2011 UEA Gwangju Summit Performance Report and Guideline to Join UEAMA



2011 UEA Gwangju Summit Office

HOW TO CONTACT US

UEAMA(Urban Environmental Accords Members Alliance)

2011 UEA Gwangju Summit Office, Kimdaejung Cenvention Center, 151 Sangmu-Pyeonghwagil, Seo-gu, Gwangju, Republic of Korea 502-828 Tel : +82-62-611-3744 Fax : +82-62-611-3799 Email : gwangju@2011uea.com Homepage : www.2011uea.com

UNEP(United Nations Environment Program)

Division of Technology, Industry and Economics, 15 rue de Milan - 75441 Paris Cedex 09, France Tel : (33-1) 44 37 19 80 Fax : (33-1) 44 37 14 74 Email : soraya.smaoun@unep.org Homepage : www.unep.fr/

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1. Introduction

The significance and achievements of the 2011 UEA Gwangju Summit are especially remarkable given that it has been held just months before the COP17 (by UNFCCC) and Rio+20 summits.

\triangleright From the message from Ban Ki-moon, Secretary General of UN to 2011 UEA Gwangju Summit



"While national governments have yet to agree on a comprehensive, binding global agreement under the UN Framework Convention on Climate Change(UNFCCC), cities and local authorities are forging ahead with their own actions." said Ban Ki-moon, UN Secretary General. He then highlighted specific examples of such action: "Solar power in Gwangju in Korea, Rizhao in China, and Cape town in South Africa are parts of a conscious policy to foster green growth and green jobs. Curitiba in Brazil with its pioneering Bus Rapid Transit system is also an example of innovation in cities around the world and a testament to a growing movement for sustainability." He also emphasized the significance of the 2011 UEA

Gwangju Summit: "It can provide valuable input to the Rio+20 discourse and outcomes. You have an opportunity, in Gwangju and beyond, to accelerate and scale up transformation already under way and to catalyze a development path that will echo down the generations."

• 2011 UEA Gwangju Summit was attended by mayors and representatives from 114 cities in 38 countries. It was held from October 11 to 13, beginning with the opening of the UEA Exhibition.

1-1. Overview of 2011 UEA Gwangju Summit

- Period : October 11 ~13, 2011 (3 days)
- Venue : Kimdaejung Convention Center, Gwangju

Date	Contents		
Oct. 11(Tue)	2011 UEA Gwangju Summit-Day 1 • Opening of 2011 UEA Environment Exhibition		
Oct. 12(Wed)	 2011 UEA Gwangju Summit-Day 2 Opening of the Summit (Opening remarks, Greetings by UN Secretary General, Keynote Speeches) Plenary Session (Development of Eco-city by Urban Environmental Evaluation Index) Plenary Session (City's Opportunity and Challenge based on Urban CDM 5 Parallel Thematic Sessions (Energy Efficiency and Climate Change, Waste, Smart Green Transportation Water Demand and Management, Natural Ecology) 		
Oct. 13(Thu)	2011 UEA Gwangju Summit- Day 3 · Plenary Session (Development of Low Carbon Green City) · Closing(Gwangju Cities Declaration, Gwangju Initiative, Proposal of UEAMA)		

- Slogan : Green City, Better City
 - Implementing the UEA for the Sustainable Development
- Host : Gwangju Metropolitan City, United Nations Environment Program(UNEP), City and County of San Francisco
- Participants: 882 attendees including domestic and foreign 126 mayors and delegates
 Earning: 422 attendees including 76 mayors and delegates; 12 international organization
 - Foreign: 423 attendees including 76 mayors and delegates, 12 international organizations
 - Domestic : 399 people including domestic environmentalists and 38 cities
- Accompanying Events (Oct. 11 ~ 14)
 - Exhibition : 4 international organizations including UNEP, 10 foreign cities, 3 domestic cities, 136 companies from 5 countries
 - 4 International Conferences : 1,200 attendees from 28 countries including UEA UNEP Youth Forum



1-2. Cities & Organizations

114 cities from 38 countries, 12 international organizations

• Asia(89)

