REPORT OF THE TECHNICAL COMMITTEE (TC)
2014 GUANGZHOU INTERNATIONAL AWARD FOR URBAN INNOVATION
GUANGZHOU, CHINA, 25-27 September 2014

I. INTRODUCTION

The TC met in Guangzhou from 25 to 27 September 2014 to select outstanding and deserving initiatives with a view to enhancing the implementation of sustainable urban development through inspiration and knowledge sharing. It took into consideration the **goal** of the Guangzhou International Award for Urban Innovation (Guangzhou Award) to recognize innovations in improving the social, economic and environmental sustainability in cities and local governments worldwide and more specifically:

- To highlight exemplary models of innovative policies and practices;
- To motivate cities and local authorities to further promote innovation;
- To improve city governance.

The TC took also into consideration the **objectives** of the City of Guangzhou to promote the sharing of lessons learned from urban innovations between cities, regions, countries and thematic areas.

The TC wishes to express its appreciation to the City of Guangzhou, the United Cities and Local Governments (UCLG) and Metropolis for their vision in establishing the Guangzhou International Award for Urban Innovation.

It wishes to thank the City of Guangzhou for its generous hospitality to the TC. The TC commends the secretariat for the Guangzhou Award in the way it handled the call for submissions, the transparency in its guidelines and processes. It further commends the City of Guangzhou for its intention to invite all 15 shortlisted cities to present their initiatives to the International Seminar on Urban Innovation as was the case in 2012, and to allow the Jury to make its final decision after the seminar.

The TC reviewed all 209 initiatives submitted from 159 cities and from 55 countries and regions. Of these 209 initiatives, 45 were identified as deserving initiatives. It further selected 15 **submissions of excellence from the 45.** These are considered of comparable merit and constitute the shortlist of cities to be submitted to the Jury for its consideration and final selection of 5 award-winning cities (See Annexes I and II).

II. The Evaluation Process

The TC assessed each submission using the main criteria established by the Guangzhou Award for Urban Innovation namely:

- **Innovativeness**: the extent to which and the use of knowledge of information has been applied in developing new policies, practices and/or business models to address major urban issues and challenges;
- **Effectiveness**: the extent to which the initiative has achieved or is well on its way to achieve its stated objective(s) and other socially desirable outcomes;
- **Replicability**: the value of the initiative in inspiring others to adopt new ideas, policies or practices, including replication in other locations of the city, region or country for greater impact and sustainability;
- **Significance**: the importance of the initiative in addressing problems of public concern.

III. Selection Procedure for the Short-listed Initiatives

In its first plenary session, the TC divided into three groups (A, B and C). Each group reviewed about one third of the submissions on a regional basis with a view to determining the qualifying initiatives. The work of the three groups resulted in a consolidated list of 77 initiatives from 71 cities and regions.

In its second plenary session, the members of the TC re-organized into two groups (D and E) with the purpose of identifying **45 outstanding cities.** Each group came up with a list. The two lists were compared in plenary. Those common to both lists were unanimously admitted to deserving initiatives list. Those remaining were discussed in plenary until consensus of the final list of 45 cities was reached.

In its third plenary session, the members of the TC were re-organized into Groups F and G with the purpose of identifying 15 outstanding cities. The same methodology was applied and resulted in the shortlist.

The TC prepared a brief for each short-listed initiative to inform the Jury of the rationale of its selection. These briefs are contained in Annex III.

The TC also came up with a draft agenda for the International Seminar on Urban Innovation which will feature the 15 shortlisted cities. The draft agenda is contained in a separate report.

The TC commends the leadership of Guangzhou for organizing study tours to all of the 15 shortlisted cities of the 1st cycle of the Award and strongly recommends that it continues this practice.

IV. Recommendations of the TC to the Secretariat

The TC appreciates the process and procedures undertaken for the evaluation of the submissions to the 2014 award. The Technical Committee has the following suggestions on how to improve even further the quantity and quality of submissions and the evaluation procedures:

1. Increasing the number of submission and ensuring a regional balance:

    a) Expand international awareness about the award through, for example, the creation of a network of local ambassadors;
    b) Increase regional, national and international media coverage;
    c) Continue and expand the cooperation with international city associations and partner institutions.

