

Towards a Greener Asia?

Sherman Tan

26 Jun 09

Last Wednesday (17 Jun 2009), the Asian Development Bank (ADB) announced that it will double its investments on clean-energy initiatives to US\$2 billion a year by 2013 to significantly dampen carbon growth and cut greenhouse gas (GHG) emissions in the region. Given that developing Asia nations now account for nearly one third of global GHG emissions (it is forecast that China and India alone will account for 24.5% of the global carbon emission in 2009), ADB decided to double its original US\$1 billion annual investment set four years ago. The money will be used to fund wind power projects in China and India, a biomass power facility in Thailand, hydropower initiatives in Bhutan, China and Vietnam as well as to convert to more energy-efficient lighting for low-income households in Philippines.

With 1.3 billion people in population and double digit economic growth over the past few years before the economic crisis, China's contribution of GHG of 20.02% is just slightly behind United State's 20.34%. Since China alone is responsible for more than 60% of the GHG emissions in Asia, let's first examine what are some of the measures China is doing in this respect.

Unknown to many, tackling GHG emissions and implementing environmental protection measures have been on China's national agenda since the late 1980s primarily motivated by the following considerations:

- (1) Climate conditions and natural disasters: taken into totality, China has relatively harsh climatic conditions ranging from extremely cold in the winter and hot temperature in summer. Moreover, China also suffers from natural disasters.
- (2) Vulnerable ecosystems: its 18,000 km of coastlines are vulnerable to rise in water level.
- (3) Coal-dominated energy source: about 69% of the primary energy source in China is derived from coal with oil (21%) and the remaining 10% comprising natural gas, solar/nuclear/wind and other alternative energy sources.
- (4) Growth in economic development: over the past few years, industrialisation and development activities have lead to higher demands for energy and other resources. To sustain such growths, there is a pressing need to manage the emission of GHG as an integral part of its economic growth policies

A white paper entitled "China's policies and actions for addressing climate change" was released by China in late Oct 2008 to reinforce its commitment to further tackle climate change issues via 8 primary areas (1) improves energy conservation and environmental protection (2) controls GHG emissions (3) enhances capacity for sustainable development (4) exploits advances in technology (5) increases international co-operation (6) secures economic development by transforming patterns of such development (7) enhances capabilities to adapt to climate change and (8) contributes to the protection of the world's environment.

In the area of improving its current energy mix, China reduced its reliance on coal-based power generation from its 1990 level of 72% to the current 69%. In addition, generation of power from alternative sources including wind, hydro, solar, nuclear power and natural gases have also increased. At the end of 2005, hydropower has reached 117GW accounting for 23% of the total power generation for the country. Besides using solar power for residential dwelling in rural areas, China is also a major exporter of solar photovoltaic panels to other parts of the world. In 2005, the utilisation of renewable energy in the country accounted for 7.5% of China's total consumption resulting in an equivalent reduction of 380 million ton of CO₂ emissions.

On the other hand, Japan which emits 4.3% of the global GHG accounts for over 14% of Asia's GHG emissions per year. On 10 Jun 09, Prime Minister Taro Aso announced Japan's new ambitious 2020 target to cut GHG emissions through a reduction of 15% from its 2005 level. With this revised target, Japan will be more in line with other major industrialised countries and putting itself above both the European Union and US's targets. However, there are many critics that said Japan as an industrialised nation is not doing enough.

Under the Kyoto Protocol, Japan has agreed to reduce its carbon emissions by 6% from 1990 levels between 2008 and 2012. However, observers noted that Japan has made no progress towards this goal. Statistics obtained from Japan's Ministry of Environment showed that on the contrary, GHG emissions from Japan have increased by more than 14% over 1990 levels. The Japanese government however has argued that industries in Japan are already more clean and energy efficient compared to other industrialised countries. Setting a more aggressive target will have a significant impact on its economy as studies conducted by the government have shown that a 14% reduction in GHG from 2005 levels by 2020 will decrease the country's GDP by 0.6% and raise unemployment by 0.2%.

India like Japan also accounts for over 4.4% of the global GHG emissions but it is taking a defensive stance on proposed target set by the UN Framework Convention on Climate Change (UNFCCC) ⁽¹⁾ as it felt that the industrialised nations such as the US, EU, Japan, Australia, etc should be taking more of the reduction in GHG emissions. India's Special Envoy on Climate Change Shyam Saran was quoted as saying "India has declared that even as it pursues its social and economic development objectives, it will not allow its per capita GHG emissions to exceed the average per capita emissions of the developed countries. This effectively puts a cap on our emissions, which will be lower if our developed country partners choose to be more ambitious in reducing their own emissions."

The US and other industrialised countries have argued that China and India have over the past few years emerged as the world's top polluters and asked that these countries take more aggressive measures to cap GHG emissions. However, China pointed to the centuries of Western pollution which collectively are responsible for over 64% of the stock of GHG associated with climate change. To illustrate the point, China's and India's per capita emission of carbon are only 4 tonnes and 1.2 tonnes respectively compared to US's 20 tonnes, Canada's 20 tonnes, Australia's 16 tonnes and Japan's 10 tonnes!

Nayan Chanda, editor of YaleGlobal Online noted that "...despite all their talk of a global threat, politicians find it hard to admit to their fellow countrymen that national borders are irrelevant to the climate... leaders of both the developed and developing world must at some point acknowledge the threat hanging over humanity like Damocles' sword. The threat of global climate change is not one that can be calculated on a national per capita basis."

⁽¹⁾ *The United Nations Framework Convention on Climate Change (UNFCCC or FCCC) is an international environmental treaty produced at the United Nations Conference on Environment and Development (UNCED) in June 1992. The treaty is aimed at stabilizing greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. The treaty as originally framed set no mandatory limits on greenhouse gas emissions for individual nations and contained no enforcement provisions; it is therefore considered legally non-binding. Rather, the treaty included provisions for updates (called "protocols") that would set mandatory emission limits. The principal update is the Kyoto Protocol, which has become much better known than the UNFCCC itself.*