


Climate Change & Fiscal Policy Issues: 2009 Initiatives

Fiscal Policy Office
Ministry of Finance Republic of Indonesia

Disclaimer

This document summarizes internal and external discussions, academic and technical studies, and public statements at Ministerial level. The document is intended to provide information and raise awareness about the Ministry's activities in the area of climate change. This document does not make policy or indicate binding commitments by the Ministry or its staff.

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Working Group on Fiscal Policy for Climate Change

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Foreword

Climate change is a critical development issue for Indonesia. Since hosting the Bali COP 13 in Bali in December 2007, the Government of Indonesia has developed more comprehensive plans and programs for addressing climate change. The Ministry of Finance is engaged in developing the GOI's response to climate change, focusing on its areas of expertise and comparative advantage in the areas of fiscal policy and incentives, climate finance, and investment and market-based approaches. Within the Fiscal Policy Office, the Minister has appointed a working group to contribute to the Government's response to climate change. Within the Ministry's key areas of responsibility, the working group aims to develop, evaluate, and deploy fiscal policies and financing instruments that can contribute efficiently and effectively to Indonesia's ability to mitigate and adapt to climate change.

Internationally, Indonesia has been a leading advocate of a strong role for Ministers of Finance in responding to the challenge of climate change. The Fiscal Policy Office has been closely involved in international meetings on climate change during the last year, including the G20, APEC, ASEAN, and other meetings of Finance Ministers, such as MDB Annuals, where the Minister of Finance advocated bolder approaches on climate financing needs.

Domestically, the Fiscal Policy Office is working to develop, evaluate, and deploy fiscal policies and financing instruments that can contribute to Indonesia's overall climate change response, including scaled up financing for climate change. This work is carried out in coordination with Bappenas, the Ministry of Environment, the Ministry of Forestry, the Ministry of Energy, the Ministry of Industry and the National Board on Climate Change (DNPI). The Ministry's program of action includes developing a fiscal policy framework, assessing sectoral policies where fiscal instruments can contribute to mitigation, exploring ways to improve and scale up carbon finance opportunities, and working with other agencies to develop domestic climate finance instruments.

In 2009, the FPO's working group on climate change collaborated with World Bank, JICA, Australian Treasury, ADB, DFID, GTZ, AFD, and several NGOs including WWF and TNC. Plans are to expand these engagements in 2010. This paper shares the findings and lessons of the Fiscal Policy Office Working Group on Climate Change 2009 in addressing the fiscal perspective on climate change and preparing and reporting for the UNFCCC Conference in Copenhagen.

Jakarta, December 2009
Head of Fiscal Policy Office

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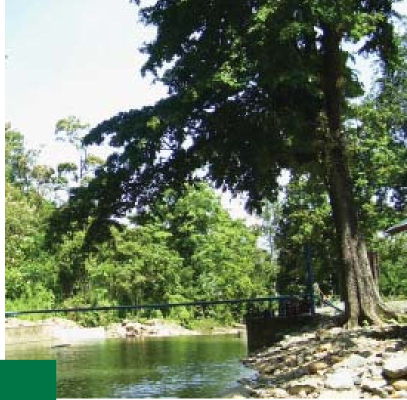

Introduction

Climate change continues to be a critical development issue facing Indonesia. Since hosting the Bali COP 13 in Bali in December 2007, the Government of Indonesia has developed more comprehensive plans and programs for addressing climate change. The President of Indonesia personally committed the country to a bold leadership stance on climate change as part of Indonesia's contribution to the G20 gathering.

President Yudhoyono's speech to the G20 Leaders' Summit
Pittsburgh, 25 September 2009

"First, no matter how difficult the challenge before us, let us make history by ensuring that Copenhagen will not fail…. As leaders, let us give a stronger mandate and a stronger push and clearer directions to our negotiators for the success of Copenhagen. Secondly, let us give a positive and a strong signal to the world that apart from our commitments, each of us has national goals, objectives and targets for emissions reductions, and that we have a clear and achievable timeline. We have to produce the necessary emission cuts to reach the targets that the scientists say we must. We are devising an energy mix policy including land use, land use change, and forestry that will reduce our emissions by 26% by 2020 from Business as Usual. With international support, we are confident that we can reduce emissions by as much as 41%."

At Pittsburgh, President Yudhoyono pushed for a greater resolve among G20 leaders to ensure the success of the UNFCCC meeting in Copenhagen. He stressed that both developed and developing countries need to do more and do away with a "business as usual" mentality. Developed nations must take the lead, but developing nations must also do their part and need to address climate finance in the context of a pro-growth, pro-poor and pro-job millennium development framework. However, to better advance mitigation and adaptation efforts, developing countries need financial support, technological transfers and capacity building from developed countries.

The Ministry of Finance is engaged in developing the GOI's response to climate change, focusing on its areas of expertise and comparative advantage in the areas of fiscal policy and incentives, climate finance, and investment and market-based approaches. Within the Fiscal Policy Office, the Minister has appointed a working group to contribute to the Government's response to climate change. Within the Ministry's key areas of responsibility, the working group aims to develop, evaluate, and deploy fiscal policies and financing instruments that can contribute efficiently and effectively to Indonesia's ability to mitigate and adapt to climate change.

Based on existing analysis, Indonesia recognizes that forest loss, land use change, and fossil fuel consumption contribute most to greenhouse gas emissions. The Government is currently reviewing policies that affect land use, and their implementation. With decentralization, incentives need to be given to the local level, where many of the important decisions are taken. Carbon payments may offer an alternative revenue stream that can contribute to regional development opportunities, especially where profitable opportunities for land conversion are foregone. The Reduced Emissions from Deforestation and Degradation (REDD) scheme is a mechanism currently under preparation that will allow the international community to finance the reduction in deforestation. For the national government, a key challenge will be to link the global level to the local level. Mechanisms must be in place to allow international incentives for carbon emissions reductions to reach the local level. The Ministry of Finance can play a key role in designing incentive-compatible mechanisms and ensuring that funds are channeled appropriately among government levels and to communities.