2. Improving the quality of submissions:

    a) Add a summary structure at the beginning of the application form:

        - TITLE and TAGLINE (one line phrase providing the essence of the submission)
        - COUNTRY PROFILE (social and political environment, e.g. GDP, GINI, HDI, government structure, etc.)
        - ORGANIZATION APPLYING (this is not always clear e.g. district government, municipal government, NGO, etc.)

- SUMMARY DESCRIPTION OF PROJECT including what is the innovation (150 WORDS)
- IMPACT

b) Section (G) of the current submission format should be placed right after the summary;
c) The index of submissions, in addition to code number, country, city and title should include the thematic areas;
d) Cross check data and eligibility of initiatives. Non eligible initiatives should be separated from the main folder for TC to confirm;
e) The submission form should ask cities to clarify if and how multiple entries are linked.

3. Pre-TC assessment preparation: Files should be available to TC members on the intranet-page or database two weeks before

4. Improve physical filing system including separators by region and country and codification system for ease of access.

5. Procedures of working groups
   a) Ensure consistency of working group procedures;
   b) Clarify criteria and methodology appropriate to each stage of the assessment process (regional selection, shortlist, etc.)

6. Cities re-submitting initiatives must indicate they are resubmitting, and clearly demonstrate new developments or improvements since the previous submission.

V. TC Members

1. **Ms. Sue Brownill, TC Member**
   Reader in Urban Policy and Management Department of Planning, Oxford Brookes University
2. **Mr. Zengke He, TC Member**
   Deputy Director of National Research Center of Innovation, Peking University; Doctorate in Political Science
3. **Mr. Eric Huybrechts, TC Member**
   Responsible for International Affairs at the Regional planning agency of Paris/Ile de France region (IAU-IDF)
4. **Mr. Hailong Li (Representative of Mr. Qiu Baoxing)**
   Doctorate, Chinese Society for Urban Studies (CSUS)
5. **Ms. Fernanda Magalhaes, TC Member**
   Senior Urban Specialist of Inter-American Development Bank
6. **Mr. Neal Peirce, TC Member**
   Founder of Citiscope (Global news site on innovation in cities), Editor and Writer
7. **Mr. Vidhyandika Perkasa, TC Member**
   Senior Researcher of Centre for Strategic and International Studies (CSIS)
8. **Ms. Farley Peters (Assistant to Mr. Neal Pierce)**
   Project Manager of Citiscope (Global news site on innovation in cities)
9. **Mr. Qiu Baoxing , Chair of TC**
   Former Deputy Minister of Ministry of Housing and Urban-Rural Development of the People's Republic of China (MOHURD)
10. **Mr. Stefan Schurig, TC Member**

Director Climate Energy at the World Future Council

11. **Ms. Wandia Seaforth, TC Member**
    Former Chief of Best Practices Programme of the UN-Habitat
12. **Ms. Geci Karuri-Sebina, TC Member**
    Executive Manager of South African Cities Network
13. **Ms. Azza Sirry, TC Member**
    Director of UTI at Housing and Building National Research Center, Professor of Urban Planning
14. **Mr. Nicholas You , Moderator of the TC Meeting**
    Advisor to the Guangzhou Award

VI. Members of the Secretariat

1. Mr. Liu Baochun, Director General of Guangzhou Foreign Affairs Office
2. Mr. Yang Zeliang, Director of Guangzhou Award Secretariat
3. Ms. Wu Xiaoling, Deputy Director of Guangzhou Award Secretariat
4. Ms. Chen Ming, Staff Member
5. Ms. Guo Jialin, Staff Member
6. Ms. Liu Wantao, Staff Member
7. Mr. Zhang Kaian, Staff Member
8. Ms. Zuo Jieqiong, Staff Member

Annex I

List of 15 Shortlisted Initiatives
(By alphabetical order)

