

## **“Indonesia’s Journey to Low-Carbon Prosperity”**

*An Open Forum With*

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**February 23, 2010**

**Adam Schwarz**, a senior fellow at the McKinsey Global Institute, discussed Indonesia’s approach to carbon-compatible development. He began by noting that, while the outcomes from the climate change negotiations in Copenhagen were not particularly encouraging, the outcome for countries such as Indonesia that use REDD (Reducing Emissions from Deforestation and Forest Degradation in Developing Countries - an effort to create a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development) was much better, as several developed countries pledged funds for REDD programs.

Indonesia is emerging as a global leader in plans for greenhouse gas reductions; at the G20 Summit in Pittsburgh, President Yudhoyono announced that Indonesia would reduce emissions by at least 26 percent by 2020 from the business-as-usual emissions projections. Currently emissions are around 2 gigatons, and are predicted to rise to 3.2 gigatons by 2030, around five percent of global emissions.

Indonesia’s carbon dioxide emission abatement potential is very high, although much work needs to be done to take advantage of this potential. A more comprehensive survey of Indonesia’s carbon emissions is necessary to determine what areas have the most potential for reduction. The government agency in charge of Indonesia’s national strategy, the National Council on Climate Change, recently saw its mandate broadened, but climate change remains a difficult and fractious issue in politics.

Currently, Indonesia’s greenhouse gas emissions are primarily the result of land use and land use changes related to the forestry and agriculture sector, but the power sector is a growing contributor. Indonesia faces particularly difficult challenges in addressing greenhouse gas emissions because they are concentrated in areas important for economic growth and development.

Indonesia has the potential to reduce emissions by 60 percent by 2030, which makes it a major player in reducing global carbon emissions. Moreover, the cost to reduce emissions is approximately \$2 to \$4 per ton of carbon

dioxide, extremely inexpensive by international standards. However, while it is cheap to reduce emissions from an economic standpoint, the institutional capacity remains a significant roadblock; investment is needed for capacity building and readiness initiatives. Currently, the National Council on Climate Change is working with Central Kalimantan and Jambi provinces, and initial successes have prompted other provinces to request to join in the national action plans to reduce emissions.

Ultimately, if Indonesia is to achieve its target of 26 percent reduction in emissions by 2020, the country will have to focus on sustainable peatland management. When peatland is cultivated, carbon dioxide is emitted from three main sources: Biomass removal when trees are cut and canals dug to clear and drain the land, as peat dries it begins to decompose and emits carbon dioxide, and peat once dry becomes highly flammable. Thus, Indonesia must work to shift the focus of land cultivation from peatlands to others (especially degraded lands), but this is difficult because of conflicts over land ownership rights.

Using Central Kalimantan as a case study, Indonesia's carbon dioxide reduction potential becomes apparent. Around 20 percent of Indonesia's peatland is located in the province, which contributes to 15 percent of the total carbon emissions, largely from deforestation and land-use changes. In order to reduce emissions while maintaining economic growth and development in the region, several key issues must be considered. The government must consider what

economic activities are less carbon-intensive, what would it cost to pursue programs to reduce carbon emissions, what kind of infrastructure will be needed to support these programs, and where will the funding come from. Seven sectors (Food crops, aquaculture, forestry, ecotourism, financial services, environmentally sustainable mining, estate crops on non-forested lands) representing over two-thirds of current employment in Central Kalimantan, have been prioritized to develop economically sustainable livelihoods.

Central Kalimantan has already taken some decisive action such as trying to put out peat fires and tree planting on abandoned lands, but it faces a lack of institutional capacity and funds. Focusing on peat and shifting crop production from forested to degraded lands will reduce the province's emissions by nearly 80 percent. Establishing a REDD task force in Central Kalimantan is a necessary first step, although the focus ultimately should be on low-carbon development in general, rather than REDD framework alone.

Ultimately, Indonesia needs international support to achieve its carbon reduction goals while also promoting economic growth and development, the cornerstone of a "low-carbon growth strategy". Without financial support, abatement measures will result in a real reduction of wealth. However, with international support for reducing greenhouse gas emissions, programs can actually contribute to economic growth, and achieve both emissions reduction while maintaining growth and development trajectories.

**Q: What are the incentives for private companies to stop clear-cutting and other negative forestry practices and make the more costly investments required by sustainable practices**

**A:** Incentives from the government or international community are needed. The policies are moving in the right direction—in Copenhagen SBY announced a policy that there would be no new palm oil cultivation in peatlands. However, looking at what we need for concessions, it's going to be expensive. The opportunity costs are high for cultivating peatland, though with the right policy and institutions we can steer production toward using degraded lands. But because of decentralization, although the policy and says no more cultivation, local officials can still go ahead and give licenses to cultivate peatlands. Thus, we need an institutional framework that is closer to the action—Jakarta is too far away to fully manage the process.

**Q:** What is the fund capacity for these kinds of programs?

**A:** Funding comes from bilateral organizations and some environmental donors but it's insufficient relative to the task at hand. It comes down to an enormous institutional building and capacity development cost.

**Q: How likely is it that the 26 percent emissions reduction goal will be achieved, and how much progress can be made given the global economic environment?**

**A:** REDD needs to be a big part of the solution and is a cheaper solution. We have an increased supply of places like

Indonesia that want to talk about REDD but the demand is lacking. From the donor side, progress is possible, the \$3.5 billion suggestion of money from developed countries will go along way towards achieving this goal.

**Q: Are you seeing resistance or support from local people in areas where you work?**

**A:** Looking at projects, each has a community engagement sector that shows promise. But this is labor intensive—each village takes on effort and there are huge gaps in institutional support. There are of course negative stories of people being pushed off of their land and not being compensated, which also must be addressed. We need to work on community engagement, especially on identifying activities in pilot projects that are successful and scale them up. Ultimately, we need to take the pressure off the forest—whether this is by removing people or by getting people to live more sustainably is a political choice for the Indonesian government to make.