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India China Economic &
Cultural Council

Sino-Indian Axis for Business Sustainability

Collaboration for Innovation to Save the Planet



Sino-Indian Axis for Business Sustainability

"China is now the world's fourth largest economy and growing very fast. India's economic salience is also on the rise. Together these two countries will profoundly influence the pace and nature of global economic change"

Dancing with Giants: China, India, and the Global Economy, World Bank, 2007



The situation: The rise of China and India

"The rise of China and India is the wake-up call that should prompt people around the world to take seriously the need for strong commitments to build greater axis for sustainability"

The Times of India, 12th Jan 2006

The world is changing fast and two new economic superpowers, China and India, have emerged as leading actors on the world scene. Over the next decade it can be assumed that the economic focus will gradually shift from the current dominant economies of the EU, Japan and the US, to the China-India axis as these countries become economically more powerful. The direction in which China and India moves is therefore set to significantly influence the movement of the world economy as a whole.¹

In the recent past, much of the discussion regarding China's and India's role in the global economy has been in the context of the countries as competitors. ² From a sustainability perspective the most important question, of course, is not whether China or India will emerge as the more dominant economy, but rather how these two emerging superpowers can contribute to the goal of sustainable development? ³ Three areas are important in this regard, First how China and India can support a sustainable development on their own, second how they can work together and third how, in collaboration with the rest of the world, their rapid development in different ways can contribute to global sustainability.

Significant investments in infrastructure are planned in both countries the coming year, but many of these investments are following unsustainable western development models that are resource inefficient and unable of delivering an equitable distribution of welfare. ⁴

The Focus : Sustainable Urbanization

“The world does not have the resources for another 5 billion people or so to behave the way that Americans do today”

The Economist, A survey of the world economy, September 16, 2006

Midway through the first decade of the 21st century, the world is rapidly approaching a situation where, for the first time in human history, more people will live in cities than rural areas.^v Exactly when this point will be reached is unclear, but it is estimated that humanity is likely to cross this historic threshold sometime during 2008.^{vi}

Over the coming decades, virtually all of the population growth in the world will take place in urban environments, resulting in a situation where approximately two billion additional people will live in cities by 2030.^{vii} As a result, the demand for investment in urban solutions that can improve quality of life without consuming excessive natural resources will increase over time. Parallel to this trend, global energy use is increasing rapidly, with demand expected to increase by more than 50 percent by 2030 if current trends continue.^{viii}

In China the urbanization rate currently stands at 1.4 per cent, which means that about 20 million farmers become urban residents each year. At this pace, the country's rate of urbanization will reach 55-60% by 2020. That means up to 60% of its projected population of 1.5 billion by 2020, or 900 million people, will live in cities. Currently, about 30% of the 1.3 billion Chinese citizens dwell in cities - about 390 million people.^x Chinese cities and towns are expected to absorb about 300 million people from rural areas in 20 years if the urbanization drive maintains a growth of 1 per cent annually.^x

In India the number of million plus cities has increased from 5 in 1951 to 23 in 1991 and to 35 in 2001. About 37% of the total urban population lives in these million plus cities.^{xi} Today India has 286 million people living in over 5000 cities and towns with over 40 per cent of them living in 60 metropolitan urban agglomerations. There are 62 million urban people living in slums and squatter settlements today. It is projected that urban population of India will grow to 468 million by 2020.^{xii}

The way China and India will invest in new urban solutions will drive technology development and institutional innovation not only in the two countries but globally. In the case of energy it is important to ask what steps are required in order to move beyond mere incremental improvements in efficiency and reduced emissions from the power sector, to the implementation of innovative and sustainable approaches such as technology-based alternatives to business travel and new urban planning models?^{xiii}



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The issue: Sustainable energy solutions

On current trends, we are on course for a dirty, expensive and unsustainable energy future," IEA Executive Director Claude Mandil said at the report's launch in London. "In response, urgent government action is required. The key word is urgent.