No.	City	Initiative
1	Abu Dhabi	Estidama
2	Antioquia	Educational Parks: innovating the educational system in Antioquia.
3	Boston	Youth Lead the Change: Participatory Budgeting Boston
4	Bristol	Smart City Bristol
5	Buenos Aires	Buenos Aires City's Collaborative Roundtable for Innovation and Creativity
6	Christchurch	Christchurch: Our Ever Evolving City
7	Dakar	Dakar Municipal finance program: Accessing the Power of Capital Markets to Improve the Quality of Life for the Urban Poor
8	Eskisehir	Cherish the Memory of the City. Eskisehir City Memory Museum (Building Intercultural Dialogue Between Eskisehir and Den Haag Museum Project)
9	Gwangju	GHGs Emission Program in Household Carbon Bank in Gwanju
10	Hamburg	The International Building Exhibition IBA Hamburg and its Climate Protection Concept "Renewable Wilhelmsburg"
11	Hangzhou	Public bicycle system
12	Jakarta	The Pluit Reservoir Revitalization Project: (Socially-Inclusive Coastal Protection Today and for 2030(Climate Adaptation and Resilience in Jakarta)
13	Linköping	Linköping - Carbon Neutral 2025-where ideas come to life
14	Melbourne	4℃ Cooler – Using green infrastructure to build a climate resilient and prosperous Melbourne
15	Rio de Janeiro	Rio Operations Center: integrating data and monitoring utilities in a truly intelligent system

Annex II

List of 30 Deserving Initiatives
(By alphabetical order)

No.	City	Initiative
1	Bogota	Zero Waste Program: a focus in reuse with social inclusion
2	Bremen	Livable streets – livable city! Sustainable Mobility and Car-Sharing – key for reclaiming street space
3	Brussel	CLts, an innovative and participative home ownership model
4	Budapest	Coming Soon!– Rögtön Jövök!
5	Büyükçekmece	Our disabilities don't have to stop us!
6	Changwon	Resident-led Urban Planning "Building the Best(Eutteum) Neighborhood" Project
7	Dubuque	Smarter Sustainable Dubuque
8	Galle	"Make Green & Clean Bio Energy City in Galle"
9	Kisumu	Waste to wealth
10	Kunming	Free Bus Service by the Elderly in Kunming
11	Laiwu	Respect the Low-Income Citizens' Right of House Selection
12	Lisbon	Lisbon Local Development Strategy for Neighborhoods or Areas of Priority Intervention(BIP/ZIP)
13	Lusaka	Know Your City- A 2030 City Without Slums
14	Malmö	Climate Smart Hyllie
15	Mexico City	"Calle Completa" Línea 5 de Metrobús
16	Ottawa	Ottawa's Innovative Spirit: Transforming an Economy through Diversification and Entrepreneurship
17	Petaling Jaya	Greening the Grassroots – A journey for Sustainability Petaling Jaya
18	Phitsanulok	Phitsanulok: Low carbon city with integration of stakeholders by taking activities on reducing Green House Gas emission and MRV system to sustainability environment city
19	Porto Alegre	Datapoa – The open data project of the City of Porto Alegre
20	Recife	Recife pact for life- Urban Security and Violence Prevention City Plan
21	Rostov	In step with the time: Socially-oriented project for adaptation of elderly people to information technology
22	Sabadell	Sabadell smart city as a catalyst for building the city of the future
23	São Paulo State	State Program for Prevention of Natural Disaster and Mitigation of Geohazards
24	Seoul	Anti-corruption clean construction System
25	Surabaya	Community-Based Independent Waste Management
26	Sylhet	Building a Water-logging Resilient Sylhet City
27	Tallin	Free public transport for the residents of Tallinn
28	Tel Aviv	The Tel-Aviv-Yafo municipality citizens club- "Digitel"
29	Vancouver	West End Community Plan
30	Vienna	wien mags wissen – Making Public Sector Knowledge Management Work: Creating Engagement With Value Based Management

Annex III
Summaries of the 15 Shortlisted Initiatives

Abu Dhabi, United Arab Emirates: Estidama

In one of the world's most rapidly growing cities, a new government-mandated program - *Estidama* (Arabic for "sustainable") - aims at making UAE more environmentally responsible and sustainable. The UAE has witnessed unprecedented urban development and poor resource management has resulted in one of the largest carbon footprints internationally. A key component of Estidama is the Pearl Rating System (PRS), a sustainability rating system introduced in 2010. The PRS guides projects through design, implementation and management. Although sustainability rating systems exist elsewhere, Estidama is the only such program designed and implemented in the Middle East with input from different stakeholders and is designed for arid regions. Estimada is at the technological edge of green building monitoring systems, merging the most innovative existing systems in an appropriate way for the UAE context. The program is provided free and has a training component to raise awareness within the construction industry. It imposes stiff environmental sustainability rules for all new construction. The program targets energy use reduction of 31 percent, water use saving of 37 percent, and 65 percent construction waste diverted from landfill. There's a mandatory audit procedure for each project. The rules ran into initial resistance from industry groups that feared increased costs and more difficult project approval. But independent analysis has confirmed that cost increases are negligible.