Kabul(Afghanistan) Dacca(Bangladesh) Phnom Penh(Cambodia) Shanghai·Wuxi·Wuhan·Qingdao·Changchun· Rizhao·Liuzhou·Dalian·Dezhou·Shenyang·Yentai· Yenji·Luoyang·Guangzhou(China) Taipei Nagpur·Delhi·Hyderabad(India) Surabaya(Indonesia) Teheran(Iran) Baghdad(Irag) Sakai Toyama Moriyama Yasu Sendai·Fukuoka·Minamata·Yamagata(Japan) Putrajaya-Kuala Lumpru-Penang(Malaysia) Ulaanbaatar(Mongol) Kathmandu(Nepal) Iloilo-Manila-Taguig(Philippines) Singapore(Singapore) Kurunegala·Matale·Habaraduwa·Colombo· Gampaha-Kaduwela(Sri Lanka) Bangkok(Thailand) Ankara(Turkey) Tashkent(Uzbekistan) Hanoi(Vietnam) Seoul-Incheon-Daegu etc.(total 38 cities/Republic of Korea)

• Europe(12)

Brussels Gent (Belgium) Chalon-sur-saone (France) Perugia Varese (Italy) Almere (Netherlands) Sinaia Baia Sprie (Romania) Nizhniy Novgorod Elista (Russia) Kiev Yalta (Ukraine)

• America(6)

Curitiba(Brazil) Medellin(Colombia) Bahia(Ecuador) San Antonio-San Francisco(USA) Lima(Peru)

• Africa(5)

Abomey(Benin), Bamenda(Cameroon) Maputo(Mozambique) Nioro du Rip(Senegal) Cape Town(South Africa)

 Participating International Organizations(12) UNEP, UN-HABITAT, UNDP, UNESCO, OECDWorld Bank, GIZ, UNFCCC, ICLEI, UITP, UNU, UNISDR

• Oceania(2)

Auckland-Wellington(New Zealand)

1-3. Program of 2011 UEA Gwangju Summit

1-3-1. Day 1 (Oct. 11)

Time	Contents		
17:00~18:20	Opening Ceremony : 2011 UEA Exhibition		
18:30~20:30	Reception Dinner (Holiday Inn Gwangju)		

1-3-2. Day 2 (Oct. 12)

Time	Contents		
09:00 ~ 10:30	 Opening Ceremony Opening announcement Promotional Video Clip : Gwangju's best practice of environmental policy Opening & Welcome address by Kang, Un-Tae Mayor of Gwangju Metropolitan City Congratulatory Message by Lee, Myung-Bak, President of the Republic of Korea Congratulatory video message by Ban, Ki-moon, Secretary General of United Nations read by Deputy Executive Director Amina Mohamed on his behalf Video message by Edwin Lee, Mayor of City and County of San Francisco, USA Keynote Speaker 1 : Joan Clos, Executive Director, UN-HABITAT Keynote Speaker 2 : Amina Mohamed, Deputy Executive Director, UNEP 		
10:50 ~ 12:30	 Plenary I: Development of Eco-city by Urban Environmental Evaluation Index Moderator & Keynote Presentation 1: Julian Castro, Mayor of San Antonio, USA Keynote Presentation 2: Development of Eco-City by Vice Mayor of Almere, the Netherlands Thematic Presentation : Results of Research on Urban Environmental Evaluation Index, by Gaell Mainguy, a researcher in charge from UNEP Panelist 1: Kim Jung-In, Chung Ang University Panelist 2: Patricia Mc Carney, University of Toronto Open Discussion with the Floor or Moderator's Comment Facilitator : Prof. Bae, Jeong Hwan (Chonnam University) 		
12:30 ~ 14:00	Luncheon		
14:00 ~ 15:30	 Plenary II : City's Opportunity and Challenge based on Urban CDM Moderator : Rafael Tuts, UN-HABITAT Thematic Presenter : Results of Research on urban CDM by Maike Sippel, a researcher in charge from UNEP Panelist 1 : Anne-Isabelle, Director of UNDP Seoul Policy Center Panelist 2 : Marcus Lee, World Bank Panelist 3 : Lee Hyun-Woo, KEI Panelist 4 : Ha, Sang-sun, CEO of ECOEYE, CDM Consultant Open Discussion with the Floor or Moderator's Comment Presentation of Position Paper : Arab Hoballah, Chief of Sustainable Consumption and Production in UNEP - "Transition towards low-carbon urban growth" Facilitator : Prof. Bae, Jeong Hwan (Chonnam University) 		
16:30 ~ 18:30	5 Parallel Thematic Sessions		
	 Session 1 : Energy Efficiency and Climate Change Moderator - Christopher Kennedy, OECD Panelist 1 - Osami Takeyama, Mayor of Sakai, Japan Panelist 2 - Lee Han-woo, Korea Energy Management Corporation Panelist 3 - Omar Barragan, Auckland, New Zealand Panelist 4 - Park Kyung-rin, Green Gwangju 21, Gwangju, Korea Panelist 5 - Cho Kyu-jong, Photonics Industry Association Panelist 7 - Nouatin F. Alain, Mayor of Abomey, Benin Facilitator : Prof. Jeong, Cheol (GIST) Q&A Summary 		