International Herald Tribune, November 7, 2006

With China being the world's second largest consumer of Energy, India the sixth and the Asia-Pacific region predicted to consume more than one-third of the world's energy by 2020,^{xv} political and business leaders realize the importance of cooperation, support and new strategic alliances in the field of energy and beyond.^{xv}

Saving energy, or to be precise to increase energy efficiency and find new innovative system solutions, has been identified as a key challenge for businesses both in India and China. About half of the solution to stay below two degree global warming by 2050 can be delivered via the much more efficient use of the energy we use. Technically about 90-95% of all primary energy, and thus carbon emissions, could be saved while providing same services and benefits even with currently available best available technologies are used. Efforts to make energy use more efficient provide triple dividends by concurrently promoting social development, enhancing competitiveness, and delivering energy security.

Since many of the existing barriers to a widespread dissemination of efficient technologies are regulatory, educational and financial and not technological, setting economic incentives and establishing an appropriate policy and regulatory framework is essential. Enhanced energy efficiency and energy conservation therefore must be promoted as a pre-condition for any sustainable energy future.

The perspective: Turning challenges into opportunities

"The poor as a market are 5 billion strong. This means that solutions that we develop cannot be based on the same patterns of resource use that we expect to use in developed countries. Solutions must be sustainable and ecologically friendly."

"The goal here is not to alarmist. The BOP [Bottom of the Pyramid, where five billion people live] will force us to come to terms with the use of resources in ways that we have not so far. Whether it is in use of fossil fuels for energy and transportation, water for personal cleanliness, or packaging for safety and aesthetics, ecological sensitivity will become paramount. I believe that more innovative, sustainable solutions will increasingly emerge from serving the BOP markets than from the developed markets."

C.K. Prahalad, The fortune at the bottom of the pyramid



Today most environmental challenges are seen as problems and costs by business and politicians. In order to solve the climate challenge it is necessary to question this perspective. The threat from climate change cannot be dealt with in the same way as other environmental challenges. In the case of Montreal protocol, the singularity of the source of pollution allowed technology solutions to be implemented after initial resistance from the polluting industry. The problem with Climate Change is the multiplicity of sectors contributing to the problem. The need for a comprehensive and collective response is critical. Yet we have examples of actions taken by Industry like promoting lead-free gasoline, chlorine free paper, phase-out of CFC, reduction of SO₂-emissions from Power Plants etc. All of these actions have one thing in common; the companies creating the problem could through marginally higher investments address their respective challenge through implementing technology already available.

With Climate Change it will be impossible to curb the problem with a unilateral action against the energy industry. The need is for tackling the problem from several key points of engagement. The solutions needed also involve more significant changes in society and thereby also include many more actors. Therefore new sectors must be involved. Instead of looking how energy companies can reduce their emissions, something that seems to lead to few places beyond research in capture of CO₂ and more nuclear power, a demand side focus must be the starting point.

In all cases, companies will be encouraged to demonstrate that the business models proposed can be profitable, either today under current rules and regulations, or if supported by new rules and regulations that they support. The goal is to ensure that we stay below a 2°C increase of the temperature, while at the same time phase out polluting and unsustainable energy solutions.

In order to achieve sustainable energy solutions, the framework that regulate investment in urban areas need to support, rather than undermine, companies that can provide solutions to the challenges of today. For China and India this is not only a matter of satisfying domestic demand in this regard, but also the opportunity to become a key exporter of sustainable goods and services.

Goods and services that help reduce resource use and support sustainable energy solutions should be given priority in all regulation. Developed countries together with China and India should also develop a joint strategy to reach sustainable consumption and production patterns, where the rapid change in China and India is used as an opportunity to develop sustainable energy solutions, not only for themselves but for the world as well.

