Transforming China's "Grave" Environmental Situation by Art Hanson, January 2 2012

The 60 people who braved Ottawa's worst winter storm were treated to fascinating look at China's environmental challenges, how it frames these challenges, its approach to addressing them and the future.

The most senior members of China's political system and its environmental oversight bodies have labelled China's current environmental situation as being "grave". In China this term denotes a problem that is both very difficult and one that the government is committed to engaging. Many of China's current environmental challenges have been the target of significant and sustained initiatives for many years, significant achievements and measurable gains, nonetheless China's strong economic growth and some weakness in program monitoring and implementation have kept a complete solution out of immediate reach.

China is increasingly its focus addressing its environmental challenges. China's 12th five year plan seeks to rebalance the economy and society. The analysis and appreciation of the environmental challenges sets them within a complex system integrating the environment with economic and social development, where the environment is seen as fundamental to optimising success in the other two domains. In this context the environment is seen not as an impediment to economic development but as an essential precondition for social stability, food security, economic security, peaceful relations with its neighbours, and to establishing a strong and desirable global China brand as a responsible global citizen. While this interrelated approach to public policy makes the search for solutions more complex, it also transforms environmental challenges into opportunities to generate not only social benefits but also jobs and income.

In general China tends to look to the creation of cascading goals for the environment, regulatory controls, and direct spending in research and development or improved physical capital rather than market based solutions. For example in the 12th 5 year plan 7 of 12 mandatory targets in the plan addressed environmental issues, and included spending commitments of $400 to $500 billion. The Chinese also appear to favour empirical approaches to engaging an environmental challenge whereby they will create a significant number of pilot projects to test alternate ways of achieving the environmental goals and assessing the economic and social impacts. Once they have confidence in a particular approach or approaches to a challenge it may be rolled out on a broader basis for embedded in mandatory goals or regulation.

Dr. Hanson illustrated the success of China's approach with numerous examples of improvements in a low carbon economy including a broad focus on energy efficiency; greenhouse gas reductions and air quality (scrubbers and filters for coal fired generators, nuclear energy and low emission cars); control of heavy metal contaminants (including mercury); nuclear energy; reforestation; and, infrastructure investments such as water, sewage, renewable energy projects (wind farming, solar energy), and environmental research and development.

Looking to the future expect to see China continuing to expand its focus on engaging its diverse environmental challenges. The greatest pressures will continue to be a product of rapid economic

growth particularly if growth exceeds 8.5% which would challenge China's capacity to effectively implement it balanced approach to environment, and social and economic development. Rapid economic growth is essential to meet their ambitious goals for reducing poverty in China, but it does put recognised pressures on the environment including the challenges of feeding its increasingly affluent population in a sustainable way. Within the current system which relies heavily on the meeting of goals and compliance with regulatory standards there is a need to strengthen the effectiveness of monitoring and enforcement. Finally there is the potential for integrated water shed management (from the mountains to the rivers to the coastal plains) and biodiversity to emerge as more significant challenges over the next 5 to 10 years.