Antioquia Province, Colombia: Educational Parks for Youth

Building on a widely-hailed experiment in Medellin, the entire surrounding province of Antioquia has set up a network of 80 educational parks designed to supplement traditional education with programs to honor young peoples' inherent skills and citizenship potentials. The educational programs that are being developed are designed to promote science, technology, research and innovation, connectivity and entrepreneurship, as well as arts and culture. Each of the parks are being designed by architects through design competitions to give each park a unique and local identity. In Medellin park libraries were set up, even in some of the poorest city neighborhoods, reflecting serious government interest in the people and skills of residents of even the poorest communities. Not replacing formal school systems, the regional parks are designed to attract local talent, capacities and skills among youth, including promoting a culture for peace and civic values.

Boston, USA: Youth lead the change: Participatory Budgeting Boston

Boston's mayor sought a way to empower youth (age 12 to 25) to become active participants in civic affairs of their city government. His solution: a process of participatory budgeting, inviting young people to collect ideas for capital projects, distill them into concrete proposals, and then hold a city-wide youth vote to determine which proposals would be funded by $1 million set aside for the project. The goal was to teach youth about city building and budgeting process, to gain leadership and professional skills. Boston became the first American city in which youth have been empowered to decide on a portion of their city's capital budget. Over 450 ideas were generated, over 1,500 young people cast a vote, 14 projects made it to the ballot and seven were selected by the youth as winners for implementation.

Bristol, UK: Smart City Bristol

An historic city beset by problems of congestion, an aging population, climate change and energy resilience, Bristol is making itself a place set apart by new initiatives. It voted to become one of the few cities in England to adopt a mayoral form of government. Bristol is a

signatory to the Covenant of Mayors, the mainstream European movement involving local authorities committed to reducing energy use and emissions. The City was awarded European 'Green Capital' status for 2015. Bristol's innovative approach to becoming a smart city is based on people and not on technology: a Public-Private-People approach. It has two primary aims:

- To contribute to the reduction of Bristol's C0 2 emissions of 40% by 2020 from a 2005 baseline
- To use projects to ensure sustainability is placed at the heart of community concerns and ensure that sustainability becomes an integral way of improving individual's lives.

Projects to date include smart metering, open data, smart grid and electric vehicles which build on the City's strengths in micro-electronic and digital companies. Citizen participation is prioritized through a living laboratory and extensive media and digital communications. Future projects include a Bristol Prize for new clean technology and a Grass Roots Catalyst Fund to incubate and develop sustainable urban living initiatives which can be up-scaled and applied to cities at home and abroad.

Buenos Aires, Argentina: Collaborative Roundtables for Innovation and Creativity

Like many local government administrations Buenos Aires faced a wide range of bureaucratic barriers. These included too many meetings of doubtful usefulness and confusing lines of initiative and accountability. Buenos Aires decided to reform its governance system with a management initiative called "Collaborative Roundtables for Innovation and Creativity." The central idea of these roundtables is to engage in frank dialogue between the municipality and its citizens and to stimulate imaginative and innovative actions by senior officials. The varied initiatives which emerged include "Schools of the Future" focused on robotics and 3D printers; an "Enterprise Academy" to deepen entrepreneurial potential; a "WiFi for Inclusion" initiative to close the technology gap for less affluent citizens; and a platform to unlock the potentials of foreign market enterprises.

Christchurch, New Zealand: Our Ever Evolving City

From 2010, a series of earthquakes and aftershocks caused loss of life and extensive damage to Christchurch. The damage included destruction of 1,200 commercial building and damage of 90% of residential properties. The city is using the recovery process to rebuild the social fabric as well as to enhance resilience. Extensive engagement with citizens was launched through the "share an idea" campaigns. From the thousands of responses received, the community's vision of a livable, vibrant and prosperous city began to take shape. A transitional city programme includes support for recovery in three key areas: healing and wellbeing, sense of place and business. At the same time, the transitional programme contains elements for long-term recovery such as testing new ideas, enhancing community resilience and creating a new identity for the city. To date hundreds of community activities have been organized and vacant spaces in the city have been activated with creative projects. The private sector has contributed significant financial and in-kind support while 10,000 hours of voluntary work has been given by the community. An indication that Christchurch is firmly on the way to recovery is the fact that it is once more being listed as a tourist destination worth recommending.