Energy use is also an important issue for climate change mitigation. Indonesia's per capita energy use is one fifth of that of Japan, and less than one tenth of that of the U.S. Carbon emissions from energy are seven times less than the OECD per capita average. But national emissions are growing fast, especially as electricity demand increases with economic growth. Indonesia is exploring the use of 'green energy' such as geothermal, to meet the rising energy demand, but this requires substantial investment.

Indonesia is also seeking to reform economic and fiscal policy to help meet climate change objectives. A range of government-led studies are underway that look at options to reduce emissions. Some studies are also assessing the policy instruments that can contribute to emissions reduction outcomes. Such policies need to be as efficient as possible, to support Indonesia's aims of economic growth and development. They also need to take account of equity and Indonesia's goals to reduce poverty and unemployment.

In 2008, the Ministry of Finance working group hosted a series of Focus Group Discussions, initiated analytical studies on key sectoral and regulatory challenges, and established institutional collaborations with key partner agencies, both domestically and internationally. The studies and documents produced to date can be found on the Ministry's climate change website at depkeu.go.id.

In 2009, the Ministry of Finance – working with other agencies – expanded its engagement in the climate change arena with greater representation in international venues, completion of several studies in key sectoral areas related to mitigation, development of several specific climate finance opportunities and institutional capacity building. This document reviews progress in each of these areas and lays out plans for 2010.

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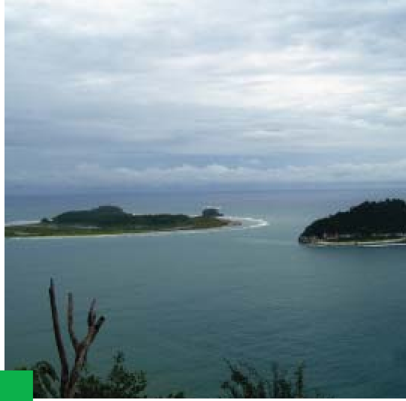

Theme 1:
International Engagements

Indonesia has been a leading advocate of a strong role for Ministers of Finance in responding to the challenge of climate change. Climate change will affect macro-economic management approaches, fiscal policy choices, revenue raising alternatives, insurance markets, and long-term investment options. Fiscal and financial policy instruments will be needed to influence incentives, investments, development paths, and the distributional impacts on the poor. For these reasons, the Ministry (through the Fiscal Policy Office) has been closely involved in international meetings on climate change during the last year, including the G20, APEC and ASEAN, the Annual Meeting of Finance Ministers, and the World Bank Spring Meetings. In these wider venues, the Ministry of Finance continues to advocate for bolder approaches on development and climate financing needs.

Turning Words Into Action

In late 2008, to commemorate Indonesia's 62nd Finance Day Anniversary, the Ministry of Finance published a book of Minister Mulyani's speeches "Turning Words into Action: Advancing Reform and the Economic Agenda". The book devoted a chapter to climate change which included the speeches the minister delivered at the Indonesian-hosted High Level Event on Climate Change for Finance ministers. The chapter also included her speeches at the World Bank Bali Breakfast Meeting, the G8 Outreach Meeting, APEC Finance Ministers Meeting, and a speech to the donor community titled "Global Problem, Local Action: Indonesia's Approach to Climate Change." These speeches provide insight into the Minister's thinking on climate change and highlight her determination to secure commitment to domestic, regional and global action.

The Ministry of Finance supported the Indonesian Delegation to the UNFCCC Conference of Parties fourteenth gathering in Poznan, Poland in December 2008. There, parties agreed to shape an ambitious and effective international response to climate change aiming toward an agreement in Copenhagen at the end of 2009. Following the initiative of Indonesia in Bali, a parallel Finance Minister's meeting was held in Warsaw, where the Ministry of Finance emphasized the need to find innovative ways to provide incentives for the development and diffusion of low carbon approaches. This is especially true against the backdrop of the global financial crisis, which makes funding for mitigation and adaptation a more challenging issue. In Warsaw, at the MDB annual meetings, and other venues, the Ministry of Finance contributed to the view that there is a need to find innovative ways to provide incentives for the development and diffusion of low carbon approaches. The Bali and Poznan Finance Ministers' meetings helped advance an understanding that climate change is an economic, social and political issue and not just an environmental one. They also helped advance a more detailed understanding among finance ministers of the available policy options on climate change financing.

In May 2009, Indonesia hosted the ADB annual board of governors' meeting in Bali. This event included meetings and side events where member countries could focus on key issues of the day, including climate change, mitigation, adaptation and financing needs in the regional context. In preparation for the May meeting, the Ministry of Finance hosted a seminar on "Climate Change Financing Needs and Opportunities" in February 2009. This seminar aimed to develop information on needs and opportunities for climate change financing and investment as a development issue and to contribute to the understanding of the role/position of the Ministry of Finance on climate change policy and financing. This seminar helped to shape Indonesia's position and contributions toward the ADB Annual Meeting.

Indonesia's intervention points at a range of ASEAN, ASEAN+3, and MDB meetings have focussed on the urgent need for the development of global carbon markets; the need to find a constructive solution to UNFCCC negotiations; the need for climate finance architecture that allows for both public and private funding; and that there is a clear role for the MDBs to scale up the delivery of public financing from developed countries and to help build the capacity and market readiness of developing countries to access the global carbon market.