1-3-3. Day 3 (Oct. 13)

Time	Contents
09:00 ~ 12:00	 Plenary III : Development of Low-Carbon Green City Moderator - Mayor of Gwangju Metropolitan City Keynote Speaker - Lester R. Brown, founder of Worldwatch Institute Report from Parallel Session 1 (by Session Moderator) Report from Parallel Session 2 (by Session Moderator) Report from Parallel Session 3 (by Session Moderator) Report from Parallel Session 4 (by Session Moderator) Report from Parallel Session 5 (by Session Moderator) Professor at Seoul National University, Soraya Smaoun, UNEP DTIE Participants' comments on Development of Low-Carbon Green City and presented outcomes of Parallel Sessions Participants' comment on Development of Low-Carbon Green City and presented outcomes Summary (including Mayors' messages to send to G20, COP17, and Rio+20) Facilitator : Prof. Bae Jeong Hwan (Chonnam University)
12:20 ~ 13:00	 Closing Ceremony Closing announcement Announcement of Gwangju Declaration: Mayor of Gwangju Presentation of Gwangju Initiative : Sunwoo Joong-ho, Chief Commissioner of organization, 2011 UEA Gwangju Summit Proposal of Establishment of UEAMA, Approval of Chair, Announcement of Executive Committee member cities : Rajni Abbi, Mayor of Delhi Greeting remarks by the Chair of UEAMA Greeting remarks by next host city : W. Laurence Doxsey, Director of Environmental Policy, San Antonio, USA Greeting remarks by UNEP : Park Young-Woo, UNEP-Regional Branch Office for Asia Pacific Photocall
19:00 ~21:00	Dinner (Mugaksa Temple)
15:00 ~18:30	Field Visit
16:00 ~ 18:00	Workshop (International Inter-Agency Advisory Group)

2. Agenda (What has been discussed?)

Cities are home to more than 50% of the global population, and account for 69% of the world's energy consumption. They also generate 80% of the world's waste, and 70% of all greenhouse gases emissions, contributing heavily to climate change. For these reasons, cities are regarded as a main culprit of global climate change, and at the same time, key players in solving the problem.

▷ From the Keynote Speech from Joan Clos, Secretary General of UN-HABITAT



In little over a generation from now, our planet's population will be twothirds urban. The global population faces a very dangerous threat from powerful, human-induced forces unleashed by development and

manipulation of the environment in the industrial age. The effects of urbanization and climate change are thus converging in dangerous ways. The results of this convergence threaten unprecedented negative impacts on our quality of life, economic and social stability. In coming decades climate change may make hundreds of millions of urban residents especially the poorest and most marginalized increasingly vulnerable to floods, landslides, extreme weather and other natural disasters. City dwellers may also face reduced access to fresh water as a result of drought or the encroachment of saltwater on drinking water. We have the science and the knowhow to tackle many of these problems. Cities and towns contribute significantly to climate change from the fossil fuels used for electricity generation, transport, buildings and industrial production, to waste disposal and changes in land use. At the same time, urbanisation will also offer many opportunities to develop cohesive mitigation and adaptation strategies to deal with climate change. The populations, enterprises and authorities of urban centres will be fundamental players in



developing these strategies. In this regard, the following points are critical to achieve more sustainable urban development: 1) elaboration of national urban strategies; 2) promoting sound urban patterns in regions surrounding cities; 3) improvement city slums; 4) job creation for economic and social development; 5) establishing legal frameworks to guarantee safety and sustainability; 6) promoting sound urban energy and urban mobility patterns and 7) enhancing local governance to increase the financial capacity of cities to sustain infrastructure. In this way, sustainable urbanization can provide one of the key unifying forces to ensure coherence between sectoral policies such as promoting energy efficiency, water demand and quality management, mobility, waste management, biodiversity protection, natural disaster preparedness and climate change adaptation.

