

Remarks of Arthur M. Mitchell*

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Regulatory barriers to investment in clean energy in Asia

Ladies and Gentlemen:

It is a great pleasure to speak before this audience on ways to increase investment in clean energy in Asia. This is a matter of critical importance because developing countries, including China and India, need to access natural resources and to construct more infrastructure in order to increase economic performance and reduce poverty but that development itself may lead to adverse consequences for the environment.

According to the International Energy Agency (IEA), the world's primary energy demand is projected to increase by more than 53% from current levels by 2030. More than two thirds of this increase will come from developing countries. Significantly, developing Asia's share of global energy-related CO₂ emissions is projected to go to 42% by 2030 from a base of 28% in 2005. If new energy supply infrastructure installed in Asia follows the current pattern of investment over the next 20 years, attempts to reduce green house gas (GHG) emissions in more energy efficient parts of the world, such as the EU, are unlikely to make a meaningful difference in global efforts to mitigate GHG emissions.

Since human beings are capable of making choices, individually and collectively, we must make some critical decisions about how to solve this complex problem.

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Unfortunately, there is no “silver bullet” or magic formula that will do the trick. Policy makers and the public must find the right balance between regulation, conservation, increases in efficiency, technological progress and diversification of energy resources. And these factors will interact with each other. I will try to give you a few examples.

In market-based economies, the legal system acts as a mechanism to allocate incentives and disincentives. The regulatory framework is the instrument that is used to set standards, to monitor compliance and punish transgression. Environmental regulators have a number of tools to implement policy, including programs for trading in pollution permits, mitigation allowances and subsidies, taxes, fees, national infrastructure development schemes, and dedicated trust funds. How these tools are used, independently and in conjunction with each other, depends upon political and economic considerations at the local, national and international level. Experience shows that money and effort will flow into the environment that has the most favorable policy, legal and regulatory framework.

For example, capital has begun to go into renewable energy projects in China and India as a direct result of favorable regulations there. As all countries are competing for access to capital, other Asian countries will not get their fair share unless they adopt policies that support the clean energy sector such as tax holidays, excise relief, modified depreciation schemes and enhanced tariff support for particular technologies.

When I was the General Counsel of the Asian Development Bank (“ADB”), I spent a great deal of my time on law reform issues in the region. This is important because it is now widely recognized that government budgets cannot provide all of the financing that will be needed for infrastructure development in Asia, let alone financing for clean energy. Many Asian countries still do not have stable and predictable legal systems. Even when

they have the right types of laws and regulations on the books, ineffective enforcement makes these measures meaningless.

While there is no lack of money for clean energy development, the funds will not flow unless the providers of capital feel that their investments will be protected. Laws governing bidding, construction and financing of development projects have to be clearly established and enforced in order to provide sufficient levels of transparency, accountability, predictability and public participation,---in a word, good governance is needed.

Policies that specifically target clean energy can be helpful. The challenge for developing countries in Asia is to find a suite of incentives that are appropriate to their national circumstances. These can include feed-in tariffs, technical standards for a renewable portfolio, subsidies and grants, tax credits and other tax incentives (including VAT reduction), and public financing, among others, in comprehensive renewable energy policy regime. To one extent or another, Cambodia, China, India, Indonesia, the Philippines and Thailand have adopted renewable energy policies which include many of these elements.

For example, wind projects in China and India have been promoted through the enactment of laws which foster investment in this sector. An interesting case study is China's Renewable Energy Law, which became effective in 2006. The Law provides a legal framework for the promotion of energy from wind, solar, water, biomass, geothermal and the ocean. It requires the central government to:

- set medium and long-term targets for renewable energy;
- prepare a national renewable energy plan;

- establish technical standards for renewable energy projects; and
- work with provincial and local authorities to coordinate the development of renewable energy projects.

The Law also requires electric grid operators to purchase power from the developers of renewable energy and permits them to pass the costs on to customers. Importantly, the Law also authorizes financial institutions to make loans to renewable power sponsors at preferential rates and gives producers certain tax incentives. Most importantly, the Law has teeth because it provides for fines for grid operators who fail to observe their obligations to allow connections to the grid or to purchase the power and criminal penalties for government officials who fail to grant licenses in accordance with the Law or its implementing regulations.