Indonesia has begun to play a more important role in the strategic G20 grouping. Discussion of climate change in the G20 ensures the involvement of finance ministers and central bank governors. As they are the managers of the levers of the economy and the flows of investment, their involvement could make a significant difference on the issue. In this venue, Indonesia has strived to contribute toward a positive outcome at the next UNFCCC meeting in Copenhagen. At the Pittsburgh Summit, in September 2009, G20 Leaders directed Finance Ministers "to report back at their next meeting with a range of possible options for climate change financing to be provided as a resource to be considered in the UNFCCC negotiations at Copenhagen." Based on this mandate, Indonesia is contributing to the analysis and discussion of the implications, commonalities and differences among the climate financing alternatives under discussion. This includes the role of public climate change finance; mechanisms for generating funds; and governance of financial architecture related to disbursement of public climate change funding.

In Scotland at the G20 Finance Ministers and Central Bank Governors Meeting in November 2009, Indonesia's Finance Minister and her Australian Counterpart delivered keynote interventions on climate change. The Ministers argued the urgent need for G20 agreement on a contribution that would allow the G20 to make a positive contribution to assist the UNFCCC in its Copenhagen negotiations. Minister Mulyani, supported by the Fiscal Policy Office, also provided a significant contribution to the President's G20 Pittsburgh climate change speech. In the lead up to the Leaders' meeting, Minister Mulyani sent a letter to the G20 Finance Ministers to reinforce the need for focus on the issue of climate financing. She argued that exploring and advancing the role of fiscal and financial policies in addressing climate change should remain a key pursuit of G20 Finance Ministers and Governors. She further argued that the G20 should support wherever possible a workable breakthrough or a convergence of views that would support and complement the work of the UNFCCC.

In the last quarter of the year, the Ministry of Finance contributed to the Indonesian delegation to the Bangkok and Barcelona Climate Change Talks held in September and November 2009. These were meetings of special purpose working groups established by the UNFCCC COP to work on further emission reduction commitments for developed countries and on Long-term Cooperative Action under the Convention. Both working groups met in Bangkok and Barcelona to draft texts and consider proposals that would be presented for adoption at the COP 15 session in Copenhagen. The Ministry of Finance participated in the delegation and contributed mainly on issues of climate financing structures and needs.

In Copenhagen, members of the working group on climate change served as member of Indonesian delegation. Indonesia maintains a strong commitment to decisive outcomes at this meeting. The President of Indonesia actively participated and delivered speech that bridge the conference to seek solution and consensus.

H.E. DR. SUSILO BAMBANG YUDHOYONO
PRESIDENT OF THE REPUBLIC OF INDONESIA

Conference of Parties-15
Bella Center - Copenhagen, 17 December 2009

110 world leaders have come here to deliver a solid political binding agreement that would lead to a legally binding climate treaty in 2010. Five highlights:

- First : our collective strategic goal is to limit the rise of global warming to WITHIN 2 degrees Celcius.
- Second : Developed countries must take the lead and come up with ambitious targets.
- Third : All the talk is meaningless without concrete delivery on financing. The initiative for a "fast launch fund" at this conference is a good start, but more is needed.
- Fourth : Science now also tells us that developing countries must also DO more, committing to a low carbon development path. Indonesia declared an emission reduction target of 26 % from business as usual because we wanted to be part of global solution.
- Fifth : MRV is not an outrageous idea. We need to know if we are making progress in reaching our targets and to ensure that support funds from developed countries are well delivered to meet climate objectives.

The remaining forests in the developing world are the key to the global climate solution. We must now inject a new economic logic where it is more beneficial to keep the trees up, than to chop them down. This is why interim financing is critical. REDD PLUS must be part of the global solution.

This is not a time for dogma and confrontation. This a time for solution and consensus.

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Theme 2:

Sectoral Policy Initiatives

The climate change agenda is as important domestically as internationally. In terms of domestic initiatives, the Fiscal Policy Office of the Ministry of Finance is working to develop, evaluate, and deploy fiscal policies and financing instruments that can contribute to Indonesia's overall climate change response. The Ministry of Finance has a four part program of action. First, the Fiscal Policy Office is developing a coherent fiscal policy framework to find the optimal mix of policy instruments to support climate change action and investment. Second, the FPO is looking at specific sectoral priorities and policies where climate friendly investments or fiscal instruments can contribute to mitigation. Third, the FPO is exploring ways to improve the existing domestic carbon finance and CDM framework to facilitate larger and scaled-up mitigation projects. Finally, the Ministry of Finance is working with other agencies to develop domestic climate finance instruments. This section deals with sectoral analyses conducted in 2009. The next section addresses climate finance issues more generally.

Based on an overview of Indonesia's carbon emissions (Low Carbon Phase 1 Synthesis, November 2008), the climate change working group elected to focus on forestry and renewable energy (specifically geothermal energy) as key sectoral policy areas in 2009. Many studies have shown (2009 GOI SNC, 2009 Green Paper) that forestry and land use are the largest current sources of greenhouse gas emissions, while emissions from fossil fuel consumption are growing fast and will be the greater concern in the future.

Forestry is a key sectoral carbon and climate finance opportunity for Indonesia. Reduced Emissions from Deforestation and Degradation (REDD) is a proposed approach to create a new carbon market to allow payments to countries that can reduce their rate of deforestation. If UNFCCC negotiations are successful, REDD could be implemented after 2012. Indonesia as a country well-endowed with rainforests could benefit through a system of international payments, if there is sufficient progress to reduce deforestation in a verifiable manner. The Fiscal Policy Office is studying this issue seriously, as this will have significant fiscal and environmental impacts.

Energy supply, and specifically electric power production, is a key development priority as well as a major source of future emissions, due to coal-fired power. GOI plans aim to accelerate geothermal energy production, as Indonesia has a large endowment of geothermal resources that have not yet been developed to their full potential.

