WCS 2010
"liveable and sustainable cities of the future"

The World Cities Summit (WCS) 2010 took place in Singapore from 28 June to 1 July. The Centre for Liveable Cities and the Civil Service College co-organised the biennial summit for more than 1,000 ministers, governors, mayors, policy makers, heads of International Organisations, and corporate leaders from 49 countries in Asia, the Middle East, Africa, the Americas and Europe.

highlights

WCS Mayors Forum Mr Mah Bow Tan, Singapore's Minister for National Development chaired this prominent forum – themed "Cities as Growth Engines in a Post-crisis World" – involving governors and mayors all over the world to discuss and share the experiences and challenges faced during the 2009 global financial crisis.

Lee Kuan Yew World City Prize Named after Singapore's first Prime Minister and present Minister Mentor, this is an international award that recognises individuals and organisations that have made outstanding contributions to the creation of vibrant, liveable and sustainable urban communities. The Prize Lecture, Prize Forum, and Gala Dinner completed the keenly watched highlight.

Plenary sessions These serve as strategic, cross-cutting overviews of the major issues that cities encounter. Right from the opening plenary, active participation characterised the interplay of broad issues involving people, technology and market.

Expert panel sessions Complementing the plenary and dialogue sessions were a series of expert panel sessions offering deep dives into an extensive range of issues.

Learning Journeys These are site visits hosted by Singapore's government agencies. The visits offered first-hand perspectives on how policies and ideas could be implemented successfully.

WCS Expo More than 3,000 sq metres – four times larger than in 2008 – was made available to some 3,000 international trade visitors and more than 50 exhibitors. The exhibition showcased the latest model cities and innovative urban solutions that enhance economic value while addressing environmental challenges.

partnerships

Strategic partners WCS 2010 received the endorsement of six major international strategic partners:
· World Bank
· Asian Development Bank (ADB)
· United Nations Human Settlements Programme (UN-HABITAT)
· United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)
· United Nations Development Programme (UNDP)
· United Nations Environment Programme (UNEP)

Supporting organisations Fourteen international associations participated as Supporting Organisations. The Heads of these organisations and associations attended and spoke at WCS 2010.
· Asia Society
· Cities Development Initiative for Asia (CDIA)
· CITYNET
· Convention on Biological Diversity (CBD)
· Fundacion-Metropoli
· Institute of Southeast Asian Studies (ISEAS)
· International Society of City and Regional Planners (ISOCARP)
· International Solid Waste Association (ISWA)
· International Urban Development Association (INTA)
· Singapore Business Federation (SBF)
· United Cities & Local Governments Asia Pacific (UCLG ASPAC)
· Urban Land Institute (ULI)
· Waste Management & Recycling Association of Singapore (WMRAS)
· World Green Building Council (WGBC)

Corporate sponsorships

Platinum sponsors
· Far East Organisation
· IBM
· Siemens
· Veolia Environnement Group

Gold sponsors
· KPMG

Lee Kuan Yew World City Prize sponsor
· Keppel Corporation

Corporate sponsors
· Cycle & Carriage
· Fujitsu
· Royal Philips Electronics

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nister for Defence

WCS 2010

welcome reception cum expo opening address

"The inaugural World Cities Summit (WCS) in 2008 attracted 800 delegates including eight Ministers and 47 Mayors and Governors. WCS 2008 also saw the holding of the East Asia Summit Conference on Livable Cities as well as the setting up of the Centre for Liveable Cities and the Institute of Water Policy. Similar to 2008, this year's World Cities Summit and Singapore International Water Week are held during the same week to reap synergistic benefits.

This is significant in the light of the growth of cities and mega-city regions, which has accelerated in recent years at an unprecedented rate. In 1950, the world knew only two megacities – New York and Tokyo – each with more than 10 million people. In 2009, there were 21 megacities. By 2025, 15 years from now, the world can expect 29 megacities. Besides the emergence of megacities, second and third tier cities are also building up rapidly in developing countries.

This Summit reflects the imperative of examining how best we can manage the growth of cities in a way that can meet the aspirations of the people and yet is sustainable to the environment that we share.

With more than 50 Ministers, Mayors and Governors in attendance, and delegates from over 30 countries worldwide, this is a clear indication of the significant role WCS plays in addressing pressing issues and challenges that are common to many cities and countries across the world."

~ **Mr Teo Chee Hean**, Deputy Prime Minister and Minister of Defence, Singapore

plenary sessions

liveable and sustainable cities: leadership and governance

The world is urbanising at an unprecedented rate. City leaders face pressing issues that have never been more broad ranging and complex.

> "Across the possible solutions, sustainability is paramount. Pivotal to tackling the issues is strong leadership and governance."

Opening Speech
Mr Mah Bow Tan
Minister for National Development, Singapore

Moderator
Professor Tommy Koh
Ambassador-at-large, Ministry of Foreign Affairs, Singapore

Speakers
Dr Han Seung Soo
Former Prime Minister of Republic of Korea and Honorary
President of the Korea Water Forum

Mrs Anna Kajumulo Tibaijuka
UN Under-Secretary-General and Executive Director, UN-HABITAT

HE Dr Jumaa Ahmed Al Kaabi
Minister of Municipal Affairs and Agriculture, Kingdom of Bahrain

Dr Noeleen Heyzer
Under-Secretary-General of the United Nations and Executive
Secretary of the Economic and Social Commission for Asia and
the Pacific (UNESCAP)

Mr Huang Qifan
Mayor of Chongqing, People's Republic of China

Mr Wim Kuijken
Government Commissioner for the Delta Programme,
the Netherlands

Dr Sadayuki Sakakibara
Chairman of the Board and CEO, Toray Industries, Inc

Mr Amitabh Kant
Chief Executive Officer & Managing Director of the Delhi-Mumbai
Industrial Corridor Development Corporation

key observations

1. Sound leadership and governance. As a case in point, the Spanish city of Bilbao and the city of Curitiba in Brazil have benefitted from sound leadership and governance. Well-laid plans were persevered with till success was attained.
   a. Bilbao was once an obsolete industrial port. In the space of 25 years, it has become a bustling centre of knowledge and culture. Its urban transformation has been based on an integrated and holistic approach. Backing this has been visionary leadership – leadership that is committed to long-term planning and the development of supporting infrastructure. For its efforts, Bilbao won the inaugural Lee Kuan Yew World City Prize at this Summit out of 78 quality nominations.
   b. Curitiba received special mention at the Prize as a model city too. It inspired other cities to emulate the success of its highly sustainable transportation policies. Many credited Curitiba's success to the leadership of former Mayor Jaime Lerner.

2. Be environmentally sustainable.
   a. Although the Asia-Pacific region has achieved spectacular economic growth, social progress and poverty reduction, the ecological footprint of some cities is three to five times higher than the global per capita average.
   b. Hence, it is necessary to adopt inclusive, low-carbon green growth strategies. It is also vital to reform urban planning and infrastructure design. In this way, cities can become compact and eco-efficient.

3. Promote cohesive and inclusive societies. It is evident that much can be achieved when governments rally the civil society and enterprises to a common stand, notably in terms of using resources responsibly with a view to making food and fuel available, and their prices stable. It is instrumental in creating affordable and dignified living conditions.
   a. Public-private partnerships in Chongqing, China have helped the city to score with jobs, education and healthcare. As the municipal government developed new industries to create employment opportunities, the provincial government improved access to higher education. Furthermore, a comprehensive social security framework was developed to meet healthcare needs.
   b. Ready financing is important for ensuring a city's resilience – think urban-based financing and micro insurance schemes. These are particularly essential when natural disasters strike, or financial downturns threaten to engulf lives.

4. Pre-empt disasters. Recover in double quick time. There is no time to lose in the face of natural disasters – identify the vulnerable areas in cities and integrate disaster preparedness.
   a. The Netherlands, for instance, has overcome her natural constraints. The country is flood-prone, yet has the best-protected delta in the world. The government looks into preventing disasters instead of just responding to them.
   b. New engineering technology ensures the safety of the people living in low-lying regions, as well as the continued prosperity of key economic regions. It also balances the need for safety from hydrological challenges while retaining the Netherlands' pleasant, attractive and open landscape.

conclusion

Cities must go beyond piecemeal planning and adopt inclusive and integrated approaches. Regard urban and rural areas as integral parts of a continuous and interconnected system.

sustainable and high growth cities: balancing development and environment

The question of how to balance economic growth with environmental sustainability comes at a challenging time. This is because many developing countries are still in the early phases of their urban transition, while high-income countries have been hit hard by the 2009 global economic crisis. While aspirations continue to rise, bread and butter problems persist.