Having said that, the Chinese Renewable Energy Law has been criticized, for example, for the manner in which it sets prices for the grid companies to purchase wind-generated power. The Law calls for energy prices to be set by public tender and encourages purchasers to accept the lowest bidder rather than the bidder who provides the best “value-for-money” that would be sought in a typical public-private partnership transaction. In practice, this method has caused a number of projects to fail because the developer has either overestimated the wind resource and consequent power generation or underestimated the cost of generation, in order to bid the lowest price. It has been suggested that the German “feed-in-tariff” system which pays the developer a benchmark price plus a “wind power” premium, would help ensure more successful projects but if experience in other areas of the economy is a guide, the Chinese authorities will quickly learn these lessons and remedy any defects.

In another example, the Central Government and a number of State governments in India have extended fiscal and financial concessions to the wind energy sector. These incentives include accelerated depreciation, concessional customs duties and exemptions from excise tax, sales taxes, and tax on profits from the sale of power generation for 10 years.

Other energy sector reforms can also help encourage investment, such as steps to unbundle the electric power industry, create independent regulators and introduce competition.

Today, many projects in Asia have been financed in part by use of Certified Emission Credits (“CERs”) created under the Kyoto Protocol’s Clean Development Mechanism. However, uncertainty concerning the climate change regime beyond 2012 is restricting the flow of funds into new projects and has caused deep discounting of CERs that are deliverable after 2012. New clarity about the future of the carbon market is imperative.

Clean energy initiatives are generally divided into three categories: i) energy efficiency programs that can reduce emissions with existing technologies in the immediate to near term; ii) clean energy infrastructure that will produce and deliver energy requirements over the long-term and are capital intensive and iii) “clean-tech” or new technological solutions to the problem of climate change. The policy tools that are needed to encourage investment in each category are different as well as the legal and regulatory framework and means of financing projects.

For example, over one billion people in Asia do not have access to grid electricity. This lack of infrastructure seriously impedes economic development and poverty reduction. Policy makers have a choice. Do they embark on a major program of rural electrification or look for clean energy alternatives? According to ADB, on average, an additional \$1

invested in demand-side management (through more efficient equipment, appliances and buildings) can avoid more than \$3 in investment in electricity supply in developing countries.

Once an appropriate policy objective has been determined, the legal and regulatory framework can be designed to provide the proper incentives and disincentives. In many countries, subsidies for carbon fuels need to be phase-out over time and energy must be priced based upon its “true cost” but these measures will be politically sensitive. Because clean energy needs significant capital expenditure over a long periods of time and relies heavily on fiscal and policy support (such as feed-in tariffs, subsidies and mandatory fuel-blending requirements), the regulatory environment must favor these policies if domestic and well as foreign investors are going to be induced to make the necessary commitments.

Energy efficient solutions can be addressed with existing technologies. What is needed is the proper mind-set on the part of officials and education of industry and the public. From a legal and policy perspective, the reforms are almost limitless but could include things like mandatory efficiency standards for new buildings and new light-duty vehicles, adoption of best-practices in lighting energy efficiency across all lighting usage sectors and mandatory energy performance requirements for certain products and comparative energy labels.

Clean energy infrastructure is more difficult in Asia because it requires project financing techniques with large and long-term capital investments. Asian governments need to recognize and mitigate the risks that are inherent in all infrastructure projects, including clean energy. This requires substantial efforts to reform the legal and regulatory frameworks to provide the good governance I have previously discussed.

Major investments in new technologies are likely to be financed by major corporations or innovative start-ups that require venture capital. Sequoia Capital and Kleiner Perkins are examples of major venture capital firms that are investing in the development of Clean Tech in China.

International financial institutions could play a useful role here by providing technical assistance for adapting clean technologies to Asian environments, such advice on the best tariff structures, using their guarantee facilities to back the development of early-stage ventures in developing countries and fostering public-private partnerships for clean energy projects.

It is generally recognized now that climate change is a global problem that must be addressed globally. An encouraging sign is that the next U.S. president is likely to have the U.S. join this worldwide effort. The private sector in the developed world must also come to see that the challenge of climate change presents more opportunities than risks for their economies. Much will depend upon how the developed and developing countries of the world structure their common future. There is a fierce debate today concerning what policies are best to tackle global warming; whether it is more market based approaches or more technological innovation. I am certain that we will need numerous approaches but getting the right legal and regulatory framework will play a large role in addressing this challenge.

Thank you.