The ISOCARP Awards for Excellence ISOCARP | Review 06

Dirk Engelke

The 2009 ISOCARP Awards for Excellence

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ISOCARP Vice President Awards and Communication

The Historic Old Town Hall in Gdansk. Poland set an excellent environment for the ceremony of the 2009 ISOCARP Awards for Excellence on the World Town Planning Day at 8 November 2009. The award ceremony and an accompanying international seminar on "Planning for Urban Change" the next day were hosted by the City of Gdansk, the Society of Polish Town Planners (TUP) and the Gdansk University of Technology. The seminar was sponsored by INVI, Investment Environments. An ISOCARP Award for Excellence is the highest honour the Society can award to a city, region or institution and is

a bench mark for an excellent plan or project, where excellence is based on the "ISOCARP triple perspective": the knowledge of its members from practice, from academia and from policy. So, an ISOCARP project of excellence has to be excellent in all these three perspectives. The composition of the jury not only reflects this idea of the ISOCARP triple perspective, it also reflects the geographical spread of the Society. The jury's members were: Ismael Fernández Mejía, (ISOCARP President / Mexico); Thomas Kiwitt, (Technical Director Greater Stuttgart Region / Germany); Pierre Laconte,



(former ISOCARP President / Belgium); Mairura Omwenga, (ISOCARP Liaison Office Nairobi / Kenya); David Prosperi (Florida Atlantic University / United States of America); Shi Nan, (Secretary General, Urban Planning Society of China / People's Republic of China; Pablo Vaggione, (ISOCARP Secretary General / Spain); Alfonso Vegara (Fundación Metropoli / Spain); Dirk Engelke (ISOCARP Vice President Communication and Awards / Germany / Chair).

The jury established three categories: (a) District planning/urban design; b) Urban and city planning; and (c)

Strategic and regional planning, recognising the different levels at which spatial planners work. The awarded projects also had to answer to climate change aspects, linking to the theme of the 2009 ISOCARP congress "Low Carbon Cities".

Projects, submitted from Asia, Europe, the Middle East and North America were considered, but it became clear that the most exciting, excellent projects are those that are to be planned and realised in Asia and the Middle East. The jury decided to give the 2009 ISOCARP Awards for Excellence to the three projects below: ISOCARP | Review 06

Beijing Changxindian Low Carbon Community Concept Plan

Joint Submission by Arup and Beijing Municipal Institute of City Planning and Design

Jury comment:

The Concept Plan is a well developed and presented project which utilizes several technical parameters and design criteria to plan and evaluate the overall project objectives. The notion of "low carbon zoning codes" highlights a traditional tool for planning as a means for obtaining current and future sustainability initiatives and goals. It is an excellent example in district planning/urban design in response to the global climate change concern and the urbanization pressure.

Planning Area

The Changxindian Low Carbon Community, located in Fengtai's Hexi District is one of the most important development areas along the south-western corridors of Beijing city. The project is 500 ha in area and includes a future residential and commercial area, an industrial research park and open space. It will be served by a Light Rail Transit line as part of the city-wide mass transit system. The future population will be approximately 70,000.

Background and Context

Climate change is already a critical global issue. Rising trends in China's carbon dioxide and other greenhouse gas (GHG) emissions will have a significant impact both on China and the world as a whole.

Rapid urbanization, together with rising living standards over the past two decades in China, have resulted in an increasing pressure on energy usage, resources and the environment. Without any energy and policy measures to manage GHG emissions, this unprecedented rate of urbanization will result in significant increase in GHG emissions. The country is urgently searching for sustainable ways to ease the negative implications of growth and urbanization. China has committed to reduce emission and energy intensity levels in her national 11th Five Year Plan. Innovative methods and tools are to be developed and incorporated in China's urban planning system to enable the creation of low carbon communities in the future.

Objectives

- To prepare a mixed-use community concept plan that is guided by a sustainability framework and performance indicators; and to establish a low carbon, economically viable, socially inclusive, environmentally friendly and resource efficient community.
- To pioneer the preparation of a set of innovative "Low Carbon Zoning Codes" that incorporate these sustainability indicators, and that are implementable as statutory zoning plans to manage climate change impact.