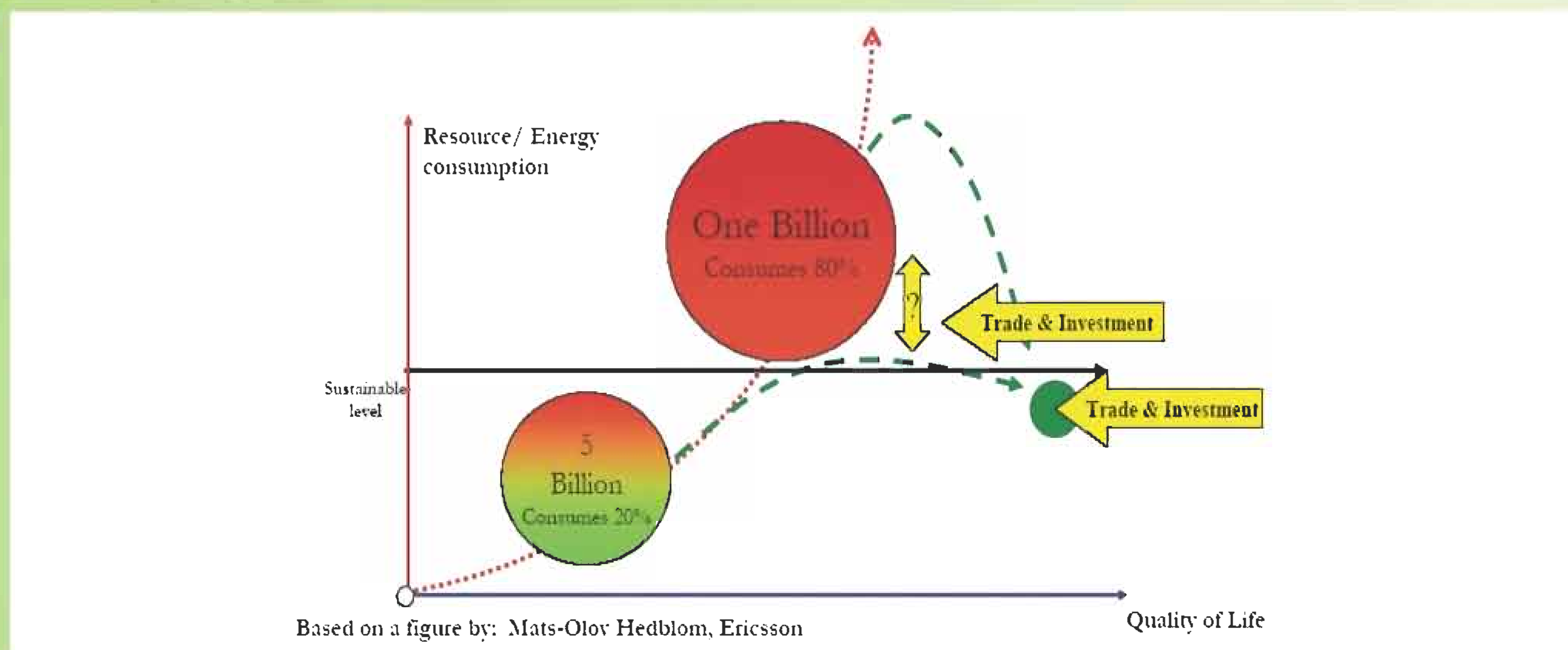


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The Initiative: Sino Indian Axis for Business Sustainability

The objective of this initiative is to explore the possibility for collaboration between key actors from China and India in the field of sustainability, and how this could be linked to other emerging economies. This will involve identifying areas in which both countries possess expertise, and from which both can gain an advantage in the form of becoming key exporters of sustainable solutions

Another key objective of the initiative is to ensure export and investments in concrete energy projects that build on the vision of complementary paths to sustainable resource use (CPSRU). A CPSRU is a path where different countries and companies agree on how to increase wellbeing in the populations at the same time as those who use too much resources reduce their use and those using very little are allowed to increase their use of natural resources. (see graph)



The initiative will focus on how China and India together with a limited number of developed countries can collaborate in key sectors (e.g. energy, transport, ICT solutions, housing and urban planning) in order to provide system solutions. It is proposed that the initiative is implemented according to a phased approach as follows:

Phase one "Movers and shakers: Drawing the map"

- Identify key sectors and solutions for a sustainable energy development in a limited number of rapidly changing urban areas in China and India. Identify key processes that influence the investments in the urbanization process (on all levels from city planning, construction, industrial choices, efficient equipment in business and private sector)
- Develop a roadmap that explores means by which leading corporate actors both from China and India can encourage sustainable innovation by using key sustainability trends as drivers for core business decisions



Phase two "The global dimension: Turning the challenge into an opportunity for the world"

- Describe ways in which these sustainability trends can translate into goods and services necessary to address global sustainability challenges
- Explore areas for developed countries to invest in domestically in order to ensure export of sustainable energy solutions to China and India. Explore the possibilities to see how groups of countries, such as the Nordic/OECD countries, could support a sustainable development in China and India, especially through a twin city concept.