 At 2011 UEA Gwangju Summit, city-level efforts to tackle climate change and seek sustainable development were presented and discussed through 3 plenary sessions and 5 parallel thematic sessions.

2-1. Presentation of a comprehensive concept and criteria for an eco-city

• At Plenary Session |, discussion focused on the topic of 'Development of Eco-city by Urban Environmental Evaluation Index'.

《Urban Environment Evaluation Index》

Background

- It will be an ideal and comprehensive criterion of eco-city which considers current technology and WHO's recommended properties. Once developed and applied to cities, it will guide cities' plan to set environmental policies to tackle worsening environmental issues.

Concept

- Based on Green City Index by UNEP and Low-Carbon Green City Evaluation Index by Ministry of Environment of Korea, comprehensive criterion of eco-city, evaluation index, strategy and action plans will be developed.

Development and Application

- It is co-developed together by UNEP, Gwangju, Korea Environment Institute(KEI) to smoothen global dissemination and application.
- -The feasibility study has been introduced at Gwangju Summit so that it can be completed in 2013.

Expected Outcomes

- It will be utilized as a guideline of global urban environmental policies for it will be developed to fit global standards.

- It will be used as a judging criterion for 'Global Low-Carbon Green City Award' to assess the performance on the index.
- The presentation of best practices by San Antonio (USA) and Almere (Netherlands) sought methods for making cities sustainable and eco-friendly, and emphasized the need for existing cities to enhance energy efficiency and reduce and recycle wastes, and for newly developed cities to establish urban plans led by citizens that enables them to grow spontaneously and with biological diversity.





- From the presentation made by Vice Mayor of Almere, Netherlands

• The following presentation and discussion handled the development of Urban Environmental Evaluation Index. lts development is essential for creating ecocities as, while more than 1,000 indices have already been developed, none are applicable worldwide because they do not account for the different properties that each city has. Development of a globally applicable Urban Environment Evaluation Index faces the difficult task of finding similar properties among different indices and combining them. However, as the environmental situation in any







given city can influence both neighboring and distant cities all over the globe, the development of a comprehensive environmental index is critical. The development makes a clear distinction of local environment from global environment, and additionally includes criteria on nitrogen and phosphorus, which had been previously been relatively ignored.

2-2. Presentation of a new paradigm on **GHG** reduction

• At Plenary Session II, discussion was on the topic 'City's Opportunity and Challenge based on Urban CDM'. While cities contribute to 60~80% of global GHG emissions, existing carbon mechanisms such as current CDMs have not included urban emissions as a key focus. Therefore, as it is necessary to respond to climate change through green economies at a city level, this session dealt with issues regarding the recognition of Urban CDM as a provider of key incentives in a green economy and as a new paradigm to city-led GHG reduction methods by granting carbon credits.

《Urban CDM》

Background

- Current CDM is targeted to individual business units, not to a whole city. New system needs to be introduced to reduce GHG emission

Concept

- Carbon credit is granted to a city which reduces the GHG emission to the amount compared to Business As Usual(BAU). Credits granted can be sold as UN climate funds or exchanged among cities. Cities both developed and developing countries therefore can have the opportunity to reduce emission.

Development and Application

- It is co-developed together by UNEP, Gwangju, Korea Environment Institute(KEI) to smoothen the registration to UNFCCC
- -The feasibility study of Urban CDM has been introduced at Gwangju Summit so that it can be completed in 2013.

Expected Outcomes

- By comparing emission with each city's own BAU, both developed and developing cities can join this CDM. As a new paradigm to reduce emission, it can contribute to mitigating climate change and further global environment.
- Reasonable rewarding based on UN climate fund and reduced amount of emission encourages global cities to join the Urban CDM.