The Ministry of Finance Fiscal Policy Office has developed a series of reports together with the World Bank and the Governments of Australia, Japan and Germany that looked at strategic options to address mitigation issues in various sectors. The "Green Paper" identifies fiscal and economic policy options for achieving climate change mitigation with a focus on the energy and land use sectors. MOF strengthened the analytical work on the forestry sector by commissioning a study on relevant fiscal issues and a report on regulations concerning REDD licensing procedures. In partnership with JICA, MOF developed a study on fiscal and non-fiscal incentives to accelerate private geothermal energy development in Indonesia. Working with the University of Diponegoro, the Fiscal Policy Office conducted a study of fiscal options in the energy sector and a study of institutional/organizational issues for addressing climate change. This section reviews the results from these initiatives.

Low Carbon Development Options

Recognizing the importance of climate change mitigation and adaptation, the Minister of Finance supports development of a low carbon development strategy for Indonesia. There is a strong economic rationale for such an approach. Although pricing reforms are under consideration, Indonesia's energy sector remains highly subsidized and regulated. This contributes to inefficient public spending and impedes investment to modernize the sector. As well, Indonesia remains vulnerable to world energy price shocks, because price changes affect the level of subsidy provided from the state budget. The investment climate remains an issue also, impeding private sector development of alternative energy resources, such as geothermal, wind and solar. On the positive side, potential carbon payments through a mechanism for Reducing Emissions from Deforestation and Degradation (REDD) may provide the incentives needed to continue and expand forest sector reforms and improvements.

Through the Low Carbon Development Options study, the Ministry is evaluating policy options for addressing climate change. The Phase I report (November 2008) summarizes the main sources of emissions in the economy and identifies key priorities and fiscal policies that could contribute to the country's mitigation plans. Phase II of the study (ongoing in 2009) includes a macro policy options element and four sector analyses covering forestry and land use, power generation, transport and industrial energy efficiency. Each of the sectoral studies will focus on fiscal policies and incentives that may be beneficial, in keeping with the Ministry of Finance's overall role in economic management. The industrial energy efficiency report was completed and published in November 2009. This low carbon study and technical assistance effort includes communication and outreach components.

The Low Carbon Development Options Study is intended to support the GOI's further development and preparation of an integrated climate change approach. Indonesia has good potential to use the results of the project to take advantage of alternative energy options (geothermal, hydropower), reduce the emissions intensity of energy sector development, tap existing carbon markets for energy efficiency improvements, develop carbon credits for REDD (under negotiation for the post 2012 period), facilitate additional investments and transfer of technology, and tap into innovative sources of financing that are now emerging.

Green Paper Synthesis

The Green Paper was developed with assistance from the Government of Australia to provide the Ministry with an overall strategy for reducing emissions, plus some short-term, practical policy targets. The report also covers institutional development issues and international carbon finance opportunities. The report was delivered to the Minister in November 2009 with a set of recommendations for follow up. Implementation of these proposals will require substantially more work, for example designing the details to implement such policies and enhancing the capacity of institutions to successfully manage policies.

In line with the President's announced targets for emission reductions, the paper proposes that appropriate pricing of carbon emissions (recognizing the true cost) is central to longer-term policy action on climate change. Appropriate pricing is necessary to achieve abatement at least cost, and is consistent with policies being developed in both developed and developing economies. Pricing carbon can be achieved through an emissions trading scheme, a carbon tax or some combination of the two.

The paper proposes consideration of phased introduction of emissions pricing, commencing with a relatively low carbon tax on fossil fuel combustion. This could then be increased over time, ideally through a regular annual percentage increase that would send a long term signal to markets and investors. Further work needs to be undertaken on the design details of a carbon tax in Indonesia, including the interaction with other policies such as fuel and energy subsidies. A prerequisite for emissions pricing will be implementation of a reliable, and ideally internationally compliant, accounting system for measuring emissions from coal, oil and gas.

A carbon tax will raise considerable revenue. If the scheme is designed to be revenue neutral, then the funds need to be reallocated into the economy to facilitate the transition to a low carbon economy, such as through assistance to industry and the poor. Indeed, modeling suggests that a well managed redistribution of revenues can boost economic activity and assist with poverty alleviation. In addition, Indonesia can potentially sell emission reductions in international markets and receive additional sources of revenue.

The following section summarizes some of the key results related to forestry and geothermal energy, the two policy focus areas chosen for study in 2009.

Policies to Encourage Geothermal and Renewable Energy

As a developing country, Indonesia has rapidly growing energy needs which, based on current trends, would lead to an acceleration of carbon emissions. Geothermal energy not only offers the potential to limit the growth in emissions but also to enhance supply security and electricity production efficiency.

The Fiscal Policy Office worked with JICA to develop a study on fiscal and non-fiscal incentives to accelerate private geothermal energy development. Indonesia has 40% of the world's geothermal potential, and the study identifies existing barriers to geothermal development. The study analyzes pricing and value of geothermal energy compared to other energy sources, and looks at the sector's structure of taxes and royalties. The study evaluates the effectiveness of feed-in tariffs and proposes options for increasing private sector participation. A key finding of the study is that incentives for geothermal energy would be socially beneficial and would increase government revenue. By spurring economic growth, geothermal development can bring significant benefits to government and society. Currently the unattractive purchase price and large resource risks are barriers to investment, but these barriers can be overcome with incentive policies.