Moderator
Dr Patricia Clarke Annez
Research Director, "Making Cities Work for Growth Project" and Non-Resident Senior Fellow at the Brookings Institution

Speakers
Ms Katrin Lompscher
Senator of Health, the Environment and Consumer Protection, Berlin, Germany

Dr Ursula Schaefer-Preuss
Vice-President for Knowledge Management and Sustainable Development, Asian Development Bank

Mr James Adams
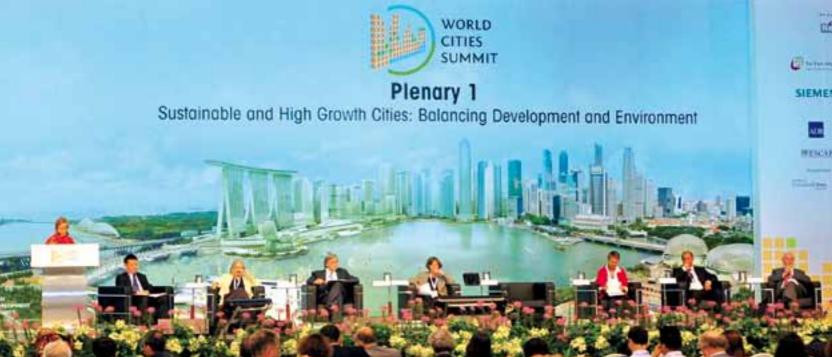Vice-President of the East Asia and Pacific Region, World Bank

HE Mr Majid Al Mansouri
Secretary-General, Environment Agency – Abu Dhabi, UAE

Professor Saskia Sassen
Robert S. Lynd Professor of Sociology, Columbia University, USA

Mr Peter Schwartz
Co-founder and Chairman, Global Business Network, a Monitor Group Company

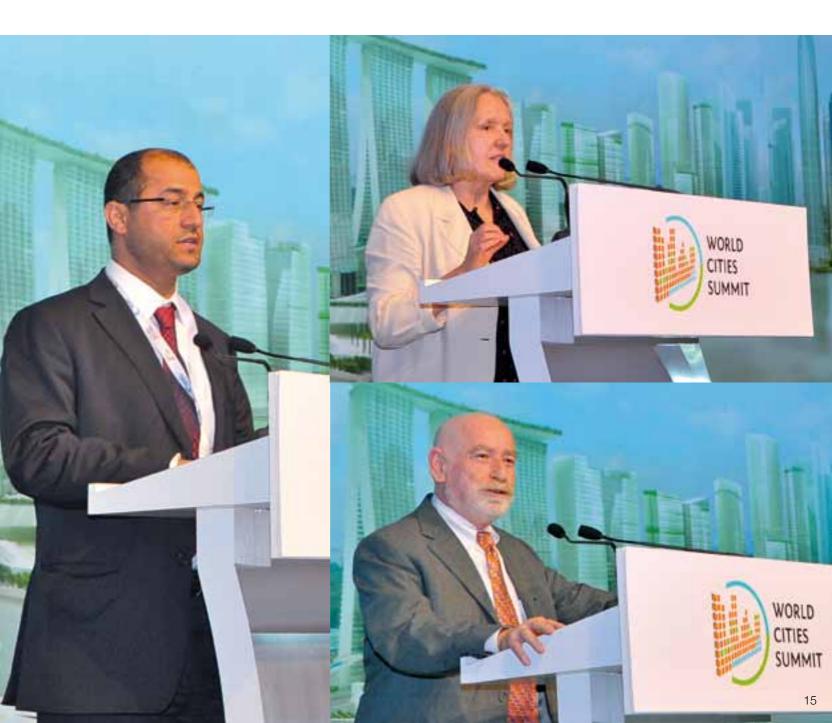**Mr Lee Tzu Yang**
Chairman, Shell Companies in Singapore

key observations

1. The Asian Development Bank's Strategy 2020. The Bank recognises that urbanisation in Asia is multi-faceted and complex. Many cities in the region are still in the infant stages of urban infrastructure. It is estimated that the infrastructure deficit in Asia and the Pacific amounts to US$60 billion per year. The provision of infrastructure might come at the expense of environmental preservation.

2. Paradox of urban poverty versus wealth creation in cities. Over the next 20 years, 90% of urban growth will take place in the developing world. This could bring about complex issues of urban management, increased cost of infrastructure and irreversible environmental challenges. Faced with this paradox, the World Bank's Urban Hub in Singapore was set up to draw lessons from Singapore's urban transformation and experience.

3. Globalisation and climate change. The global financial crisis offered more opportunities for innovating, rethinking and testing alternative models and strategies. It prompted the world to think about the linkages between cities, and how ecology could help to make cities more environmentally sustainable and viable. Climate change is the other real and pressing issue, and choices made by cities today can have severe repercussions in the long run. The pursuit of "green urbanism" – which involves controlling the usage and distribution of land, as well as the technologies people use for transportation, buildings and electricity production – could reduce the negative consequences of human and urban development on the environment and mitigate drastic climate changes that would threaten all the progress achieved by cities.

4. Transport and sustainable mobility. Transport accounts for half of the world's oil production, a third of global energy use, and 25% of carbon emissions. While urban mobility moves with rapid urbanisation, cities can control this through planning, design and the development of low carbon options. Sustainable mobility adopts alternative forms of energy, including conventional gasoline, biofuels, and electric power. Shell's energy scenarios indicate that by the year 2050, renewables could reach 30% of the world's total energy mix with fossil fuels and nuclear energy comprising the remaining 70%.

conclusion

Amidst the challenges, the world has grown more optimistic and excited about making cities more future-oriented and successfully organised.

harmonious, creative & liveable cities: balancing community needs

Globalisation intensifies competition for talent and investments. This prompts cities to invest in spaces that enable people to live, work and play.

Moderator
Mr Ong Keng Yong
Ambassador-At-Large, Ministry of Foreign Affairs, Singapore

Speakers
Dr Vivian Balakrishnan
Minister for Community Development, Youth and Sports, Singapore

Mrs Carrie Lam, JP
Secretary of Development, Hong Kong Special Administrative Region
Government

Mr Richard M. Rosan
President, Urban Land Institute Foundation, USA

Mr Jim Clifton
Chairman and CEO, Gallup Organisation, USA

Mr Jonathon Mills
Festival Director and Chief Executive, Edinburgh International Festival, UK

> "How do we celebrate diversity yet balance various communities' needs? What are the conditions for creating social capital and building inclusive and harmonious cities?"

key observations

1. Living together: Singapore manages diversity for prosperity. As an immigrant nation with a diverse population, Singapore manages the issue of "how to live with one another" every day. A fair, open and meritocratic approach takes centre stage, ensuring that no particular race or group feels disadvantaged and disenfranchised.

2. Conserving the Central District in Hong Kong. The conservation of Hong Kong's Central District is the city's attempt to meet the diverse needs of different communities even as it develops into a global city. The Hong Kong government conserved buildings with historical value and created public spaces for the community.

3. Liveability through Well-Designed Public Spaces. It was observed that the most economically successful cities are those that foster liveability through the provision of well-designed public spaces. This often attracts talent and businesses, thereby stimulating economic development. In the United States, a recent surge in urban migration, particularly by affluent and educated individuals, is driven by a desire to live in places that are well connected to work and recreation.

4. Jobs come first. The Gallup Organisation's World Path study found that the key concern of people all over the world is jobs. According to the study, the most important factor for job creation is law and order. An increased sense of security would lead to increased investments, to job creation and economic growth. Another key element facilitating job creation and generating GDP growth is food and shelter. The amount of confidence in institutions and infrastructure, from education and transportation to healthcare and housing, is another important criterion.

5. The power of hope. It has been observed that "hope" could empower leaders with the momentum to lead changes across their cities.