Current Status of Korea's GHG emissions and CDM projects registered



More than 40% GHG emissions come from city

- From the presentation made by Ha, Sang-sun, CEO of ECOEYE, a CDM Consultant

2-3. Directions for Developing Urban CDM to prepare for Post-Kyoto Protocol

2-3-1. What is the Urban CDM?

- The CDM defined in Article 12 of the Kyoto Protocol allows the developed country A to reflect its reduction of GHG emission that is caused by its investment in the developing country B, in its certified emission reduction, which can help the developed one reduce GHG in a cost-effective manner and allow the developing one to get technological and financial assistance.
- Urban CDM
 - It is a similar concept to the Cit-wide CDM developed by the World Bank or NAMA CDM supported by Jeong Rae-gwon, director of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP).
 - Research on CDM methods and models for the whole city level is needed since existing CDM projects were only for individual businesses.
 - Even though GHG emissions consumed by

cities (cities are responsible for 71% of the total emissions) are significant, adopting CDM system in all of emitters isn't possible because most of them are low emitters.

- Developing countries' participation in GHG reduction is needed but they aren't reluctant to actively take part in the effort, due to limitation of financing and technology, and strict reduction based on the CDM method have limited effects because of the rigorous certified process.
- Thus, there are strong needs for Cap & Trade System that puts the BAU standard of each country on the baseline to be developed for active participation of Annex countries, with the invention of methods for adopting the CDM method in GHG reduction caused by cities' preparation policy and project and the carbon finance method in preparation for the post-Kyoto system.
- ※ BAU (Business As Usual): GHG emission with no measures taken
- * Cap & Trade: Trading certified emission reduction after getting the allocation of the total carbon emission

No CDM Projects from Building and Transportation.

2-3-2. Meaning of Putting a Price on Carbon

- Carbon markets and emission trading schemes are central to carbon emission reduction at the global level.
 - Facilitating carbon emission reduction activities and increasing investment in low-carbon technology and service

2-3-3. Achieving Scale in the Expansion of Carbon Markets

- Achieving Scale in the Expansion of Carbon Markets
 - In 2007, the trading volume of EU Emission Trade System (EU ETS) was estimated at about USD 50 billion.
 - In 2008, major CDM markets were worth about USD 7.4 billion.
 - A variety of carbon reduction schemes are planned or in the process of development
- Currently, the problem is whether existing markets and systems live up to the necessary scale of investment and activities for carbon reduction.
- Various scales of trade, necessary conversion and transparent trading are needed for perfect and effective implementation of carbon markets.
 - The long-term vision and stability are also needed.
- There still remain a lot of rooms for improvement since existing or planning carbon markets don't satisfy the standards.
 - Most of all, the scale of carbon markets should be on the list of priority during discussion.

2-3-4. Towards a global Carbon Market

• Establishment of the global carbon market is

expected to open a new chapter in carbon emission reduction.

- Current carbon markets are implemented at the national or regional level.
- The current situation runs counter to experts' recommendations and the principle of Kyoto Protocol.
- ※ Kyoto Protocol planners want to create a carbon emission reduction system implemented at the international level and in an open manner
- Establishment of the carbon market at the international level could make its trading volume surpass combined trading volume of individual nations and regions.
- Post-2012 global agreement will be the opportunity of developing European carbon trading schemes into open ones.
 - Establishment of carbon markets effectively implemented at the international level could put an end to dispute over appropriate price of the carbon credit.
 - -This is based on the fact that the market implemented at the international level can provide the price signal that lives up to the emission goal.
- Developing countries' participation in carbon emission reduction lags behind that of developed ones because of the limited approach on a project basis and lack of capabilities of institutions.
 - Partial and practical approach of developing nations contributes to expanding the application of the CDM method.
 - Still, cross-sectoral and alternative approach such as establishing the distinct goal is necessary to attract attention of many countries and regions.

- Enhancing the capability of institution is central to success of carbon markets at the national and international level.
 - The central role of implementation institution is setting the goal, authorizing planning and monitoring the progress.
 - Sharing responsibility each other is necessary for effective and efficient implementation of markets.
 - Enhancing capability and cooperation of institutions is badly needed for facilitating connection between carbon trading schemes.

