smartecocities

Abstracts from Papers Presented at EU-Asian Sustainable Management Conference

Taipei, Taiwan, 15-16 March 2017

Our project team in China presented the following papers at the 'EU-Asian Sustainable Management' conference in March 2017, held at National Taiwan University:

- **The Global Actors of Pingdi's International Low Carbon City: An analysis of their Influences on the Planning Process**
- **China's move towards a New Low-Carbon Development Mode? An Analysis of International Low Carbon City (ILCC) in Shenzhen**
- **Implementation Gap for Smart City Management: The Case of Ningbo China**

Full abstracts are provided overleaf. All three papers drew on the fieldwork conducted during the second year of our international cross-comparative research project 'Smart-eco cities for a green economy: a comparative study of Europe and China'.

For further details on these papers, or about the related publications being prepared, please contact the authors direct:
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The full conference programme can be found here. The event was the sixth in a series of workshops on EU-Asia Relations in Global Politics organised by the ESSCA EU*Asia Institute.

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The Global Actors of Pingdi's International Low Carbon City: An Analysis of their Influences on the Planning Process

Authors: Ali Cheshmehzangi, May Tan-Mullins, and Linjun Xie
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Abstract

This study looks into one of the most promising low carbon city planning initiatives, namely Pingdi's International Low Carbon City (ILCC) in the context of China. ILCC is located in the township area of Pingdi in the outer district of Longgang in the City of Shenzhen, South China. This new development, launched in August 2012, is aimed to become one of the national low carbon city planning models of the future low carbon planning in China. ILCC has started its 'development phase' with 1km^2 of low carbon planning and design development into implementation of 'pilot scale test' phase of 5km^2, and later into the 'promotion phase' of 53.4km^2. In the latter phase, the project is expected to cover the whole area of Pingdi town, making the whole township area into a recognisable international low carbon model. So far, the project has included many local and provincial actors, as well as several global actors that will be studied in this paper.

With elaborated policies on low-carbon initiatives, this project was first initiated as a collaborative project between the Dutch and Chinese partners. In its first few years of development, ILCC's global partners expanded to other countries, such as in Germany, Italy, France, Australia and the US. All these partners play their distinct roles in the process of making Pingdi's ILCC. In this study, we aim to explore these international relations and roles. The study will map these roles and their influences in the process of making this new development area. This research paper will also explore two key aspects of political relations and international collaborations for making the ILCC. This research study will answer: 1) What are the influences from global actors in the development of ILCC (so far)?; and 2) How are these influences linked to the implementation of low carbon initiatives in ILCC? In light of these research questions, and after the mapping study, the study will provide an analytical view of influential policies and planning practice in ILCC. It will also provide a more in-depth and up-to-date analysis of ILCC's current status. Finally, the study will conclude on the assessment of ILCC from both political and planning perspectives.

Keywords: *Pingdi, ILCC, Low-Carbon, China, Global Actors, Planning.*

China's move towards a New Low-Carbon Development Mode? An Analysis of International Low Carbon City (ILCC) in Shenzhen

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Abstract

Decarbonisation and the promotion of low-carbon development have become common goals of climate change mitigation around the world. Respectively, China as a large developing country, faces complex challenges of accelerating urbanization and industrialization, and is in dire need to speed up changes to its economic development patterns. In 2010, China launched the first batch of pilot low-carbon province and city projects, including five provinces and eight cities across the nation; one of which is the City of Shenzhen in South China. Since then, low-carbon city projects have become widespread and are deemed as pilot practices for a sustainable urban transition mode towards green and low-carbon development. Although a myriad of researches have explored this emerging field, few have probed into the development process of China's low carbon cities. It remains unknown that to what extend and how low carbon principles are integrated into the development strategies and practices of these projects. In this respect, this paper aims to fill this void by delving into low carbon city development process through an analysis of the renowned case of the International Low-Carbon City (ILCC) in Shenzhen. This study is based on a brief review of two typical development models in China, namely the 'Development Zones' of 1990s (*kaifaqu*) and the 'New Cities' of the 2000s (*xincheng*). Further evaluation of the case study is then conducted through the analysis of its development strategy. The analysis of the ILCC's financing and investment system, land development approaches, actors and actors' roles, and regulatory mode will be further discussed into three categories of 'place production', 'place consumption', and 'place marketing', while the examination of low carbon's involvement and embodiment will be incorporated throughout the study. The conducted analysis suggests that ILCC's development mode blends some features of both*kaifaqu* and *xincheng* development models, while it also presents new low carbon characteristics of its own. This study provides a glimpse into the current implementation of the ILCC project and will be a reference for future study on the project's prospect and evaluation as it proceeds. Moreover, it will contribute to the overall study of China's low carbon city development attempts.

Keywords: *Low-Carbon, China, Development Model, ILCC, Shenzhen.*

Implementation Gap for Smart City Management: The case of Ningbo China

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Abstract

In January 2013, the Chinese government launched the first batch of 90 smart cities initiative, seeing the need to use smart technology to promote and enable eco/sustainable cities development in China. A series of policies and guidelines were then launched, such as the new 'Urbanisation Plan for 2014-2020' and 'Guiding advice for healthy development of smart cities', providing clearer guidelines, aid coordination and exchange of best practices. This demonstrated the Chinese central government political will to promote this initiative. However, as this initiative is mainly implemented by the local provincial/ municipal governments, who are well-known for their entrepreneurial behavior in strategically implementing central policies or adapting them innovatively to the local contexts, the outcomes of this initiative have deviated from its original intents of 'smart city' development. This paper looks at the divergence between planning, policies and implementation of smart city management in China through the case study of Ningbo, a city located in the northeast of Zhejiang province. Ningbo is used as our main case study as it is a pilot city for key initiatives of 'smart city', 'low-carbon city', 'green city', and recently 'sponge city' and has developed a comprehensive Smart City plan to be implemented from 2011 to 2015 with an investment amount totalling 40.7 billion (US$6.36 billion). There are two main gaps on the implementation of Ningbo smart city identified in this paper. The first is the gap between centrally planned policies and provincially/ municipally implemented initiatives, that it will always exist due to the governance structure and decentralized system in China. The second is the gap between the original intents of the smart city and its interpretations by the local government officials due to the varying interests of the local stakeholders. Without reconciling these two gaps, the benefits of the smart city will not be distributed as equitably and equally among the different stakeholders.

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