

US China Long Term Low Carbon City Initiative

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We are living in an unprecedented moment of history. The current contraction in the global economy is affecting every country without exception, often overshadowing the “bigger picture issues” concurrent with this challenge: the larger and equally pressing demand to reduce our carbon-based economy to a more sustainable and less polluting model – more sustainable in the use of our resources, and less polluting through the dramatic reduction of our carbon footprint.

The proposed **US China Long Term Low Carbon City Initiative** has been proposed specifically to utilize the current critical environmental challenge as the driver for economic recovery, by focusing on green employment, technologies and community development. The twin issues of climate change and economic downturn are part of a profound systemic shift, where the technologies implemented, the jobs created and the community developed will have a deep and beneficial impact on society for many years to come.

Designed to collaboratively address the issue of climate change, this program will take a learning-by-doing system approach to help each participating city: to plan, to implement, to monitor and to evaluate its efforts in reducing its carbon footprint and economic improvement. Through the process a measurement system for carbon reduction will be developed. A living database, facilitating connections and sharing knowledge among participating cities and leadership capacities, essential to the success of this program and to the extended efforts in the future will be documented. The initiators of this program envision that, with the experience, knowledge, systems and management teams developed, tested and delivered, this model can be taken worldwide and the program itself will build itself up as a social enterprise.

Learning-by-doing system approach

The project will initially select five cities in China, one city in Taiwan territory, and five cities in the US. Each selected city will tackle its own local priority using the “low-carbon” initiative methodology and concurrently working interactively with the other cities, developing and sharing: experiences, ideas, tools, methodologies developed in a process of dialogues, training seminars, workshops as well as with a database designed to closely track the status of the development of each city and to share and develop the common knowledge.

Since a low-carbon initiative will have profound impact on the economical, social and environmental systems of a city and the process of implementing this low-carbon initiative involves major shifts in the perspectives of the community, it is necessary that low-carbon initiatives in each city be developed with a system approach that bears the following characteristics:

- It involves all the stakeholders in the process, from country administration agencies, the city government agency to local communities and businesses as well other parties, such technology, product and service companies, NGOs and education and research institutes. And through a dynamic development process, it will expand and engage more organizations interested in joining the collaborative effort, the ones who will impact this process and will in turn be impacted by the initiatives.
- It is based on the uniqueness of each city in its economic, social and environmental bearings, helping each city to develop its own path of development and growth, balancing short-term and long-term objectives. At the same time, it will develop a shared vision and commitment among the cities for developing a common knowledge base for planning, executing and evaluating low-carbon initiatives.
- It is a learning process designed for the cities to learn from their own success and failures and to share among the cities, stage by stage, through a process of collaborative learning, so that all the participating cities will benefit from its own organization learning experience and the common knowledge developed in the process, which will be enhanced continuously as new experience and knowledge is drawn from each city's implementation of low carbon initiatives.

In this process of developing this system approach, we will use various tools and methodologies that have developed in the past 10 years in the area of sustainable growth. One of example will be the *game-board*, which has been developed by Johnson Control and successfully applied in developing sustainable priorities in the US and China.

This learning-by-doing system approach will become the core of the knowledge base developed by this project, which not only provides framework for expansion of the project, but will also, with the a living database, help engage cities, communities and individuals to develop their own initiatives.

Measurable results

Ultimately it is recognized that we cannot manage what we cannot measure. Many stories that claim carbon reduction are either unproven anecdotes or simply unverifiable. One of the objectives of this project is to create and develop a measurement and monitoring system for carbon reduction, using the same technologies that have led to the universal stock market acceptance and adoption of standard accounting practice.

- For ensuring measurable results from the beginning, the project will work with the city administration in selecting a “manageable” trial site, i.e. a township community in China, as the initial project site. The experience of this site can then be shared and spread in three dimensions: local expansion within the city, among the 10 participating cities, and to new “students” when the project expands to a larger crowd.
- An international accounting partnership will be built to develop and improve the measurement system according to the agreed global standards and to audit the results as the city initiatives move forward.
- With this new benchmark of measurement, each city will be, with the support and guidance from a dedicated project management and expert team, undertake an interactive process of planning, executing and evaluating its low-carbon initiative,

accurately measure and verify reductions in carbon use on an ongoing basis, and compare notes with other participating cities for collaboration and improvements.

Living database

One of the main planks of this initiative is a living database to document and share the knowledge developed in this learning-by-doing process. The database will include all the training materials developed in the project, the on-going project status of the each cities' projects, the success and failure stories from each city, the tools, ideas, methodologies developed during the process, industry information related to this effort, and the related government regulations, policies and projects.