2-3-5. Just a Part of the Solution

- Carbon trading scheme is just one of the necessary technologies for reducing the climate change.
 - We can't understand all possibilities of reducing climate change in an effective manner just with carbon prices.
 - Establishment of the carbon trading scheme doesn't necessary mean that we have incentives for developing all technologies required for reducing carbon emission all around the globe.
- We have to consider long-term policy and measures by putting water, energy, food and even climate change on the agenda of sustainable development

2-3-6. Future Actions

- Leaders should make decisive moves.
 - Facilitating investment in carbon emission reduction activities and low carbon emission by helping nations get strong confidence in the sustainability of the carbon market.
 - ** For achieving the goal, leaders are required to come to an agreement on long-term goals that should be achieved by 2050 and possible routes at the COP 17 Climate Change Conference in Durban in 2011.
 - Joint efforts between policy makers and professionals should be made on an active and comprehensive manner for the open and effective global carbon market.
 - * This efforts are considered more important than ultimately facilitating connection between carbon trading schemes.
 - Development of policy for creating a new carbon market beyond limits of existing CDM methods is necessary for developing nations.

2-3-7. Development of the Urban CDM and Future Action of Gwangju Summit.

 Development model, jointly developed by the UNEP and Gwangju Metropolitan City in Gwangju.





Ex. City Polich CPA: sectoral approach City Policy + City Paln CPA: cross-sectoral approach



2-4. 5 thematic discussions for sustainable urban development

• At the 5 Parallel Thematic Sessions, cities' best practices and cutting-edge policies and technologies were shared.

From the keynote speech from Lester R. Brown, founder of Worldwatch Institute



Our early 21st century civilization is in trouble. We are now so close to the edge that the global economy could start to unravel at any time. Rising food prices may be the first sign of

trouble. Last summer, record high temperatures scorched Moscow. Russia's grain harvest dropped from roughly 100 million tons to 60 million tons. The world food price index climbed to an all-time high in a matter of months. We were lucky. If a similar heat wave were instead centered in Chicago, it could easily reduce the U.S. grain harvest of 400 million tons by 40 percent, or 160 million tons. There would be chaos in world grain markets, with prices climbing off the chart. Grainexporting countries would restrict exports, as Russia did. Meanwhile, oil-exporting countries would try to barter oil for grain, while the other grain importers would scramble for the crumbs. Instead of the TV evening news carrying scenes of smoke-filled streets in Moscow, it would run live footage of food riots in low-income countries with reports of spreading hunger and falling governments. With confidence in the world grain market shattered and with so many governments collapsing, the global economy could unravel. The principal threats to our security now are not armed aggression but climate change, population growth, water shortages, spreading hunger, and failing states. The answer: redefine security, shifting fiscal resources from military budgets to those needed to stabilize climate, stabilize population, raise water use efficiency, and address other twenty-first century threats to security. And it must be done with the urgency of the U.S. mobilization for World War II.

2-4-1. Session 1 : Energy Efficiency and Climate Change

- In particular, the energy efficiency of buildings in cities is a major concern as buildings consume one third of global energy (end use) and are hence the largest contributing sector to global GHG emissions (GER Buildings, 2011). Residential and commercial buildings are responsible for nearly 60% of global electricity supply (GER Buildings, 2011). Through demand for heating, ventilation and air-conditioning, refrigeration, manufacturing, and so forth, buildings contribute heavily to the energy consumption profile and carbon footprint of cities. They also contribute to the urban heat enclave effect, channel and exacerbate wind speeds in the city, while contributing little to the ability of the city to capture and store water and energy. Moreover, the construction industry consumes a third of global resource consumption and generates 40% of the total global volume of solid waste. The total energy footprint of buildings is therefore even higher if one considers their construction. The building sector is therefore a critical sector where global GHG reductions is concerned, and the IPCC study of 80 cases in 2007 (IPCC, 2007: in GER Buildings, 2011) in 36 countries suggests that a 29% reduction in projected baseline emissions can be achieved at zero cost in this sector.
- This session was attended by Gwangju (Korea), Sakai (Japan), Auckland (New Zealand), Abomey (Benin), Wuppertal Institute (Germany), and Photonics Industry Association (Korea), as presenters or panelists. Of note, Gwangju's key 'Carbon Bank' policy to reduce GHG received such positive response from all participants that Joan Clos, Secretary General of UN-HABITAT suggested it be applied all around the world.