6. Celebrate! Festivals are hailed as ways to cement sense of liveability. For instance, the Edinburgh International Festival began in the aftermath of World War II in 1947, bringing together different cultures to create a sense of respect and hope. Today, it has spawned into nine festivals and sells more tickets than any other event in the world after the World Cup and the Olympic Games. More importantly, it has added to the vibrancy of Scotland's capital city and made it a mainstay on the international arts scene.

conclusion

Cities that really thrive are those that let their uniqueness show and permeate, while balancing the needs of the people for jobs and assurance.

ministerial dialogue
leading the change: building liveable and vibrant cities

The Ministerial Dialogue gathered past and present practitioners of governance, urban theorists and planners to discuss the vision for a liveable and vibrant city; the priorities of a country or city following the economic crisis; and whether ideals of building liveable cities could be realised. The common theme is vision: a vision for the city, communicating and revisiting that vision constantly, strong leadership, and the close partnership between the public, private and people sectors.

Moderator

Ms Grace Fu
Senior Minister of State for National Development and Education, Singapore

Speakers

Mrs Carrie Lam, JP
Secretary for Development, Hong Kong Special Administrative Region Government

Hon. Robinson Njeru Githae
Minister of Nairobi Metropolitan Development, Kenya

Mr Lim Guan Eng
Chief Minister of Penang, Malaysia

Prof Dr Marat R Safiullin
Minister of Economy, Republic of Tatarstan, Russia

Dr John So
Former Lord Mayor of Melbourne, Australia

Dr Jaime Lerner
Former Mayor of Curitiba, Brazil; former Governor of Parana State, Brazil; and former President of the International Union of Architects

Mr Tom Murphy
Former Mayor of Pittsburgh, Pennsylvania, USA & Senior Fellow, Klingbeil Family Chair, Urban Land Institute

> **"The Ministerial Dialogue evinced that there is no "one-size-fits-all" model that makes a city vibrant."**

key observations

1. **Global Perspectives and Experiences.** Urban society increasingly associates liveability and vibrancy with sound governance, security, economic success, environmental quality, neighbourhood amenity, quality of living and individual well-being.

2. **Hong Kong: Starting with the vision.** Hong Kong recognises the need to look beyond economic competitiveness to become a "quality" city with "sustainable and diversified development". Its 2030 vision lays out planned land use through land zoning and legislation for "building energy codes".

3. **Nairobi: Getting the basic infrastructure in place.** Nairobi is taking measures to make the city more liveable. For example, funds are set up to encourage the setup of small businesses and increase employment rate. The government is also establishing public-private partnerships to better manage the increase in solid waste generation.

4. **Penang: Becoming an international city.** Penang is ranked the eighth most liveable city in Asia and second for the best food in the world by ECA International Survey. It was also one of the 30 Global Business Process Outsourcing Centre for the Future and named a UNESCO World Heritage City. Penang recognised that it needed to develop its own niche as an international city and therefore focused on quality, reliability, safety and integrity as its branding.

5. **Kazan: Taking the sporting path.** With the best teams in football, hockey, basketball, ice hockey and field hockey, Kazan has earned the status as the sports capital of Russia. The government also notices a positive boost in the city's economic growth whenever Kazan wins a sports title as it draws an influx of investors and foreigners.

6. **Melbourne: Strength in diversity.** Melbourne acknowledges the need to stay attractive to immigrants as they are part of the economic growth drivers in the city's high-yield knowledge industry. This population diversity works well for Melbourne as people are actively sharing their customs and traditions and the community is actively engaged in shaping its city life.

7. **Curitiba: Living, working and playing together.** Curitiba assimilates immigrants through education by ensuring they have the same opportunities as everyone else in Curitiba. It also believes that teaching children about their city is an important step towards getting people to like their city.

8. **Pittsburgh: From manufacturing to entrepreneurship.** Once a severely polluted industrial centre, Pittsburgh is now ranked by Forbes and The Economist as one of the world's most liveable cities. From being one of the least entrepreneurial cities in America in 1980s, Pittsburgh achieved the highest growth of venture capital investment in the number of start-ups in America between 1997 and 2007.

conclusion

Funds and infrastructure can help build the hardware necessary to support growth and attract new investments. However, leading real change and creating a liveable city requires the development of a city's "soul". This comes in the form of the people's dreams, confidence and aspirations.

closing plenary

liveable and sustainable cities: the way forward

The closing plenary brought about a renewed awareness of the multi-dimensional and interconnected considerations in city planning. The session generated a collective visualisation of the intricacies of city planning.

> " Forward looking city planning calls for "planning what we must" and not "planning what we like". "

Moderator
Mr Joshua Cooper Ramo
Managing Director, Kissinger Associates, USA

Speakers
Dr Dieter Salomon
Lord Mayor of Freiburg, Germany

The Right Honourable Robert Doyle
Lord Mayor of Melbourne, Australia

Dr Liu Thai Ker
Director, RSP Architects Planners & Engineers Pte Ltd, Singapore and Chairman, Centre for Liveable Cities Advisory Board

Mr Joel Kotkin
Distinguished Presidential Fellow in Urban Futures at Chapman University in Orange, CA and Adjunct Fellow at the Legatum Institute, London, UK

Dr Vishakha N. Desai
President, Asia Society

key observations

1. **Culture matters.** Apart from economic, social and environmental issues, the culture of a city is equally essential to the pursuit of economic development. Culture is the soul of the city. Culture embodies intangible factors that reflect a city's appeal.

2. **City planning to the fore.** Forward-looking city planning calls for "planning what we must" and not "planning what we like". Master plans devised using a comprehensive and long-term approach can thrive in adverse environments. City planners are also advised to see beyond the people's immediate needs to build communities that forge a sense of identity, belonging and pride.

3. **Freiburg impresses.** The German city of Freiburg was cited as an example of long-term commitment to sustainability. For two decades, the city has combined "hardware" (jobs) and "software" (social and cultural factors, sports, wellness and leisure in urban planning). Freiburg has become a magnet for people. Over time, institutions and start-up companies have sprouted, spurring growth.

4. **Melbourne prevails.** Melbourne stands out as a city that preserves its identity and character. The Lord Mayor does so with a diverse portfolio of top-class offerings in education, sports, arts and entertainment, which serve to fortify the city's strong positioning as a premier city of commerce and industry. At the same time, he reinvigorated the streets of Melbourne, making the city one of the most liveable and frequented in the world.

5. **Helping the families.** The very factors that make a city "successful" and "sustainable" might have also eroded the conditions conducive for forming families. This has resulted in the trend of migration out of increasingly less affordable and high density megacities. The solution lies in designing the living environments intelligently.

conclusion

Compact cities that are well run are proving that high density and highly liveable environments do cater to diverse needs, enabling individuals, families and communities to thrive.

expert
panel
sessions

making cities sustainable and endearing: strategies for success

Truly liveable cities should be designed with a quality environment and with the pedestrian in mind.
A comprehensive approach towards planning included social and environmental factors.

Moderator
Dr Alfonso Vegara
President of the Fundación Metrópoli

Speakers
Professor Jan Gehl
Professor, Founding Partner, Gehl Architects

Mr Goh Chye Boon
CEO, Sino-Singapore Tianjin Eco-City Investment & Development Co., Ltd

Professor Ricky Burdett
Professor of Urban Studies at the LSE, Director, LSE Cities

Ms Louise Cox
President, International Union Architects

Ms Amanda Burden
New York City Commissioner, City Planning, USA

Mrs Cheong Koon Hean
CEO, Urban Redevelopment Authority and Deputy Secretary (Special Duties), Ministry of National Development, Singapore

key observations

1. People cities are sustainable cities. The most important aspect of city planning is to look at the people-scale of things. Cities are built for people, not motorcars.

2. The architect's vision. The ethos of good design involves inter-professional cooperation and communication, upholding professional values and ethics, and promoting innovation and best practices.

3. Shaping the City. Go for what really matters. For instance, the heart of New York is in the streets and the sidewalks. Therefore, creating pedestrian-friendly places at street level is a criteria in the City's planning policy.

4. Urban innovations. This is an unceasing endeavour. Singapore, for example, has kept remaking herself since attaining independence. From fighting a dearth of housing, she has become a highly liveable city in a garden. For many other cities, retrofitting with intelligence is key.

conclusion

Cities present great opportunities. In city building, the public sector remit is not to build afresh but to intervene within the fabric and work with existing structures.

pathways to growth – analysis from the Global Liveable Cities Index (GLCI)

The Centre for Liveable Cities (CLC) commissioned The Global Liveable Cities Index (GLCI) in 2008. The objective was to develop a balanced assessment of urban liveability based on five key areas. These are:

- good governance
- environmental friendliness and sustainability
- urban infrastructure
- quality of life
- economic competitiveness and vibrancy.