Steps of the Realization Process

The Fengtai – Hexi District Plan (2006-2020) was prepared by the Beijing Municipal Institute of City Planning & Design (BMICPD) on behalf of the City Government, in accordance with the Beijing Urban Master Plan.

Arup has subsequently been commissioned by a local developer (who acts on behalf of, and in partnership with, the Fengtai District Government) to review the existing statutory District Plan and to produce a "low carbon" concept master plan for the 500 hectares site.

Conventional planning processes in China focus mainly on spatial elements. In this project innovative planning tools driven by resource management objectives were introduced in a two-stage planning process as part of the decision making process.

In Stage One (Innovative Strategies & Tools) three elements were developed:

 A Sustainability Framework, including Vision, Objectives and 20 Key Performance Indicators 250 ISOCARP | Review 06 ISOCARP | Review 06

- An Integrated Resource Management (IRM) system and the use of an Eco-Footprint to assess the efficiency of the master plan options.
- Application of Participatory Planning & Village Upgrading, enhancing Social Improvement

Stage One resulted in a master land use plan that meets the 20 performance indicators.

In Stage Two the preparation of Low Carbon Zoning Codes as Statutory Zoning Plans (Regulatory Plans) was pioneered.

Innovation and Achievements

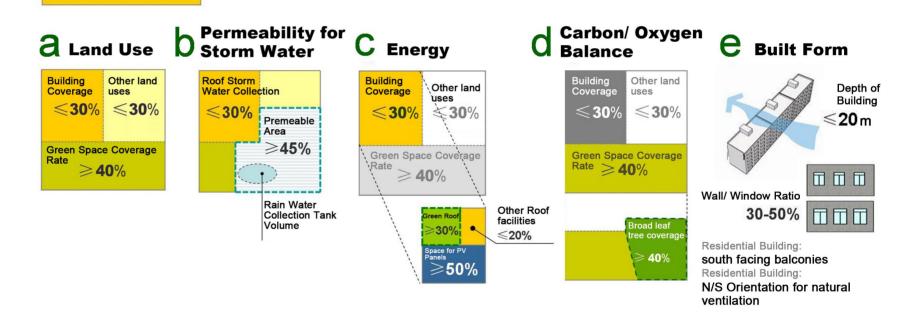
The current Chinese statutory planning system has focused on setting out site specific development parameters at the local detailed plan level – the statutory "Regulatory Plan". The list of mandatory planning parameters does not have an adequate breadth and depth fully relevant to low carbon planning objectives. This is a key challenge for planners in China.

Hence, the Beijing Changxindian Community Concept Plan is of prime importance as a pilot in addressing this implementation issue, as it involves an institutional solution. It is a pioneering case study aimed at building low carbon development models that can be implemented, enforced, and replicated in China through innovative low carbon zoning codes.

This new approach should greatly improve the feasibility and the enforceability of implementing the low carbon planning concept in China. This pilot project clearly demonstrates the need for institutional reform in China's planning system in response to the challenge of climate change.

Sustainable Urban Design Guidelines

Residential Site Area 100%



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New Comprehensive Planning of Wuhan

Wuhan Planning and Design Institute, People's Republic of China

Jury comment:

The "New Comprehensive Planning of Wuhan" is setting the ecological framework for the sustainable metropolis region. The entry shows an advanced technology in problem identification, analysis and presentation. It also shows a sophisticated understanding of the relationship between microclimate considerations, open space provision, transportation and building strategies as key elements of sustainable comprehensive planning in Wuhan.

Planning Area

Wuhan, capital of the Hubei province, covers an area of 8,5 km² and has 8.97 million permanent inhabitants. It is a central metropolis in central China.

Background and Context

Wuhan, a nationally famous city of history and culture, major industrial, scientific research and education base, traffic and communication terminal, will have a population of 11.8 million by 2020.

It used to be one of the four famous "stoves" in China because of the problem of urban heat island effect, with temperatures ≥35 °C in summer.