| Gwangju's 'Carbon Bank' |



- From the presentation made by Park, Kyung-rin, Green Gwangju 21

2-4-2. Session 2 : Waste Reduction

• The global waste market (not including the informal sector in developing countries) has an approximate value of US\$410 million per annum (GER Waste, 2011). 5% of global GHG emissions result from the 11.2 billion tonnes of solid waste that is collected globally. Waste management challenges in cities (i.e. solid waste, electronic waste, biomass waste, hazardous waste, medical, packaging waste and marine litter) are amplified by the high rates of urbanisation. The costs of maintaining landfill operations are increasing as available landfill capacity is being stretched (and have to be developed further away from cities) and increasing transportation and management costs combine to take their toll on city governments. Moreover, city governments are increasingly recognising and attempting to deal with the polluting effects of landfills upon surrounding areas and the water table. Recycling programmes for glass, plastic, biomass, hazardous waste, and so forth have been adopted by many cities in response to the challenge of dealing with waste material. According to the GER Waste (2011) report, the

global waste to energy market was evaluated at US\$19.9Bn in 2008, and 30% growth was projected in the sector by 2014. The global market for recycled plastics and glass is also favourable, and previously informal recyclers such as the Zabbaleen in Cairo (a Coptic Christian minority) - who have implemented sophisticated recycling systems (GER Cities, 2011) have managed to access this global market. Accessing local and global markets for recycling can transform the waste sectors of many cities, and generate new employment opportunities that would otherwise remain untapped. In respect of creating new employment, the role of informal recyclers, who generally work under unsafe and unhygienic conditions (with devastating health

consequences for recyclers: GER Waste, 2011), are often overlooked in green waste strategies (Medina 2000: in GER cities, 2011), and expensive, technocentric schemes are adopted instead (Wilson et. al., 2006; in GER Cities, 2011). Rethinking waste management from a social perspective requires grappling with this challenge.

• This session was attended by San Francisco (USA), Taipei (Taiwan), Curitiba (Brazil), Ankara (Turkey) and UNEP DEIT, as presenters or panelists. Comprehensive waste management policies such as zero-waste at landfill and incinerators and recycling waste were addressed.



Comprehensive Management Policies



- From the presentation made by Soraya Smaoun, UNEP DTIE

2-4-3. Session 3 : Smart Green Transportation

3R

• The need for sustainable urban transport that improves access and mobility, while decreasing congestion and increasing productivity is self evident in many cities around the world (see section 2.2). The sheer numbers of employment seekers that are converging upon cities and the increase in the number of privately owned



Participants during open discussion at Plenary Session.

vehicles place concentrated pressures upon city infrastructures. These problems manifest in both developed and developing world cities, and a variety of responses have emerged. In some cases, private vehicle owners are penalised and public transport use is incentivised. The degree to which penalties and incentives are used may vary from case to case. In other cases, promoting the switch to cleaner cars (e.g. electric or hybrid cars) or cleaner fuel use (e.g. bioethanol, biodiesel, hydrogen) forms the core of city strategies for making urban transport more sustainable. Pedestrianisation has also been undertaken at large scales in some cities of the world. What is clear is that public transport programmes have the potential to address a wide range of needs in the city, that go beyond sustainability and deal with the greater issues of liveability. The potential for reducing GHGs in the transport sector is staggering, and the GER report on transport (2011) states that "(s) everal scenarios show that a green, low carbon, transport sector can reduce greenhouse gas emissions by 70 percent without major additional investment". The challenges involve shifting investment towards projects that respond to the principle of "avoiding or reducing trips through



integrated land-use and transport planning and enabling more localised production and consumption" (GER Transport, 2011). It also involves shifts towards more environmentally efficient modes of transport (e.g. public transport, nonmotorised transport options), and to more environmentally efficient vehicles and fuels (GER Transport, 2011).