Moderator
Dr Remo Burkhard
Managing Director, Singapore-ETH Centre for Global Environmental Sustainability (SEC)

Opening Remarks by
Mr Andrew Tan
Director, Centre for Liveable Cities & CEO, National Environment Agency, Singapore

Speakers
Dr Tan Khee Giap
Associate Professor, Lee Kuan Yew School of Public Policy

Dr Chen Kang
Associate Professor, Lee Kuan Yew School of Public Policy

Panellist
Professor Woo Wing Thye
Professor, Economics Department, University of California Davis; Director, East Asia Program, The Earth Institute at Columbia University

key observations about GLCI

1. **Strengths.** Besides GLCI, there are three other indices: the Global Power City Index, Mercer Liveability City Index and EIU City Index. The GLCI is a more general index. Its strength is its wide coverage of 135 ideal indicators and its strong emphasis on emerging cities in Asia. Good governance and leadership, as a component of the index, is omitted in the other indices. GLCI also takes into consideration the quality of life of the average local family living in the city. This means that the index could better reflect the liveability of the city, and help derive the relevant urban policies.

2. **Room for improvement.** The GLCI can better itself by including more indicators:
   - law and order
   - cultural life
   - adequacy of power supply
   - accessibility to medical facilities
   - education

   Apart from including more cities, cities could be ranked by population size for the purpose of making better comparisons.

conclusion

The GLCI's focus on the needs of the local population renders it useful in helping urban policymakers identify areas of improvement.

expert panel session

cities in southeast asia: challenges & opportunities in the age of globalisation

The Centre for Liveable Cities (CLC) and the ASEAN Studies Centre (ASC) at the Institute of Southeast Asian Studies (ISEAS) held a series of regional workshops in 2009. At this session, three countries shared their experiences and perspectives on managing the impact of urbanisation and responding to emerging challenges. The insights are timely, considering that almost half of the population in Southeast Asia live in urban areas. While the rate of urbanisation has increased, urban growth rate has been declining.

Moderator
Mr Barry Wain
Writer-in-Residence, Institute of Southeast Asian Studies (ISEAS)

Opening Remarks by
Mr Andrew Tan
Director, Centre for Liveable Cities & CEO, National Environment Agency, Singapore

Speakers
Mr Rodolfo Severino
Head, ASEAN Studies Centre, Institute of Southeast Asian Studies (ISEAS)

Dr Yap Kioe Sheng
Editor and Resource Person, CLC-ASC Urbanisation Report

Panellists
Dr Supachai Tantikom
Member, Adv. Committee to Governor of Bangkok

Mr Nurfakih Wirawan
Head Commissioner, Pembangunan Jaya Ancol, Jakarta, Indonesia

Tuan Haji Onn Bin Abdullah
Director, Commission of City of Kuching North, Malaysia

key observations

1. **Bangkok.** The Bangkok Metropolitan Authority has put in place a five-year action plan that outlines strategies to reduce CO2 emissions by 15% in 2012.

2. **Jakarta.** Rapid urbanisation in the Jakarta Metropolitan Area has caused annual flooding, dearth of housing, and poverty. The key challenge is to manage imbalances arising from decentralisation. Particularly challenging is the coordination between central and local governments.

3. **Kuching North.** This city focuses on providing excellent city services and ensuring that the city remains beautiful, healthy, green, and culturally vibrant. Proper planning, empowerment and clear delineation of responsibilities contributed to Kuching North's success as an environmentally sustainable city.

conclusion

Policymakers have to create inclusive social policies to help the urban poor. The main priorities of larger cities like Bangkok and Jakarta are to respond to the impact of rapid urbanisation and global warming through urban policies and projects. In Kuching North, partnerships with the private sector and mutually beneficial networks with cities and towns in the surrounding areas also boost the city's attractiveness and liveability. This makes the city appealing to the business community.

expert panel session
financing of municipal infrastructure

Jointly organised by the Centre for Liveable Cities (CLC) and the World Bank, the panel explored the challenges that cities in emerging markets and developed economies face in raising private capital for public infrastructure. Before cities can even begin to think about the specificities of financing their infrastructure, they first have to consider some larger issues. There are four different types of crises they may face: Cultural, Political, Economical and Ecological. The solution hinges on public-private-civil society partnership.

Moderator
Mr Kamran Khan
Program Director, World Bank-Singapore Urban Hub

Speakers
Professor Paul James
Director, Global Cities Research Institute, RMIT, Australia and Director of the United Nations Global Compact Cities Programme

Mr Melvin A. Cruz
ex-Chief Financial Officer, Marikina City, Philippines

Mr James Harris
Chairman, International Project Finance Association Asia

Mr Ping Chew
Managing Director, Greater China Head, Standard & Poor's

Mr Coskun Cangoz
Director General of Public Finance, Undersecretariat of Treasury, Turkey

Mr Michael Barrow
Director of Private Sector Development, Asian Development Bank

key observations

1. Get primed with funding. All that Marikina City, the Philippines, had in 1992 was a budget of $74 million. The city had to prioritise. Infrastructure building was paramount. The breakthrough in funding came about when Marikina City received a favourable credit rating from Standard & Poor's. This facilitated loans form International Finance Corporation.

2. Get the project going. Two challenges were often encountered in the emerging markets: systemic challenges and human nature. Systemic challenges include obstacles such as the lack of access to sub-sovereign borrowing. Human nature encompassed corruption, political interferences, and unrealistic timelines.

3. Cultivate the credit culture. This involves a risk pricing mechanism, investor protection, transparency and full disclosure, and predictability. These are factors instrumental in gaining investor confidence, and hence continued funding.

4. Prudence and accountability are key. Turkey, for instance, suffered the after-effects of municipals' overborrowing. Since 2002, the central government instituted tougher regulations to ensure accountability.

conclusion

Governments must not conveniently outsource projects to the private sector entirely, as the city lives with the outcome for the next 15-20 years. Public agencies that work with private investors need to have a credit culture ingrained in their operations in order to be credible partners.

expert panel session
sustainable urban solutions: role of innovation and industry

This session emphasised that with innovation, the private sector and governments could harness resources efficiently. They should devise novel market-oriented sustainable solutions.

Moderator
Assoc. Professor Simon Tay
Chairman, Singapore Institute of International Affairs

Speakers
Dr Willfried Wienholt
Vice President, Urban Development, Siemens ONE, Siemens AG, Germany

Mr Bruno Berthon
Global Managing Director for Accenture Sustainability Services, Paris

Dr Robert W. Schumacher
General Director, Advanced Product & Business Development, Delphi Electronics & Safety Kokomo, Indiana

key observations

1. Urban infrastructure. Siemens was cited as an example of a firm that develops sustainable solutions and implements them according to the varying scenarios in cities.

2. Information and Communication Technologies (ICT). ICT could enable operationally efficient solutions to energy use and mobility. More importantly, ICT could tailor solutions in respect of differing profiles and contexts.

3. Transportation. To make transportation sustainable, policy makers have to tackle these challenges:
   a. *Energy cost, energy security and greenhouse gas emission.* Shell, for instance, sought to produce second-generation bio fuels in terms of road infrastructure. It studied how to recycle aggregates from the road based on the concept of a circular economy.
   b. *Traffic management.* At stake are congestion and loss of productivity. Delphi's sustainable transport solutions are based on smart grid integration
   c. *Connectivity.* This called for the integration of mobile phones into the vehicle cockpit.

conclusion

In an inter-connected environment, it is essential to foster consensus among various actors and decision-makers.

expert panel session
shaping world-class built environments

Shaping world class built environments involves taking a long-term view of sustainability while preserving the uniqueness of cities' urban design, history, heritage and culture. The quality of a built environment hinges very much on the effectiveness of the local building control regime which in turn defines liveability of a city.

Moderator
Dr John Keung
Chief Executive Officer, Building and Construction Authority, Singapore

Speakers
Ms Jane Henley
CEO, World Green Building Council

Professor Dr Steffen Lehmann
UNESCO Chair in Sustainable Urban Development for Asia and the Pacific; Chair and Professor, School of Architecture and Built Environment, University of Newcastle

Mr Finn Petrén
President, European Institute for Design and Disability (EIDD - Design for All Europe)

key observations

1. Unlock the Potential. "Greening" existing buildings could lead to a 50% reduction in carbon emissions. To do this, strong financial incentives or disincentives are needed. Carbon trading delivers actual savings.