Dakar, Senegal: Accessing Capital Markets

With rapid growth in its urban population, a large portion of Dakar's population works in the informal sector. There was a pressing need for a central market place to accommodate its street vendors so as to improve their social and economic situation and to provide more convenient and hygienic conditions for consumers. To finance the project, Dakar decided to

access capital markets.. Not only is it the first city to do so in sub-Saharan Africa (outside South Africa), it is also one of the few cities in a developing country to do so without the benefit of full guarantees from central government. It enlisted financial and technical support from a wide range of organizations including the Bill and Melinda Gates Foundation, the World Bank, the United States Agency for International Development and Cities Alliance. A total of $4 million was raised for the project; equally important the city now has access to a new financing mechanism to achieve its development goals. With this breakthrough, there is now a precedent for other cities across Africa to benefit from lower transaction costs and lower credit terms as well as less skepticism from investors as they seek mainstream sources of finance for their respective capital projects.

Eskisehir, Turkey: Cherish the Memory of the City Museum
Endowed with a rich history of many past civilizations, Eskishir has created a Memory Museum that builds a cultural bridge from the past to the present. It combines the best of museology with modern technology. The project focuses on enabling citizens to establish and nourish ties with their culture through digital recordings of oral histories captured through interviews with scholars and other experts about Eskisehir's history and cultural heritage. The museum features arts, ethnic culture, education, sports, economy, genetic heritage and personal experiences. The museum incorporates and curates participation through competitions, library collections and child-oriented activities, and it intends to continue as a living and continuously self-renewing museum. No less than 40 percent of museum visitors in 2013 were Eskisehir citizens, showing the extent of local interest.

Gwangju, Korea: GHGs Emission Program in Household Carbon Bank in Gwanju
Can a government-initiated program to spark voluntary carbon-saving steps by citizens actually generate significant returns? Gwangju's Carbon Bank system indicates a strong "yes." Initiated five years ago, it has expanded participation by some 330,000 households, representing 1.5 million Gwangju citizens or 62 percent of the city's population. While the city paid for educational and operating costs, a Green Star Network was responsible for implementing the education and promotion activities. Greenhouse gas emissions have decreased each year, most recently by 135,000 tons.

Hamburg; Socially Inclusive Zero Carbon Neighborhood Transformation
In 2005 Hamburg decided to support the redevelopment of the Wilhelmsburg neighborhood of the City through hosting the International Building and the International Garden Show (IBA). An "IBA Partnership" was established which brought together 150 private companies and the local community. As a result over 70 projects were developed around 3 themes including cities and climate change. Wilhemsburg has 55,000 inhabitants living in an Island on the Elbe vulnerable to flooding. It is also an ethnically diverse and low income community with an environment affected by industrial and transport infrastructure. The projects are based on maximizing the use of local energy resources such as energy savings and energy efficiency thereby strengthening the local economy as a result. The aim is 100% local renewal supply by 2025 and 100% renewable heat by 2050, making the Elbe islands carbon neutral. The IBA provided an opportunity and structure to further the scheme. Already scheduled projects will ensure that 54% of heat production and 14% of the overall energy demand will be renewably produced by the end of 2015. The IBA Hamburg Model and the Climate Protection Renewable Wilhemsburg's strategy are already being used in other parts of the City. Additionally the IBA is sharing the knowledge generated with other partner Cities.

Hangzhou, China: Public Bike Sharing
With 80 percent of residents and commuters identifying a serious traffic problem in the city, Hangzhou launched China s first public bicycle project. Serving some 280,000 passengers

daily, the system (free for the first hour) complements the city's extensive bus system. Run by the newly-formed Hangzhou Public Bicycle Development Company, it represents a model of government-led enterprise, claimed to be the world's largest bike-sharing program that doesn't require government funding beyond initial capital. Beyond fees on bike use (imposed after an hour of use), the company raises significant private funds through selling advertising space on the bike docking station kiosks. A key feature is partnerships, with inter alia, universities, to monitor trends and issues in the use of the bikes and a unique management system designed to overcome the most frequent problem areas of bike sharing systems: service points, getting bikes to where they are needed when they are needed, responsive hot-line support, repairs and implementing users' recommendations for the continuous improvement of the system.