Phase three "The Corporate dimension: Sustainability as a driver for Innovation"

- Develop and collect recommendations regarding the means by which foreign companies and governments can support sustainability leadership in China and India. These recommendations may range from changes required in the intellectual property rights regime and public procurement standards, to lending criteria and the structure of different industry standards regimes.
- Develop models for companies in relation to their supply chain, distribution chain and their development of content. Also include new financial solutions to create resource efficient infrastructure for both in China and India.
- Establish a "sustainability innovator zone" on the internet, in which concrete challenges can be presented, for example by government actors that are willing to pay private sector companies for solutions to these challenges. The role of the companies is to then encourage their employees and service providers to develop such solutions.

Phase 4: "From Idea to Reality: Roadmaps for a 21st Century Industry Paradigm"

- Ensure a limited number of concrete investments in efficient urban energy solutions in China and India and those policies that support sustainable urban solutions.
- Establish a system that can measure the environmental implications of trade in sustainable energy solutions in and between China / India.
- Establish collaboration between entrepreneurs in China/India and the world, both on the corporate level and in academia.

This shift from west to the east have upset some actors and there are tendency where the old economic superpowers are trying to create tensions between the to emerging super powers. See for example: <http://www.cfr.org/publication/9962/> , <http://www.cnn.com/2006/WORLD/asiapcf/03/02/bush.india.visit/index.html> , <http://www.blonnet.com/2005/07/01/stories/2005070100310900.htm> http://www.economist.com/surveys/displayStory.cfm?story_id=3689214 http://www.businessweek.com/magazine/toc/05_34/B3948chinaandindia.htm ¹See for example: The Economist, Now for the Hard Part A survey of Business in India, June 3rd 2006, page 4 ²It is predicted that by 2007 urban population will exceed the rural http://www.un.org/esa/population/publications/wup2003/pop899_English.pdf ³<http://www.unfpa.org/swp/2007/english/introduction.html> ⁴http://www.un.org/esa/population/publications/WPP2004/WPP2004_Volume3.htm ⁵<http://www.iea.org/Textbase/nppdf/free/2006/Key2006.pdf> ⁶http://www.atimes.com/atimes/China_Business/HF03Cb05.html ⁷http://www.chinadaily.com.cn/china/2006-03/21/content_547967.htm ⁸Urbanisation in India, Pranati Datta, Population Studies Unit, June, 2006 ⁹Kumari Selja, Minister for Housing and Urban Poverty Alleviation at the inauguration of ministerial segment of the first Asia Pacific Ministerial Conference in New Delhi on 15th December 2006 ¹⁰ICT can for example make work more efficient both on a daily basis if people at relevant positions are allowed to work from home one to three days a week. Video and audio conferences can make it easier to build networks both within India and with other important emerging markets such as China, Russia, Brazil and South Africa as well existing economies like EU and US. ¹¹Manning, Robert A., "The Asian Energy Market: A New Geopolitics?", Asian Energy Markets dynamics and trends, Abu Dhabi: Emirates Center for Strategic studies and Research, 2004, p.31 ¹²South Korean President Roh Moo-hyun said "I find this trend [expanding economic cooperation] highly desirable and hope that the cooperation in energy and natural resources will go beyond merely increasing trade volume and develop further into technology sharing and joint development of natural resources." during his UAE visit in May quoted in: <http://www.gulfnews.com/nation/Government/10039644.html>. Former Saudi Oil Minister and senior OPEC official Ahmed Zaki Yamani was quoted saying "For the first time we are focusing on Asia" in a keynote address to an annual London energy conference in 1998 by Manning, Robert A., "The Asian Energy Market: A New Geopolitics?", Asian Energy Markets dynamics and trends, Abu Dhabi: Emirates Center for Strategic studies and Research, 2004, p.41.





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