Ecological problems in the rapid urbanization period are increasingly prominent. The City's water area, arable land, forests and other ecological resources are being encroached upon, while green space in the central city amounts to less than 9 m² per capita.

China's longest river, the Yangtze joins the Hanjiang River in the city center. The City's water area covers one quarter of its total area. Wuhan is the most typical riverside & lakeshore city.

Objectives

The overall objectives of the project are: Promoting Urban Ventilation (channelling fresher and cooler air into the city), Stack Control (technical design measures to enhance or, where appropriate, avoid this ventilation), an Ecological Framework & a Sustainable Metropolis Region

- Expand and introduce population distribution based on six development axes, applying a Transit Oriented Development (TOD) mode based on "expressways, main roads and rail" along multi-mode transportation corridors
- Encourage a green traffic network by preferential public traffic, developing a rapid, high volume public transport system.

- Establishment of a livable city focusing upon community construction, encouraging a balance between homes and jobs to reduce commuting and carbon emissions
- Strengthening measures for urban sustainable development
- The use of ecological methods based on natural circulation leading toeffective mitigation of the urban heat island effect

Steps of the Realization Process

In 2007, Wuhan Urban Circle was granted the "Experimental Area for Comprehensive Reform of Two-Oriented Society" status.

Thus, building a resource-efficient and environmentally- friendly eco-city has become a new aim for the spatial development strategy in Wuhan. This aim shall be met by adopting TOD Mode for sustainable metropolitan axial expansion as well as seeking urban ecological framework control for rapid urbanization period. This is supported by applying natural circulation of ventilation stack control to reduce the heat island effect.

Strategy Content:

- Create a spatial development pattern of "Mixed Axes & Wedges"
- Master Planning involving six new intensive urban groups and six ecological green wedges at the core of the main city zone", and a new approach to urban development, away from resource-oriented extensive development to an intensive ecological development pattern. The planned land area for ecology control is up to 83%.
- Construct an urban ecological framework based on the ventilation and stack control by setting up six large-scale ecological green wedges that run through the whole city mainly based on water areas, wetlands, mountains and woodlands along the Yangtze and Hanjiang rivers

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- Provide extensive public green space in the urban area based on the climatology theory
- Emphasise the role of open space and the construction of main roads along river corridors in order to channel high quality air from the surrounding areas to the city center, accelerating mitigation of thermal island effect.

Innovation and Achievements

The new comprehensive planning of Wuhan helps the finding of solutions to the ecological dilemmas typical for metropolises in central China. It sets an ecological framework for the sustainable metropolis region and shows an advanced technological approach to problem identification, analysis and

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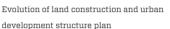
presentation. That framework effectively integrates microclimate considerations with green infrastructure provision, transportation and the location of built development as key elements of sustainable comprehensive planning in Wuhan.

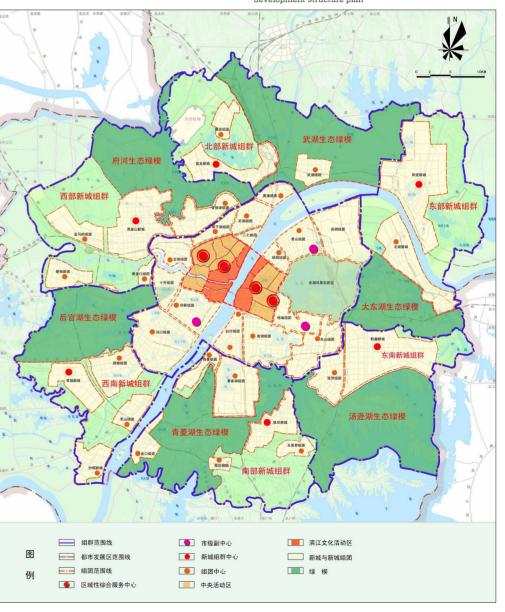
Since 2003, high temperatures during summer days have apparently

decreased by 1 °C on average in the urban areas of Wuhan. It means that the city has successfully shaken off its nickname "stove".