The Green Paper proposes removing two key hurdles to the development of geothermal power. The first recommendation would reduce the uncertainty associated with developing geothermal energy and provide a stronger basis for geothermal exploitation tenders with the Government (through the Geological Agency) funding some of the early exploration activities directly. A budget measure for 2010 on geothermal can support this activity. The second recommendation would narrow the 'true cost' of geothermal energy by taking into consideration the full range of costs embedded in other sources of energy, such as implicit subsidies to coal fired generation. The paper also recommends a tender structure and profit sharing regime to ensure that any benefits beyond normal commercial returns accrue to the Indonesian people rather than to project proponents.

The University of Diponegoro study analyzed possibilities for implementing fiscal policies to promote several different forms of renewable or lower carbon energy sources. In the geothermal area, the study confirms that risks are an important feature of these long term investments and that pricing reforms or concessional financing terms may be needed to make some projects feasible. The study also looked at replacing kerosene with bio-ethanol for household uses and using LPG for taxis to reduce emissions in the transport sector. The study provides cost benefit analysis on the implementation of fiscal incentives to check whether such policies are economically feasible. The results of the study show that tax policies, subsidies, and other incentives will enhance the development of bio-ethanol development and LPG use in Indonesia and that they are economically feasible.

Policies to Improve Forest Outcomes and Access REDD Carbon Markets

Deforestation and forest degradation are among the biggest sources of emissions in Indonesia. Effectively addressing these concerns requires a comprehensive set of policies dealing with the broader issue of land use. Past analyses of Indonesia's forestry fiscal policies have pointed to significant opportunities for increasing the public revenues generated by the forestry sector. In spite of recent governance improvements and greater efforts on illegal logging, Indonesia continues to lose tax and non-tax revenue in the forestry sector. Timber royalties and timber taxes need to be set at the right level and implemented in an effective manner to reduce over-exploitation and to achieve sustainable forest management. Improving forest management will improve the ability to deliver benefits (revenues and livelihoods) to local governments and society. Improved management will also reduce the level of off-site externalities (drought, flooding, water pollution) that have financial impacts on communities, resource users, and the Government. Public expenditures on flooding disasters, mud slides, and forest fires may be decreased by encouraging more sustainable land management practices through improving the fiscal mechanisms and incentives that local governments and forest managers face.

Fiscal policies and revenue issues in forestry. With the World Bank and Indonesian analysts, the Fiscal Policy Office is assessing fiscal policy instruments available for improving regulation and management of the forest sector. The ultimate purpose of the effort is to improve regulation and management of the forest sector, improve government revenue sources and stability and increase the potential for REDD payments reduced deforestation. The study offers a number of policy options. This section reviews the policies most closely related to the fiscal policy responsibilities of the Ministry of Finance.

Reducing duplicative regulatory and fee structures would help to enhance the investment climate and provide the GOI with a clearer view of expected revenue. In particular, the forest royalty and reforestation fees should be integrated and the tariff levels should be adjusted to improve efficiency. The forest fee system should be simplified and optimized to correct the incentives that forest concessionaires face and to reduce harvesting costs. Competing or overlapping regional regulations (Perda) should be removed. Removing the log export ban would enhance the domestic log price and reduce log smuggling. Auctions of forest concessions would help to improve incentives and transparency. Providing technical, financial, and market access assistance for small and medium forest enterprises and for investment in new processing technology would help to create jobs, achieve higher value-added, and improve efficiency in wood processing. Work on these issues will continue and expand in 2010.

Regional forestry incentive mechanism. One important component of a national initiative to reduce deforestation is to provide incentives to regional governments for implementing carbon reducing activities. The Green Paper study proposes a Regional Incentive Mechanism that would provide outcome and milestone based payments from the central to regional governments. Regional governments typically have authority over land use decisions and are best able to integrate carbon abatement action with local social, development and environmental objectives. The mechanism would be designed to provide incentive payments for regional governments that are able to maintain forests. This could effectively link with international REDD payments, which will increasingly be based on carbon outcomes. Where applicable, the mechanism should use similar systems for measurement, reporting and verification as international REDD systems, but also allow more flexible definitions of outcomes at the local level. Seed funding for a regional pilot project, with a focus on peat fire prevention, has already been provided in the 2010 Budget. While the details remain to be determined, one options is to use the DAK system to enable the provision of milestone- and outcome-based payments, and to facilitate multi-year spending programs.

REDD legal framework and payment distribution. The Ministry of Finance is also studying the legal and regulatory framework needed to improve the collection and distribution of revenues from environmental services, including carbon storage and REDD. The Fiscal Policy Office is examining how best to use the authorities and responsibilities of the Ministry of Finance to strengthen the regulatory basis for a strong REDD program in Indonesia. This involves a technical assessment on the revenue sharing and payment distribution scheme for improving the REDD approach, and ultimately the regulation and management of the forest sector in Indonesia. The work reviewed Indonesia's current forestry sector revenue and payment system, as well as the legal and institutional basis for treatment of forest sector revenue in the Ministry of Finance. Existing regulations on forest revenue sharing were reviewed; the legal and institutional basis for the current structure of fees, taxes, and royalties was summarized; the Ministry of Finance's policy scope and authority in relation to REDD implementation was assessed; and alternative regulatory approaches or revenue distribution systems were evaluated. Based on the study's preliminary findings, the Minister of Finance has the responsibility in dealing with international agreements on financial frameworks and for collecting and allocating state revenue and some forms of non-tax revenue. The regulatory framework for REDD in Indonesia will benefit from improving coordination among appropriate agencies and ensuring that policies are harmonized and incentives compatible.

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Theme 3:
Climate Finance

In an increasingly carbon constrained world, we are likely to see the expansion of private market and public finance to support climate change mitigation in developing countries. If suitable mechanisms are put in place internationally and domestically, Indonesia could be a major recipient of such finance. To ensure that international mechanisms are favorable to Indonesia's interests, continued active engagement with international fora such as the UNFCCC and G20 is needed.