2. Green Urbanism and Resilient Cities. Long-term planning is a must for cities to be more sustainable and resilient. Future-proofing existing buildings curbs urban sprawling and reduces carbon emissions. Holistic social sustainability elements should also be incorporated to achieve healthy and liveable communities.

3. Planning and designing for all at the outset. A "design for all" concept is necessary to achieve social inclusivity. Upfront planning and co-ordinated efforts are necessary to ensure accessibility provisions and application of the "design for all" concept.

conclusion

As cities grow, they must address the needs of changing demographics, while ensuring that the built environment is safe and well-maintained within a carbon-constrained environment. Legislation has a critical role to play in maintaining environmental as well as social sustainability standards. Strategic urban governance to balance economic growth, societal well-being and environmental quality is also imperative. However, the government alone cannot future-proof the sustainability of built environments; it requires collaborative effort between the public and private sectors.

expert panel session

beyond affordable & quality housing: gracious & harmonious living environments

Many countries and cities have progressed from the building of basic shelters to the provision of quality housing. Engaging communities to shape their living environments and build local identities requires strategies to promote social cohesion, whilst encouraging gracious living.

Moderator

Mr Tay Kim Poh
Chief Executive Officer, Housing & Development Board, Singapore

Speakers

Mr Daniel Biau
Director, Regional and Technical Cooperation Division, UN-HABITAT

Dr Suzanne H. Crowhurst Lennard
Director, International Making Cities Livable Council

Ms Ada Fung, JP
Deputy Director of Housing Department (Development & Construction), Hong Kong Special Administrative Region Government

key observations

1. **Foster strong communities.** Housing has played an important role in many successful cities. In Singapore, more than 80% of the population live in government flats. To ensure the success of its public housing programme, the Housing and Development Board (HDB) looked at both hardware and software aspects to foster strong communities.

2. **Balance long-term growth needs.** The Hong Kong Housing Authority (HKHA) recognised the importance of sense of belonging in the communities. HKHA strived to build sustainable communities with a people-oriented approach to meet prevailing social, economical and environmental needs without compromising the needs and interests of future generations.

3. **Prioritise environmental planning.** This is essential to transiting from sectoral housing to broader urbanisation management approaches. Sustainable communities need hospitable public places in human scale, mixed-use neighbourhoods to enable social interaction.

conclusion

Successful public housing is no longer solely about quality and affordability. Governments need to place greater emphasis on community engagement and environmental sustainability as well.

expert panel session
cities and climate change

Urban growth trends exert great pressure on energy and water resources. This is particularly true in megacities, where 10 million or more people reside.

Moderator
Mr Ira C. Magaziner
Chairman, Clinton Climate Initiative, William J. Clinton Foundation

Speakers
Mr Sanjeev Sanyal
President, The Sustainable Planet Institute, Delhi

Associate Professor Vladan Babovic
Founding Director of Singapore-Delft Water Alliance

Dr Sharon L. Nunes
Vice President, Big Green Innovations, IBM Corp.

Dr Enki Tan
Board Member, Conservation International

key observations

1. **Promote walkability.** "Walkability" refers to urban design that allows city dwellers to treat walking as their primary mode of transport. "Walkability" as a design paradigm would also meet cities' environmental, economic and social sustainability objectives. Cities designed for "walkability" would be denser, with minimum land-use and low energy footprint.

2. **Future-proof the infrastructure.** Where the infrastructure were to be designed for multiple roles, robust enough for various scenarios, the city could serve as an enduring nexus.

3. **Build smart cities.** This calls for understanding the complexity and interactions of systems. A smart city could harness information and tap the collective intelligence of its citizens to create better places to live and work.

4. **Synergise with the non-government organisations (NGOs).** NGOs could help speed "green economies". Their expertise in using natural resources could help cities better manage climate change.

conclusion

To tackle the challenges of climate change from various angles, city planners need to understand the way cities function. They need to develop growth models that moderate energy use, minimise waste and increase efficiency.

expert panel session
sustainable waste management – turning trash into resource

Rapid urbanisation and crowded cities led to the proliferation of solid waste. Ineffective waste management could weigh on the infrastructure, especially in developing countries.

Moderator
Mr Toshi Noda
Director, Regional Office for Asia and Pacific, UN-HABITAT

Speakers
Mr Jeff Cooper
Vice-President, International Solid Waste Association (ISWA)

Professor Jim Swithenbank
Chairman, Sheffield University Waste Incineration Centre

Dr Ryutaro Yatsu
Director-General, Waste Management and Recycling Department, Ministry of the Environment, Japan

Dr Helge Wendenburg
Director-General, Directorate of Water Management, Waste Management and Soil Protection, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety of the Federal Republic of Germany

Mr Howard Shaw
Executive Director, Singapore Environment Council

key observations

1. **Promote the value chain.** The value of the value chain emanated from waste treatment technologies that reduced greenhouse gas (GHG) emissions while producing useful end products. Put simply, it's turning waste in resource.

2. **Reducing Landfills.** With effective 3R (reduce, reuse, recycle) practices and incineration, landfills can be avoided. Cities have to recognise that dumping waste without recovering reusable materials is not sustainable. In Japan, legislative frameworks, law enforcement and capacity building enabled the responsibility and cost of waste management and recycling to be shared. This created new markets for environmental services.

3. **Identifying economic spin-offs.** Germany's closed cycle waste management system requires recyclables to be collected separately, sorted and reprocessed before being reintroduced into the economic cycle. Doing so reduces GHG pollutants from waste management by more than 31 million tonnes annually. It also yields an annual turnover of over 50 billion euros and has created employment for more than 250,000 people.

4. **Counting on public education.** In Singapore, public education has been critical to the success of waste management. Apart from incineration, Singapore needs to explore other forms of value-added waste utilisation.

conclusion

Cities have to reinforce existing systems and plan for longer-term waste management, resource conservation and environmental sustainability. Individual countries need to identify their own priorities on waste management and recycling. Regional cooperation would enable such implementation to be vitalised.

expert panel session

moving beyond plans to implementation

Co-organised by the Centre for Liveable Cities (CLC) and the Cities Development Initiative for Asia (CDIA), the session spotlighted ideas for overcoming roadblocks to realising city plans and projects. Topics included prioritising projects, securing guidance, conducting useful studies, finding the right funding, and phasing implementation appropriately. Presenters also addressed issues like capacity building and the involvement of key players. Speakers from China, India and Mongolia fleshed out these ideas by sharing case studies of projects from three different cities.

Moderator

Ms Bebet Gozun
Former Secretary, Department of Environment and Natural Resources, Philippines, Chair, Clean Air Initiative For Asian Cities, and Member, Cities Development Initiative for Asia (CDIA) Advisory Board

Speakers

Dr Ursula Schaefer-Preuss
Vice President for Knowledge Management and Sustainable Development, Asian Development Bank (ADB)

Ms Xu Hui
Vice Chief / Project Manager, Foreign Capital Utilization Section, Guiyang Development and Reform Commission, Municipal Administration Center of Jinyang New District, Guiyang, Guizhou, China (Co-author)

Mr Yang Mingqiu
Senior economist, Shanghai Academy of Social Science (Co-author)

Mr Rajesh Kumar Singh
Secretary, Local Self Government Department, Government of Kerala, India

Mr Tsogtsaikhan Chultemsuren
Senior Officer, Urban Development Policy Department, City Government of Ulaanbaatar Mayor's Office, Mongolia (Co-author)

Ms Baasanjav Bayantuul
Senior Officer, Finance and Investment Department, Ministry of Road, Transportation, Construction and Urban Development, Mongolia (Co-author)

key observations

1. **Prioritising projects:** The CDIA Planning Project Priority toolkit helps governments prioritize infrastructure expenditure and draw funds from others, using a framework to identify and capitalise on high priority projects. Using it, Guiyang chose foreign oriented investment projects for implementation first, as it paves the way for many foreign financial connections.

2. **CDIA can help build capacity:** In Cochin, CDIA conducted studies, surveys and workshops. The city aims to have a transport roadmap and investment package by mid-2010. '5-way tests' reviewed each project for feasibility and impact.

3. **Pre-feasibility studies:** To extend Ulaanbaatar's building rehabilitation city-wide, CDIA helped conduct a pre-feasibility study. Such studies help justify and launch Public-Private Partnership (PPP) projects, when they find evidence of potential commercial viability.