- The living database is a 'meshwork', which facilitates collaboration between individual stakeholders in different cities, by creating a database of individuals and their positions within the administration, in NGOs and in local businesses. This is a huge advance on the current haphazard networking practice of trusting you will 'bump into' the right person at a relevant event. By sharing best practice and having access to advice, mentoring and vocational training through this 'meshwork' programme, cities can learn from each others' experience, and eventually accelerate employment growth and the strengthening of their local economies, while simultaneously reducing their carbon footprint.
- This living database will link, over time, with major international universities and prestigious think tanks. It will assist in building a vast vocational training project where those administrators in the first wave of development can help support those coming after as they 'learn by doing'. Also, those learning new skills in research, design, fitting, maintenance, and product chain logistics, can assist in training new 'students'.
- Clearly the resilience and robustness of the software package linking the cities is of paramount importance and there are two significant aspects of the program that support this initiative. The first facilitates rapid access to, and sharing of, information on what is and is not working via a sophisticated colour coded system. This technology, already used with great success both institutionally and commercially, will potentially accelerate both employment and economic growth as cities collaborate on best practice.

Eventually we see this living database and related living academy becoming a trusted global source for governments, cities and industries seeking information on 'what works' in carbon reduction, and where the future technologies might be.

Leadership Capacity Development

The successful sustainability initiatives developed in more than a decade, in private sector by major corporations such as GE, DuPont, BP, etc. or in community development such as Sweden's drive for zero fossil-fuel dependence, have proved that leadership capacity building is an essential element in the effort to combat such complex problems as climate change. The low-carbon city initiative will focus its leadership capacity development efforts in three areas as in the following:

- A dedicated team of expert and program management will be formed to help the cities in the process of implementing their low carbon initiatives, not only to ensure a

measurable success in each city's effort, but also to develop the new leadership experience and skills in system thinking, collaboration and innovatively defining a new future at the local community level.

- This dedicated team will also serve as a bridge among the cities, especially among the American cities and Chinese Cities, as well as within and among other participating groups such as industries, businesses, research and education institutions and NGOs in nurturing a leadership in the larger systems. The influence and impact from the city initiatives will also involve government teams at all levels, which may lead to new regulations, policy changes and other projects and/or initiatives.
- The dedicated team itself is a core part of the leadership capacity development in this program, by attracting and engaging young professionals, it will serve as a "training camp" for developing a fast growing team of professionals who have the passion, commitment and necessary leadership experience and skills for combating the climate in the long run.

With the system approach, the measurement system, the living database and professional team developed in the initial 12 cities in China and the US, we envision that over time the cities will increase worldwide to one hundred, then one thousand, and then ten thousand, all connected through an interactive living database system that will enable them to share breakthroughs and avoid breakdowns, and all engaged in a process in developing their own leadership while "exporting" their expertise, experience, tools, methodologies, so that a knowledge based "green economy" will emerge and impact the future of their own city and the future of the world at large.

We also envision that this program, during the process and over time, when providing its services to the cities, will develop into a social enterprise for community development in managing the living database, providing professional services, promoting green technologies, facilitating business transaction, nurturing partnerships and leadership and collaborating in R&D efforts with other parties.

In addition to all these benefits and impacts, **US China Long Term Low Carbon City Initiative**, represents an innovative platform for a Sino-US relationship. Apart from all other areas of collaboration, which have become "a must" for the two countries, striving for a prosperous future, working together to provide leadership in combating climate change should be at the top agenda for both governments. **US China Long Term Low Carbon City Initiative's** uniqueness lies in its "grassroots" approach, building up an unprecedented platform for common people in the both countries, to work together in developing a shared vision for the future. A successful knowledge based green economy will benefit more and more people as it builds capacity, demonstrating new opportunities for simultaneous carbon reduction and economic recovery.

A forthcoming **Forum of the US China Low Carbon City Initiative** has been proposed to the China State Administration of Foreign Expert Affairs for November 2009 in Beijing. US and Chinese cities who are interested in the benefits low carbon economies will be invited to participate. The program management team will outline opportunities of the program and selection criteria. Selected participating cities for the **US China Low Carbon City Initiative** will formally launch this program in 2010.

All the initiators of this program recognise the need to begin now and learn by doing. We believe that the program outlined above will restore economic growth and employment to our cities. We also believe that this initial Sino-US project will become a global model, one in which China will demonstrate to the world the unique value of her culture, skill, knowledge and partnership. As we move from the industrial age to the knowledge based economic development, through this initiative China will transform from the manufacture centre of the world to a economic and environmental balanced harmonious society. The US China Long Term Cooperation on Low Carbon City Initiative may provide an opportunity to meet the dual challenge of global economic crisis and climate change at this critical junction of human history.

I would like to acknowledge the input of Lawrence Bloom and Morel Fourman for the conceptual framework of the project and the invaluable assistance of Du Ting Ting, Zheng Xuemei, Ma Li, Gao Feng and Li Chenyi.