In international venues, the Ministry of Finance continues to support and advocate a REDD mechanism for forest carbon finance for mitigation, as well as more streamlined and comprehensive carbon market and trading mechanisms. These approaches will stimulate and provide incentives for private sector involvement in the investments needed for climate mitigation in the long run. In the short to medium term, Indonesia also supports the view that public sector climate finance will play an important role as a catalyst and source of up-front financing. In the international negotiation process, the GOI holds that climate finance should be additional to existing ODA and multilateral financing and that developing country borrowing for climate change actions (with development benefits) should be on concessional terms. The Fiscal Policy Office has closely followed the development of international climate finance mechanisms in a variety of international venues. In Warsaw, at the MDB annual meetings, and other venues, the Ministry of Finance contributed to the view that there is a need to find innovative ways to provide incentives for the development and diffusion of low carbon approaches. This is especially true against the backdrop of the global financial crisis, which makes funding for mitigation and adaptation a more challenging issue.

Currently, global climate financing mechanisms worth several billion US dollars are being set up to fund large-scale mitigation and adaptation efforts in developing countries, particularly in the forestry and renewable energy sectors. All these climate finance funds and financing mechanisms represent an opportunity for Indonesia to receive financial support for mitigation programs.

The Climate Investment Fund is a set of funds established by developed countries and managed by multi-lateral development banks for channeling resources to developing countries for climate-friendly investments. The Climate Investment Fund consists of several financing "windows" for clean technology, for building resilience, and for forestry, with potential for additional windows to be developed. The Clean Technology Fund (CTF) – currently the largest of the climate investment funds – seeks to promote scaled-up financing for demonstration, deployment and transfer of low carbon programs and projects with significant potential for long-term greenhouse gas emissions reductions. The CTF focuses on financing projects addressing the power and transport sectors and energy efficiency issues. The Strategic Climate Fund focuses on financing pilot projects that have the potential to support scaled-up or sector-wide climate change mitigation policies. The Forest Investment Program is another window that seeks to provide concessional financing for investments that help to reduce deforestation and degradation. Another mechanism for the forest sector is the Forest Carbon Partnership Facility (FCPF), separate from the CIF. This funding mechanism is designed to set the stage for a large-scale system of incentives for reducing emissions from deforestation and forest degradation. The Forest Carbon Partnership Facility helps developing countries build capacity to reduce emissions from deforestation and forest degradation and to tap into any future system of positive incentives for REDD. The FCPF will also test a program of performance-based incentive payments in some pilot countries.

The model for each of these funds and mechanisms is management by trust fund committees consisting of donor and recipient countries. The Fiscal Policy Office represents the GOI in the Climate Investment Fund framework and has sent teams to meetings in Washington to ensure that Indonesia is represented in the process of setting up the Strategic Climate Fund and the Forest Investment Program. After consideration and consultation, the GOI has agreed to participate in both the Clean Technology Fund and the Forest Carbon Partnership Facility. Representatives from the Fiscal Policy Office participated in discussions with MDB missions working to develop these programs in September, October and November 2009.

The GOI also participates in a major climate financing opportunity, tied directly to the domestic development agenda. The Climate Change Program Loan provides concessional financial support for Indonesia to achieve development objectives defined in the National Climate Change Action Plan (2007) and the Development Planning Response to Climate Change (2008). The Governments of Japan and France both support this loan framework, which has been running for 2 years. The loan is designed to support the agreed policy actions under the key policy pillars of "Mitigation," "Adaptation," and "Cross Cutting Issues" in terms of encouraging GHG reduction and absorption, strengthening country resilience to the anticipated negative impacts due to climate change, and improving institutional frameworks related to mitigation and adaptation. BAPPENAS chairs the steering committee for the loan framework to ensure proper coordination and monitoring of the achievements. In parallel with the loan process, both Japan and France provide additional technical cooperation in key areas – defined in collaboration with the GOI – in areas such as forest conservation, forest fires, energy, co-benefits, agriculture and water resources.

As one of the results from Copenhagen summit, the government budget has been earmarked for specific climate change and low carbon development activities. However, this source is far too small in comparison with the magnitude of the problems. Indonesia is a large archipelagic country with more than 10 percent of its population living below the poverty line. Much of resources from government budget has been spent to improve basic human needs, namely health and education. Furthermore, the country is still in dire need of infrastructure development. Hence, new, additional and scaled up international sources of financing are crucial.

In addition to financial support, climate change related economic and fiscal policies have a significant role in supporting the realization of low emission development in Indonesia. Sound economic and fiscal policies should be able to promote multi-stakeholders economic cooperation, be it internally among government sectors, or with the international community, public and private sectors. Very often private sector is reluctant to invest in climate mitigation because the development of low emission infrastructure requires large upfront capital. To this end, a well targetted policy will establish a national atmosphere that promotes increased investment in climate change mitigation as well as adaptation. Fiscal policy measures could be used, among others, to promote investment and development of low carbon industries.

05

Theme 4:

Institutional Development & Capacity Building

The Fiscal Policy Office has worked to improve its analytical and institutional capacity and conducted focus group discussions on economic policy responses to climate change. Studies on fiscal policies in the forest and energy sectors resulted in capacity development for dealing with mitigation issues within the Ministry of Finance. The work was developed through frequent contact and consultations with key counterparts in other agencies, including Ministry of Forestry, BAPPENAS, and National Climate Change Council. These studies, as well as the participation in international discussions and negotiations, helped to position the Ministry of Finance with a good understanding of the challenges and key entry points within its areas of responsibility.