4. **Consideration of diverse funding options:** CDIA can help identify potential financing sources. In Ulaanbaatar this included CDM, PPP, donor loans, higher utility bills, and sale of certified emission reductions on the carbon market.

5. **Phased implementation:** Again in Ulaanbaatar, project implementation was phased, to test the feasibility of the project and build capacity for a city-wide programme.

conclusion

As resources are limited, governments must prioritise projects objectively and holistically. This then becomes the city's development strategy. Governments must also identify which projects it should fund, and which are more suitable for PPP. Carbon financing and savings from energy efficiency projects are other sources of funds. Finally, capacity building at all levels and the involvement of all key players is important to turn plans into reality.

expert panel session
challenges that cities face – nexus of energy, water & food security

The Centre for Liveable Cities co-organised this Dialogue with the International Water Association, supported by the Agri-Food & Veterinary Authority of Singapore, Camp Dresser & McKee Inc. and the Energy Studies Institute, Singapore. There has been increasing interest in managing water, energy and food security as a whole. After all, each sector has been facing mounting tension as demand outstrips supply.

Moderator
Mr Paul Brown,
Executive Vice-President, Global Market Development, Camp Dresser & McKee Inc.

Speakers
Mr Paul Reiter
Executive Director, International Water Association

Dr Dennis Wichelns
Principal Economist, International Water Management Institute

Dr Michael Quah Cheng-Guan
Principal Fellow & Chief Scientist, Energy Studies Institute, Singapore

Panellists
Ms Tan Poh Hong
Chief Executive Officer, Agri-Food & Veterinary Authority of Singapore

Mr Rob Skinner
Managing Director, Melbourne Water, and Board Member, Water Services Association of Australia

Dr Geng Anli
President, BioEnergy Society of Singapore

key observations

1. The water and energy nexus. The heavier the reliance on energy, the greater the need for water. The reverse is true, such as in desalination. As demand for water escalates, water and energy efficiency measures have to be thought through again, and redesigned at the city level.

2. The food and water nexus. Food and water had been in many ways linked. Water has been a key to livelihood opportunities in many areas. Waste water should be captured and treated safely to derive economic return. Education would be essential to convince the public to accept waste inputs in the food chain.

3. The food and energy nexus. Most fossil fuel alternatives address electricity needs; only bio-fuels replace liquid transport fuels. But if crops, land and water are diverted from food to bio-fuels, severe food shortages will result. Second generation bio-fuels thus hold promise, like algae that also treats waste water.

conclusion

Concerted joint action among the government, commercial and people sectors at the city, national and regional levels would be critical to bridging the gap between the demand for water, energy and food on the one hand, and supply on the other.

expert panel session
urban biodiversity & ecology for sustainable cities

For the first time ever, in 2007 more than half of the world's population lived in cities. Following from this, about 70% will do so by 2050. In order to improve liveability in high-density environments, cities should make available nature and biodiversity, especially as urbanisation intensifies.

Moderator
Prof Leo Tan Wee-Hin
Professor (Special Projects), National University of Singapore

Speakers
Prof Bruce Clarkson
Director, Centre for Biodiversity and Ecology Research, University of Waikato, Hamilton, New Zealand

Prof Wang Xiangrong
Fudan University, Director, Research Centre for Urban Ecological Planning & Design; Regional Vice-Chair for East Asia Commission on Education & Communication

Assoc. Prof Mark J. McDonnell
Director of the Australian Research Centre for Urban Ecology

Prof Richard Corlett
Department of Biological Sciences, National University of Singapore

Mr Ng Lang
CEO, National Parks Board, Singapore

Dr Ahmed Djoghlaf
Executive Secretary, UN Convention on Biological Diversity, Canada

Mr Bob Harvey
Mayor of Waitakere City, New Zealand

Ms Gwendolyn Hallsmith
Director of Planning and Community Development, City of Montpelier, Vermont

Mr Herbert Dreiseitl
Founder, Artist, Landscape Architect, Atelier Dreiseitl

key action points

1. Promote the value chain.
1. Maintain biodiversity in urban areas.
2. Transform cities into eco-friendly environments.
3. Preserve the natural heritage by restoring the ecological balance in some areas.
4. Engage the community, creating empathy towards the very real crisis of losing biodiversity.
5. Integrate the social, environmental and cultural elements.
6. Galvanise the government, corporations, and the public's joint efforts.

conclusion

An interdisciplinary approach is needed to solve our urban problems and achieve a good balance.

learning journeys

Learning Journeys provided first-hand insights into the business of Singapore public agencies such as the Agri-Food & Veterinary Authority of Singapore (AVA); Building & Construction Authority (BCA); Housing & Development Board (HDB); National Environment Agency (NEA); and Urban Redevelopment Authority (URA).

The delegates were presented with themes including urban biodiversity conservation, city planning, waste and resource management, built environments, public housing and marine aqua-culture. In particular, they saw how policies and ideas have been implemented in a city-state like Singapore.

the urban biodiversity conservation journey
conservation in Singapore

Pulau Ubin or Granite Island provided delegates a much-needed escapade from the hustle and bustle of city life. They had the chance to see the immensely rich biodiversity of Chek Jawa Wetlands, located on the south-eastern tip of Pulau Ubin. Covering approximately 100 hectares in area, the wetlands are unique as several habitats can be seen in one area – sandy beach, seagrass lagoon, mangroves, coral rubble and coastal forest.

the city planning journey
an insight into Singapore's latest city developments

With more than 30 hands-on interactive exhibits, the Singapore City Gallery offered an interesting insight to Singapore's city planning journey. Delegates also enjoyed an aerial view of Marina Bay – the centerpiece of Singapore's urban transformation – from the the world's largest observation wheel, the Singapore Flyer. They were then brought to Marina Bay Sands, a revolutionary urban place that integrates the Waterfront Promenade with a multi-levelled retail arcade.

Delegates visited the Southern Ridges as the last stop of the city planning journey, which comprises a nine-kilometre chain of green, open spaces spanning Singapore's popular parks.

the waste & resource management journey
a tour to Singapore's ecological offshore landfill

The waste and resource management journey brought delegates to the Semakau Offshore Landfill, which showcases Singapore's success in managing an effective landfill while retaining the city's natural heritage. Semakau Landfill receives 2,000 tonnes of waste per day but serves as a major sanctuary for many marine ecosystems.

the public housing journey
the past, present and future of Singapore's public housing

For this learning journey, delegates visited the HDB Gallery, which charts Singapore's public housing journey from slums to vibrant towns through multi-sensory self-exploratory exhibits. They also visited two of HDB's milestone projects that transformed the landscape of Singapore into a world-class city in less than five decades – Toa Payoh and The Pinnacle@Duxton.

Source: Housing & Development Board

the built environment journey
a tour of Singapore's key achievements in universal design

Delegates witnessed the various stages of the development of Singapore's built environment through this learning journey. The BCA Gallery by the Building and Construction Authority (BCA) showcased the key pillars of an excellent built environment: safety, quality, sustainability and friendliness, while Singapore's first Zero Energy Building exemplifies BCA's commitment towards R&D in the area of sustainability. The Sensory Garden shows how universal design features could make a garden accessible and enjoyable to both disabled and non-disabled visitors. IKEA Tampines, with its provision of unique and thoughtful facilities, is a winner of the Gold BCA Universal Design Award.

the marine aquaculture journey
understanding Singapore's research and development in tropical marine aquaculture

Delegates visited the Marina Aquaculture Centre (MAC) at St John's Island which helps meet the fish supply needs of Singapore in a sustainable way. MAC plays a strategic role in spearheading appropriate tropical aquaculture technology development, developing and harnessing technology to facilitate the development and expansion of large-scale hatchery and fish farming production in Singapore and the region.

world cities summit

mayors forum

world cities summit mayors forum
cities as growth engines in a post-crisis world

"Leadership. Courage. Dialogue. These are the key engines to breaking free of the global challenges in an urban age. These are instrumental to growing cities post-crisis."