Jakarta, Indonesia: The Pluit Reservoir Revitalization Project Climate Adaptation and Resilience in Jakarta)

Jakarta, lying in a delta of 13 rivers with 40 percent of land below sea level, faces a huge crisis of flooding, algae and water pollution.. Its Pluit Reservoir Revitalization Project represents the city's significant effort to improve water storage capacity, reduce urban flooding and improve the quality of its prime water source. The project requires improving storage capacity, relocating 3,000 squatters around the reservoir's banks, and transforming the areas into parks and quality public open space. The city's water management plan, envisioned for roll out from now to 2030, is seen as a way to address climate change in a socially conscious way. It includes government partnerships with a corporate sector that is expected to benefit – along with the public – in new and less threatened property development.

Linköping, Sweden: Carbon Neutral 2025

Linköping has a bold goal: to become an absolutely carbon neutral city by 2015. The city council's road to that goal was launched through broad-based collaboration and partnership with residents, employers, universities, other cities and national and international networks. And the municipality has sought to lead by example: it uses renewable fuels (over half its vehicles use biogas); it specifies climate criteria in its procurement processes; it regularly communicates climate and environmental issues to its employees and residents; and it works closely with Linköping University to develop methods and technologies to reduce CO2 emissions and establish a Biogas Research Centre. Two new combined heat and power plants have been built, with 95 percent of homes already connected. City buses are fueled by biogas produced from livestock manure and food waste. The results are already emerging: CO2 emissions are down by 25 percent since 1990, energy consumption in schools and hospitals have been reduced by 5 percent and are on a trend for further reductions.

Melbourne, Australia: 4℃ cooler: using green infrastructure to build a climate resilient and prosperous Melbourne

Between 1995 and 2009, the city of Melbourne suffered extreme hot weather resulting in severe drought, water shortage and heat waves that killed several hundred people. The immediate response of the city was to plan a 90% reduction in potable water use. This included cutting irrigation support to the city's urban forests and a plan to remove 40% of the city's trees. Ironically, this solution underestimated the value of green spaces and ecosystem support which are critical to climate change mitigation. Realizing the need for a more strategic long-term strategy, in 2010 the city appointed a new Urban Landscape Team. The team produced the open space strategy and the urban forest strategy. Since 2010, forty million dollars have been invested in related initiatives including urban forests and shrubbery; green space and rain water harvesting; permeable paving and protection of waterways; and wetlands. The goal is to cool the city by 4 degrees Celsius and to lower energy use for

cooling. 15,000 trees have been planted, 40 streets retrofitted to improve permeability, and an in-road storm water harvesting system started. A four year citizen's engagement programme educates and mobilizes citizens. The city of Melbourne provides the bulk of the funding while the regional and federal governments have also contributed. Other partners include the universities of Melbourne and Victoria for related research; and the media for public awareness.

Rio de Janeiro, Brazil: A World Leading Emergency Control Center

Rio de Janeiro has been hit hard by repeated Atlantic storms imperiling the city. This especially affects the mostly low income settlements that are located on the high slopes surrounding the metropolis and are prone to devastating landslides. Following a vicious storm in 2010, Rio de Janeiro decided to create a center that operates 24 hours a day, staffed by officials from 30 city departments. This center has become a global model showing the benefits that can be derived from collaboration, alignment and data sharing across city divisions. Since the facility went on-line, employing some of the latest information communication technology and weather forecasting systems, there have been no deaths caused by landslides. The model has had many other benefits for the day-to-day management of the city. Traffic emergency time response has been reduced significantly with citizens alerted about traffic snarl ups and accidents and redirected to the best routes. Data gathered for the center also enables the identification of neighborhoods with higher dengue fever infection rates. In planning the facility, Rio officials visited alert centers in Madrid, Seoul and New York, and have since forged cooperation with Johannesburg as it plans a similar system.