A study undertaken with the University of Diponegoro looked into institutional issues. One objective of the study was to evaluate and recommend appropriate organizational structures to enable the Ministry of Finance to contribute effectively in line with its responsibilities and in concert with other key agencies involved in planning and managing the GOI's response to climate change. The UNDIP study recommends that there is a need to institutionalize climate change within the Ministry of Finance organization. The appropriate structure will need to call on and integrate expertise from several operational units, including fiscal policy, debt management, taxation and tariffs (customs), financial and revenue management, as well as planning and modeling to evaluate alternative policies and proposals. The climate change unit will also need an external relations function for dealing with other ministries and agencies, as well as with the international community through the regular finance ministers' gatherings as well as groupings such as G-20, APEC and ASEAN.

In a similar vein, the Green Paper also concluded that effective climate change policy needs effective policy coordination and strong economic input across the policy spectrum. The paper proposed establishment of a dedicated Centre for Climate Policy within the Fiscal Policy Office. The centre would provide economic input into the development of climate change policies across GoI, design fiscal instruments for climate change policy and, where appropriate, undertake modeling of different policy scenarios. The Ministry of Finance policies and activities would be in support of the GOI's lead climate change policy agency, empowered with a strong mandate to coordinate across domestic and international agencies.

FPO staff participated in several capacity building activities, to develop skills relevant to expanding policy engagement on climate change. Some of these events are enumerated here:

- Participation in the planning and design of the Climate Investment Funds enabled the Ministry of Finance staff to develop understanding of the international mechanisms and priorities of key donor countries, as well as the concerns of developing countries. Lessons from this experience have been used to inform and deepen the GOI's approach in the climate negotiation meetings in Bangkok and Barcelona.
- Under the Australia-Indonesia Partnership - Government Partnership Fund (AIP-GPF), two senior FPO staff visited Canberra for meetings with counterparts in Treasury and the Department of Climate Change (DCC). At these meetings, the delegation received an overview of the breadth of Treasury and DCC climate change activities; the structure of the Australia government's climate change operation; and how the departments interact with each other and the rest of government.

- Also under the AIP-GPF program, program, two FPO officers undertook an internship at Australian Treasury and the Department of Climate Change in Canberra to learn more about the structure of the Australian Government's climate change operation. The two officers also attended a general equilibrium modeling course at Monash University.

06

Closing and Next Steps

In summary, the working group has carried out its mandate in 2009 by deepening and expanding the work begun before the Bali COP 13. The group has contributed in the domestic policy process by contributing ideas and analysis and by focusing on critical fiscal and financial policies related to climate change, carbon markets, and alternative energy paths. The group has contributed also to Indonesia's engagement at the international level, through the G20 and through the UNFCCC sponsored sessions. The group has continued to develop the role and relevance of the Ministry of Finance in the treatment of climate change as a development issue and a financing issue.

In 2010, the working group within the Fiscal Policy Office intends to continue with policy analysis and cross-institutional discussions that contribute to Indonesia's climate change response. The Ministry of Finance expects to contribute to formulating an optimal mix of fiscal policies and financing approaches to ensure accountability, proper and inclusive procedures, prudential management, and achievable outcomes of the climate change enterprise. Core activities for 2010 will include the following:

- Support for climate policy decision processes through development of white papers based on special studies, as well as macro/micro economic assessments and modeling. This work would be integrated with ongoing modeling and capacity development activities. A series of focus group discussions is planned to compile information on methodology and measurement for reaching national emission reduction targets for 2020.

- Capacity development to ensure that the unit has the appropriate skills for managing policy development, quantitative policy analysis, environmental economics, legal analysis and drafting, macro economic impact modeling, and risk analysis. Training will be carried out on several economic modeling approaches that allow the quantification of the effects of climate change policies and financing interventions at sectoral level.
- Forecasting budget allocation and external funding for climate change activities through 2020.
- Public dissemination of analytical findings from studies related to climate change. This will include increasing the unit's public dissemination capacity, at least through a web site, linked to the Ministry of Finance web site.

In addition the FPO will:

- Work toward the development of a dedicated climate unit within the Ministry of Finance.
- Contribute to Indonesian positions and policies with regard to mitigation, adaptation, carbon markets, and climate finance. This would include studies and evaluations on key topics related to low carbon development (transport, power sector, trade, peat land) and on policy issues and barriers to low carbon development (banking sector, trade policy etc). This will require workshops and national seminars for sharing results within and outside the GOI. These studies would also contribute to the Mid-Term Development Plan and climate change road map plans.
- This will also include engagement in international climate change financing venues, such as expanding contributions to the G20 and other venues, working with international study teams and working groups (G20, ADB, OECD, UNFCCC). These works could include travel to international venues, comparative studies of

alternative regulatory frameworks, contributions to working groups and steering committees of international venues.

- Finally, the FPO and the Ministry of Finance more generally expects to be engaged in advising on the management of Indonesian climate investment funds, financing services, and access to international climate finance opportunities.

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Appendix

Copenhagen Accord

The Heads of State, Heads of Government, Ministers, and other heads of the following delegations present at the United Nations Climate Change Conference 2009 in Copenhagen: [*List of Parties*]

In pursuit of the ultimate objective of the Convention as stated in its Article 2,

Being guided by the principles and provisions of the Convention,

Noting the results of work done by the two Ad hoc Working Groups,

Endorsing decision x/CP.15 on the Ad hoc Working Group on Long-term Cooperative Action and decision x/CMP.5 that requests the Ad hoc Working Group on Further Commitments of Annex I Parties under the Kyoto Protocol to continue its work,

Have agreed on this Copenhagen Accord which is operational immediately.