Sub-themes

1. Leadership and Governance in Turbulent Times
2. Eco-Friendly & Liveable Communities
3. Promoting Communities of Best Practices among Cities

Speakers

Professor Richard Burdett, Professor of Urban Studies, London School of Economics and Director of the LSE Cities and the Urban Age Programme

Mr. Abdulaziz Bin Abdulrahman Al-Hussiyen, Mayor of Al-Madinah Al-Munawarah, Saudi Arabia

Mr. Jiang Sixian, Vice-Governor of Hainan Province, People's Republic of China

Mr. Babatunde Raji Fashola, SAN, Governor of Lagos State Governor, Nigeria

Mr. Chen Guoying, Mayor of Tangshan, Hebei Province, People's Republic of China

Mr. Ilmar Reepalu, Lord Mayor of Malmo, Sweden

Dr. Dieter Salomon, Lord Mayor of Freiburg, Germany

Mr. Philip Gordon, Mayor of Phoenix, Arizona, USA

Mr. Zhao Xiaowei, Mayor of Rizhao Municipality, People's Republic of China

Dr. Amy Khor, Mayor of South West District and Senior Parliamentary Secretary, Ministry of Environment and Water Resources, Singapore

Mr Michael R. Lindfield, Principal Urban Development Specialist, Asian Development Bank

Dr. Anna Kajumulo Tibaijuka, UN Under-Secretary-General and Executive Director, UN-HABITAT

Ms. Fumiko Hayashi, Mayor of Yokohama City Government, Japan

Mr. Robert Doyle, Lord Mayor of Melbourne, Australia

Mr. Teo Ser Luck, Mayor, North East District, Senior Parliamentary Secretary, Ministry of Community Development, Youth and Sports & Ministry of Transport, Singapore

Mr. Shi Yuchu, Vice Chairman, Suzhou Industrial Park Administration Committee (SIPAC), People's Republic of China

Mr. Zong Guoying, Governor of Tianjin Binhai New Area, People's Republic of China

Mr. James Adams, Vice President of the East Asia and Pacific Region, World Bank

key observations

Singapore's Minister for National Development Mr Mah Bow Tan chaired the forum involving more than 50 governors, mayors and experts. They weighed the challenges of enabling progress and ensuring quality living in high-density cities.

50% of the world's population currently lives in cities in 2010. That figure would reach 75% in the next 30 to 40 years.

It is imperative that urban planners, transport planners and local population work hand in hand to lead change in the right direction. The right direction is underpinned by three core conditions: leadership, courage, dialogue. Here are some cases in point.

Leadership. Commanding the vision to drive change even through challenging times.
• The city of Al Madinah Al Munawarah in Saudi Arabia developed an Observatory System. The system was designed to collect data to track its Millennium Development goals, alleviate poverty and upgrade informal settlements. It won a UN award, and was being replicated across other regions in Saudi Arabia.
• In Lagos, Nigeria, infrastructure renewal and development instilled order and improved the city's image.
• Tangshan, China. The citizen-centric information management enabled the city to capitalise on its strengths and quicken its pace towards becoming a scientific city.

Courage. It takes the form of pursuing eco-friendly and liveable communities in partnership with an active corporate and civil citizenry even if results were to take time to manifest. Both Mayors of Phoenix, Arizona and Waitakere City, New Zealand emphasised the need for active citizenry. Consider these:
• The World Bank expected financing developments in eco-friendly infrastructure to take centre-stage over the next 20 years due to the rapid growth of developing countries.
• In Malmo, a year's worth of incinerable waste could generate some 170,000 cubic metres of energy.
• In Phoenix, landfills were converted into solar fields to create revenue. Without the private sector, the 17-point Green Phoenix Plan that made Phoenix the first carbon neutral green city in the United States would not have materialised.
• In China, Rizhao's goal of an eco-city with distinctive marine features aims to grow the marine industry and eco-tourism.
• Freiburg owed its "Green City" to a dedicated citizenry.
• Asian Development Bank devised new financing mechanisms to fund urban development in a more flexible manner. The Cities Development Initiative for Asia will help cities structure, formulate and finance environmentally friendly infrastructure projects.

Dialogue. Keep promoting Communities of Best Practices among cities.
• Tap the momentum of globalisation to examine how global platforms like the WCS Mayors Forum could provide opportunities for the development of a peer-to-peer learning network.
• Yokohama promoted city-to-city exchanges via CITYNET (The Regional Network of Local Authorities for the Management of Human Settlements).
• The Suzhou Industrial Park Project exemplified how collaboration between Suzhou and Singapore led to valuable exchange and transfer of economic and technological know-how.

wcs mayors networking breakfast

About 50 distinguished guests – participants of the WCS Mayors Forum as well as representatives from the Singapore Government and international organisations – attended a networking breakfast hosted by Mr Mah Bow Tan, Singapore's Minister for National Development.

The breakfast was held at the Ritz-Carlton Millenia Singapore just before the Forum to facilitate networking amongst the participating mayors and governers.

president's lunch

Following the conclusion of the Forum, delegates were hosted by President S R Nathan to an exclusive lunch at the Ritz-Carlton Millenia Singapore. The high-level mix of ministers, mayors, governors, and international organisation and industry representatives enjoyed the valuable networking opportunities while being treated to a classical performance by a harp trio – I-Sis Trio.

lee kuan yew
world city prize

lee kuan yew
world city prize

The Lee Kuan Yew World City Prize is named after Singapore's first Prime Minister and present Minister Mentor. It is the only biennial international award that recognises the achievements of outstanding individuals and organisations who have contributed urban initiatives, policies or projects that epitomise foresight, good governance or innovation in overcoming the challenges faced by cities.

The inaugural Lee Kuan Yew World City Prize was conferred on Bilbao City Hall in recognition of its integrated and holistic approach towards urban transformation. Bilbao City Hall has been instrumental in regenerating and transforming the city from an obsolete and dilapidated industrial city into a knowledge-based economy.

lee kuan yew prize
award ceremony and banquet

The Lee Kuan Yew Prize Award Ceremony and Banquet saw the joint presentation of the inaugural Lee Kuan Yew World City Prize and the Lee Kuan Yew Water Prize on 29 June 2010 at the Ritz-Carlton, Millenia Singapore. Some 600 international and local ministers, mayors and dignitaries graced the event.

The highlight of the evening included an exclusive dialogue with Minister Mentor Lee Kuan Yew, moderated by Chairman of the Nominating Committee Professor Kishore Mahbubani. A special 4-minute commemorative video to showcase Bilbao's achievements was screened at the event. Together, the two Prizes helped to raise the profile of the dinner event.

dialogue with singapore's minister mentor lee kuan yew

Long before the emergence of the Green Movement, Mr Lee had conceived of Singapore as a green, sustainable and efficient city. His leadership enabled Singapore to strike a balance between economic demands and environmental protection to achieve high density and high liveability in Singapore.

Some key points emerged from the dialogue:

1. **Be differentiated.** As a small city-state lacking natural resources, Singapore needed to transform itself into a first world oasis to survive. It sought to be the springboard for companies from developed countries to access South East Asia and the rest of Asia by developing world-class infrastructure.

2. **Industrialising without polluting.** One of the most difficult tasks was to carry out industrialisation without polluting the island. Mr Lee cited the example of Singapore's first petrochemical plant in the 1970s. Pollution concerns also led Singapore to reject a lucrative offer for an iron plant to be set up on one of its outer islands.

3. **Changing mindsets.** The other challenge Mr Lee faced in developing Singapore was changing people's mindsets. Mr Lee recalled how the government adopted a mix of public education and tough measures to overcome poor hygiene standards and curb rampant littering and vandalism.

4. **Water independence.** Since independence, Singapore put in place measures to achieve water self-sufficiency. Today, about three quarters of Singapore is a water catchment area. By 2020, the entire island will become a water catchment.

5. **Diversifying energy sources.** Mr Lee opined that it would be an impossible task for Singapore to achieve self-sufficiency in energy as the country is alternative energy disadvantaged. Besides buying piped gas from other countries and looking to build a liquefied natural gas plant, Singapore might have to consider nuclear energy.

6. **Rolling plan.** When Mr Lee took on the stewardship of Singapore, he had a rolling plan that changed in response to new opportunities and challenges. Many of the changes today would have been unimaginable back then. Singapore's future, he suggested, would depend on how it dealt with the opportunities and challenges thrown up by new technologies.

7. **Overpopulation.** Mr Lee singled out overpopulation as the world's single biggest challenge. Since the world's population is projected to grow to 9 billion in 50 years' time, the Earth's biodiversity is under threat. One of the ways to moderate global reproduction rates is to educate more women across the world, and enable them to join the workforce.

lee kuan yew
world city prize forum

Through the 78 nominations received, certain trends and best practices were observed. This Forum shared the insights gleaned from the diverse experiences of the top four Prize finalists (including the Prize laureate), and offered important learning points that could help cities balance high density living with economic progress and sustainability.