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Plan Al Ain 2030: Urban Structure Framework Plan

Abu Dhabi Urban Planning Council, United Arab Emirates

Jury comment:

The "Plan Al Ain 2030" is an ambitious plan for an ecologically extreme fragile region. It carefully balances between facing globalisation on the one hand and local/ethnical identities on the other by focusing on physical development and environmental concerns. Using a traditional approach the plan combines a strategic consideration based on local identity with a structural framework. The "Plan Al Ain 2030" is considered an excellent example of strategic/regional planning.

Location and Planning Area

Al Ain (meaning "The Spring" in Arabic) is located approximately 150 kilometres east of Abu Dhabi city and 150 kilometres south of Dubai in the United Arab Emirates (UAE). The fourth largest city in the UAE, it has an estimated metropolitan population of just over 400,000 residents.

Background and Context

The contemporary city lies at the site of an ancient nomadic crossroads that has offered reliable water supplies to human settlements for the past 5,000 years. It still has six oases originally fed by an ancient irrigation system known as falaj, some parts of which date to 1,000 BC. Al Ain Oasis, the largest of the six oases, is located adjacent to the city's central business district. Al Ain also possesses the UAE's richest architectural heritage, including 50 historic structures within the oases.

Contemporary Al Ain has reached a crucial turning point in its physical and economic development. A rapidly expanding population and a policy of very large plot allocations have filled out most of the available land. The city must now decide how to develop in order to preserve its character, heritage, and the relaxed lifestyle it offers.

Objectives

The "Plan Al Ain 2030" is an ambitious plan for an ecologically extreme fragile region, carried out by the Abu Dhabi Urban Planning Council (UPC). It carefully balances between facing globalization, on the one hand, and local/ethnical

identities on the other. Using a traditional approach it combines a strategic consideration based on local identity with a structural framework, intended to foster the authentic Arabic identity of Al Ain while supporting continuous evolution and growth.

Plan Al Ain 2030 promises special treatment for the city's oases, ensuring that they remain at the heart of the community for generations to come. It supports traditional Bedouin living too.

Key environmental principles of Plan Al Ain 2030 include preserving the city as an oasis and protecting the natural environment. Key cultural principles include protecting the cultural heritage and cultural homeland. The key social principle of Plan Al Ain 2030 is a high quality of life, and a living Arabic community. The key economic principle is a diversified economic development. These key principals are laid down in four frameworks of the Plan Al Ain 2030:

- Environmental Framework
- Land Use Framework
- Transportation Framework
- Open Space Framework

Steps of the Realization Process

The UPC has already defined three phases for the delivery of the plan but the timing is subject to evolving circumstances and requirements. UPC is already working with private developers to incorporate Plan Al Ain 2030 principles into their development proposals.

During Phase 1, the major structural elements of the Land Use Framework will be planned, including a redevelopment plan for the City's Central District, key transportation and transit improvement initiatives, and the advancement of Emirati housing projects.

For Phase 2, the major structural components of the Gateway Transit Corridor will be planned, and development at key transit nodes will intensify. Planning work on the surface tram system will begin and the development of Emirati housing will continue. Through the implementation of Phase 3 by 2030 the majority of Al Ain residents and commerce will be housed.. A second north-south axis will also contain higher density accommodation, creating a crossroad where the two major axes meet.

Innovation and Achievements

Plan Al Ain 2030 is a conceptual document that articulates a clear vision for Al Ain, expressed through principles, policies, geographic plans, urban design details, and architectural guidelines, serving as an interim tool for evaluating development and growth propositions until detailed district-specific plans are completed,

Plan Al Ain 2030 strikes a delicate and much-needed balance between conservation and development. It explores the need to conserve ground water resources and protect natural habitats.. Creating a comprehensive network of protected areas and limiting urban sprawl, Plan Al Ain 2030 proposes projects that exploit existing economic wealth to develop renewable energy production and reduce the consumption of non-renewable resources.

TRANSPORTATION FRAMEWORK: TRANSIT

High Speed Rail

Trans System

Orange Line

Green Line

Community Bus

High Speed Rail Station

Trans Station

Shuttle Terminus

Bus Terminus

Plan Al Ain 2030 Transportation Framework: Transit