1. We underline that climate change is one of the greatest challenges of our time. We emphasise our strong political will to urgently combat climate change in accordance with the principle of common but differentiated responsibilities and respective capabilities. To achieve the ultimate objective of the Convention to stabilize greenhouse gas concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system, we shall, recognizing the scientific view that the increase in global temperature should be below 2 degrees Celsius, on the basis ofequity and in the context of sustainable development, enhance our long-term cooperative action to combat climate change. We recognize the critical impacts of climate change and the potential impacts of response measures on countries particularly vulnerable to its adverse effects and stress the need to establish a comprehensive adaptation programme including international support.

2. We agree that deep cuts in global emissions are required according to science, and as documented by the IPCC Fourth Assessment Report with a view to reduce global emissions so as to hold the increase in global temperature below 2 degrees Celsius, and take action to meet

this objective consistent with science and on the basis of equity. We should cooperate in achieving the peaking of global and national emissions as soon as possible, recognizing that the time frame for peaking will be longer in developing countries and bearing in mind that social and economic development and poverty eradication are the first and overriding priorities of developing countries and that a low-emission development strategy is indispensable to sustainable development.

3. Adaptation to the adverse effects of climate change and the potential impacts of response measures is a challenge faced by all countries. Enhanced action and international cooperation on adaptation is urgently required to ensure the implementation of the Convention by enabling and supporting the implementation of adaptation actions aimed at reducing vulnerability and building resilience in developing countries, especially in those that are particularly vulnerable, especially least developed countries, small island developing States and Africa. We agree that developed countries shall provide adequate, predictable and sustainable financial resources, technology and capacity-building to support the implementation of adaptation action in developing countries.

4. Annex I Parties commit to implement individually or jointly the quantified economy-wide emissions targets for 2020, to be submitted in the format given in Appendix I by Annex I Parties to the secretariat by 31 January 2010 for compilation in an INF document. Annex I Parties that are Party to the Kyoto Protocol will thereby further strengthen the emissions reductions initiated by the Kyoto Protocol. Delivery of reductions and financing by developed countries will be measured, reported and verified in accordance with existing and any further guidelines adopted by the Conference of the Parties, and will ensure that accounting of such targets and finance is rigorous, robust and transparent.

5. Non-Annex I Parties to the Convention will implement mitigation actions, including those to be submitted to the secretariat by Non-Annex I Parties in the format given in Appendix II by 31 January 2010, for compilation in an INF document, consistent with Article 4.1 and Article 4.7 and in the context of sustainable development. Least developed countries and small island developing States may undertake actions voluntarily and on the basis of support. Mitigation actions subsequently taken and envisaged by Non-Annex I Parties,

including national inventory reports, shall be communicated through national communications consistent with Article 12.1(b) every two years on the basis of guidelines to be adopted by the Conference of the Parties. Those mitigation actions in national communications or otherwise communicated to the Secretariat will be added to the list in appendix II. Mitigation actions taken by Non-Annex I Parties will be subject to their domestic measurement, reporting and verification the result of which will be reported through their national communications every two years. Non-Annex I Parties will communicate information on the implementation of their actions through National Communications, with provisions for international consultations and analysis under clearly defined guidelines that will ensure that national sovereignty is respected. Nationally appropriate mitigation actions seeking international support will be recorded in a registry along with relevant technology, finance and capacity building support. Those actions supported will be added to the list in appendix II. These supported nationally appropriate mitigation actions will be subject to international measurement, reporting and verification in accordance with guidelines adopted by the Conference of the Parties.

6. We recognize the crucial role of reducing emission from deforestation and forest degradation and the need to enhance removals of greenhouse gas emission by forests and agree on the need to provide positive incentives to such actions through the immediate establishment of a mechanism including REDD-plus, to enable the mobilization of financial resources from developed countries.

7. We decide to pursue various approaches, including opportunities to use markets, to enhance the cost-effectiveness of, and to promote mitigation actions. Developing countries, especially those with low emitting economies should be provided incentives to continue to develop on a low emission pathway.

8. Scaled up, new and additional, predictable and adequate funding as well as improved access shall be provided to developing countries, in accordance with the relevant provisions of the Convention, to enable and support enhanced action on mitigation, including substantial finance to reduce emissions from deforestation and forest degradation (REDD-plus), adaptation, technology development and transfer and capacity-building, for enhanced implementation of the Convention. The collective commitment by developed countries

is to provide new and additional resources, including forestry and investments through international institutions, approaching USD 30 billion for the period 2010 . 2012 with balanced allocation between adaptation and mitigation. Funding for adaptation will be prioritized for the most vulnerable developing countries, such as the least developed countries, small island developing States and Africa. In the context of meaningful mitigation actions and transparency on implementation, developed countries commit to a goal of mobilizing jointly USD 100 billion dollars a year by 2020 to address the needs of developing countries. This funding will come from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources of finance. New multilateral funding for adaptation will be delivered through effective and efficient fund arrangements, with a governance structure providing for equal representation of developed and developing countries. A significant portion of such funding should flow through the Copenhagen Green Climate Fund.

9. To this end, a High Level Panel will be established under the guidance of and accountable to the Conference of the Parties to study the contribution of the potential sources of revenue, including alternative sources of finance, towards meeting this goal.

10. We decide that the Copenhagen Green Climate Fund shall be established as an operating entity of the financial mechanism of the Convention to support projects, programme, policies and other activities in developing countries related to mitigation including REDD-plus, adaptation, capacity-building, technology development and transfer.

11. In order to enhance action on development and transfer of technology we decide to establish a Technology Mechanism to accelerate technology development and transfer in support of action on adaptation and mitigation that will be guided by a country-driven approach and be based on national circumstances and priorities.

12. We call for an assessment of the implementation of this Accord to be completed by 2015, including in light of the Convention.s ultimate objective. This would include consideration of strengthening the long-term goal referencing various matters presented by the science, including in relation to temperature rises of 1.5 degrees Celsius.

Acknowledgements and Working Group Members

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