Speakers

Dr Iñaki Azkuna
Mayor of Bilbao, Spain

The Right Honourable Robert Doyle
Lord Mayor of Melbourne, Australia

Shri Keshav Chandra
Special Secretary to Chief Minister of New Delhi, Ms Sheila Dikshit

Dr Jaime Lerner
Former Mayor of Curitiba, Brazil; former Governor of Parana State, Brazil; and former President of the International Union of Architects

key learning points and conclusions

1. **Strong governance and leadership.** It is observed that strong governance and leadership in key decision-making is crucial in the planning and implementation process (as evident in the case of the Prize Laureate, Bilbao City Hall and the three special mentions). It is equally important for the government and leaders to have foresight and tenacity to institutionalise strong key processes, to ensure commitment and continual sustained implementation of their long-term plans, regardless of the change in leadership and administrations. This will help achieve the long-term objectives of the plans and result in more impactful outcomes for their cities and communities over a longer period of time.

2. **Power in partnerships.** It is vital to involve the grassroots and have private-public partnerships with relevant stakeholders. This is how the masses' support could be galvanised. For the cases of Curitiba and New Delhi, the grassroots-level was engaged to initiate a change in mindset (towards recycling and clean energy respectively) and to create a movement whereby the people were themselves the agents of change. In the nominations received, this is often effective when the implementation and success of the policies and programmes rely heavily on the involvement and participation of the masses. In the cases of Bilbao and Melbourne, selected stakeholders are engaged in a consultative process, creating a sense of identity and pride in achieving a vision that is an amalgamation of their collective efforts.

3. **Optimal use of limited resources.** In a world of finite resources, it was observed that many cities were turning to urban renewal and redevelopment of brown field sites instead of green field developments to meet the demand for the city's growth and expansion. Many of the older and blighted districts were revitalised economically and made socially viable again. Urban sprawl is also greatly reduced, and valuable land resources get safeguarded. For instance, Dr Lerner created a system of stormwater drainage through the creation of parks for "flood-parking" (as opposed to expensive canal and drainage systems). The parks also serve leisure purposes and are open to people of all social classes. In the rural villages, Dr Lerner provided basic modular housing and land to the lowest income group, who were then able to generate their own livelihood from farming.

4. **People-oriented approach.** Many cities have shifted their focus from planning for just infrastructure and for utilities to really planning for people first, so as to retain talents and ensure social sustainability. In Bilbao, the railway tracks were re-routed around the city to allow development of the Abandoibarra waterfront today. Major arterial roads were also downgraded / buried underground to create a more pedestrian-friendly urban environment. In Melbourne, pedestrianisation of backlanes ('Laneways") has injected life into the city, at the same time removing traffic from the city. Public projects such as Federation Square and Birrarung Mar have created quality public spaces for residents.

5. **Research and studies.** Cities provide opportunities as a test bed for urban solutions. Tested solutions are gems worth sharing. These moves are important because they help improve quality of life in urban environments.

6. **Commitment to sustainable principles and measures.** A case in point is Melbourne. The city implements good transport systems and encourages sustainable modes of transport in the pursuit of the zero net emissions policy. Curitiba adopts recycling as a way of life. On the other hand, New Delhi is very exemplary in converting all public transport to the use of CNG fuels.

lee kuan yew world city prize lecture

After a rigorous review and selection process, **Bilbao City Hall** was selected as the inaugural Lee Kuan Yew World City Prize Laureate. Bilbao is an exemplary city that has continued to reinvent itself and evolve amidst dynamic changes, and its win sends out a very powerful message that cities should continually undergo regeneration to remain relevant.

Bilbao's experience also highlights the importance of good governance, commitment to long-term planning and an integrated and holistic approach to solving its urban problems. At the Lecture, Dr Iñaki Azkuna, Mayor of Bilbao, shared the challenges and innovations of Bilbao City Hall, the key strategies and projects that aided the city's transformation over the past 25 years as well as Bilbao's future plans.

Bilbao's industrial past

The iron mines and the resulting industries that sprang around it transformed Bilbao from a provincial city to an industrialised city. This was largely due to the businessmen and entrepreneurs that had the vision and strength to plan for an industrial Bilbao.

Development of the city was spectacular until the late 20th century when Bilbao was unable to withstand the global crisis that adversely affected industries in the 1970s. To compound matters, a great flood in 1983 irrevocably damaged its industrial infrastructure and destroyed parts of the city.

Bilbao's transformation

Various means were employed to transform the city. Transport links within and beyond were strengthened by shifting the sea port away from the city centre and expanding it, building a new airport, a new metro and also a tramway.

The Bilbao estuary was de-contaminated over a 20-year period at a cost of $700 million Euros. Having restored the banks of the estuary with more than four kilometres of promenades, this was arguably the most important environmental project in the Basque region.

Culture was also not ignored; the construction of the Guggenheim Museum gave Bilbao an international icon that also boosted interest in its other cultural venues like the Museum of Fine Art.

A complete, balanced city

A city should have an airport and links to the exterior, some museums and sporting centres, but to be a complete city, it must also have commercial, industrial, sporting and social facilities.

Maintaining a balanced city is a challenge that Bilbao has risen to. Attention is paid not just to modern neighbourhoods. Declining industrial districts like the Zorrozaurre Peninsula are being rejuvenated with a master plan of integrated rehabilitation.

Transparency and prudence

In 2008 and 2009, an international body based in Madrid analysed Spain's municipal governments on economics and public transparency. Out of a total of one hundred municipalities analysed, Bilbao was ranked first in 2008 and second in 2009. Fiscal discipline is another hallmark of the Bilbao government. Over the past 11 years, the municipality's debt has gradually been reduced to the point that it is now almost zero.

The Way Ahead

Infrastructural improvements continue. Ecologically sound projects are also in the works. A green belt around the city is testament to the government's commitment to making Bilbao more comfortable, beautiful and liveable.

Singapore International Water Week

WORLD CITIES SUMMIT

Lee Kuan Yew World City Prize Lecture

**world
cities
summit**
expo

world cities summit expo
liveable and sustainable cities for the future

Held in conjunction with the Water Expo 2010, the World Cities Summit Expo reached a new high by selling out 3000 sq metres of exhibition space to more than 50 exhibitors from about 18 countries. The Expo attracted some 3000 international trade visitors from over 20 countries.

Private and public sectors were brought together under the three primary clusters – the Singapore Inc. Pavilion, the World Cities Pavilion and the Urban Solutions Pavilion. The diversity and number of exhibitors underscored the World Cities Summit Expo as a global marketplace to showcase model cities and innovative urban solutions that enhance economic value whilst addressing environmental challenges. The Industry-to-Industry Networking Forums hosted by various industry associations added to the rich networking and cross-industry business opportunities.

exhibitor profile

Singapore Inc Pavilion

- Agency for Science, Technology and Research (A*STAR)
- Agri-Food & Veterinary Authority of Singapore (AVA)
- Building Construction Authority (BCA)
- Centre for Liveable Cities (CLC)
- Singapore Economic Development Board (EDB)
- Housing Development Board (HDB)
- JTC Corporation (JTC)
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- LTA Academy
- National Environment Agency (NEA)
- National Parks Board (NPARKS)
- SMRT Corporation Ltd
- Urban Redevelopment Authority (URA)

World Cities Pavilion

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- Bilbao City Hall
- Embassy of Brazil
- Nigerian Institute of Town Planners / Lagos State Government
- Suzhou Industrial Park Administrative Committee
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- Esri Singapore
- Far East Organisation
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- KPMG
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- MANN+HUMMEL Filter Technology (S.E.A) Pte Ltd
- Mirabilis Advisory Pte Ltd
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- Samsung C&T Corporation
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- Siemens Pte Ltd
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- Surbana International Consultants Pte Ltd
- Trane Singapore
- TÜV SÜD PSB Pte Ltd
- Veolia Environnement Group
- Wipro Technologies

International Organisations and Institutions

- School of Architecture & the Built Environment - Singapore Polytechnic
- Asian Development Bank (ADB)
- United Nations Development Programme (UNEP)
- United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)
- United Nations Human Settlements Programme (UN-Habitat)

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