• Toyama (Japan), Changwon, Seoul (Korea), Brussels (Belgium), (Iran), Econex (Korea), Tehran and UITP participated as presenters or panelists in this session, which discussed smart green transportation, focusing on urban improvement and enhancement of citizens' quality of life. The significance bottom-up approaches of through cooperation and partnerships were highlighted, as was the expected economical impact through job creation.

Bus Management System in Seoul, Korea



- From the presentation made by Ma, Gook-Jun, Seoul, Korea

2-4-4. Session 4 : Water Demand and Quality Management

- Population increase, increased living standards, over-exploitation, pollution, ecosystem degradation and adverse climate change effects all contribute to global water scarcity problems (GER Water, 2011). Ensuring water supply and wastewater treatment in cities has also become a major challenge for cities that are experiencing high population growth levels. Cities are increasingly seeking out water from sources that are located ever further from cities, in order to meet demand. Wastewater processing facilities are also under increased pressure in a number of cities, and the high cost of moving water-borne waste out to wastewater facilities located far away from the districts where the waste is produced, has become a major consideration for planners who are seeking new ways to address the challenge of wastewater abstraction. In some cities, extensive use of greywater systems have been implemented, while other cities have explored making use of bio-filtration processes to manage waste at lower cost. Ultimately however, there is a limit to the benefits that reuse and recycling can bring to city water metabolism, and it is necessary for cities to be actively engaged in catchment scale management in order to improve their access to water in the long term. The rehabilitation of the Catskills catchment - which provides the water supply for the city of New York - is one example where paying attention to catchment activities resulted in significant benefits at the city scale.
- At this session, Bamenda(Cameroon), Wooram Engineering, Kumho Engineering and Construction(Korea), and KOICA participated as presenters or panelists, and discussed cities' aggressive responses to water crises, such as local drought and climate change, by establishing management plans for efficient water use. The session also considered efficient

ways to supply water in residencial and industrial sectors while water consumption in cities is on the rise.

Drinking/Waste Water Treatment System

Drinking Water Treatment System



Wastewater Treatment & Reuse System



Seawater Treatment System



- From the presentation made by Kumho Engineering and Construction

2-4-5. Session 5 : Natural Ecology

 urban ecosystem management concerns have gained the attention of city-managers for a host of reasons. Many cities that depend on their natural assets for attracting tourism or property investment (such as the city of Cape Town: see section 4.1.5), for example, have taken up conservation and restoration projects that increase land value and stimulate employment creation. Urban gardens and food markets have also been implemented in clever and unique ways to increase the resilience of cities to external price changes in food that is imported into cities. Spaces for recreation and business activities can also be stimulated through creative and innovative urban ecosystem management initiatives. The key issues that dominate the debates on urban ecosystem management revolve around the following key issues. The lack of recognition of urban ecosystems as unique ecosystem habitat niches by ecologists and conservation biologists. which has led to a dearth of information and data on urban ecosystems. More-over thinking of urban ecosystem management strictly in terms of conservation biology is itself a limiting perspective and hampers the development of strategies for urban ecosystem management that address the broader socio-economic and cultural context in which urban ecosystems are located. Lastly, the emphasis on urban ecological security (Marvin & Hodson, 2009) has the potential to remove city ecosystem management from considering how ecosystems that are affected far away from these cities are affected by activities within these cities.

In this session, Suncheon (Korea), Putrajaya (Malaysia), Iloilo (Philippines), Bangkok (Thailand), UNISDR, EVA, and Ministry of Environment (Korea) participated as presenters or panelists, and looked at how the restoration of a sound urban ecological system is expected to enhance citizens' quality of life and further boost the urban ecology.

《Protecting urban ecosystem gives many side benefits》

- Human health
- Mitigating climate change
- Employment opportunities
- Creating educational spaces
- Creating recreational spaces
- Protecting biodiversity
- Reducing disaster risk
- Providing tourist industry

- From the presentation made by Peter Gilruth, UNEP

3. Outcomes(What have been introduced?)

"Gwangju Summit reached a concrete and practical agreement on given agendas."

3-1. Introduction of Gwangju Declaration

- Through Gwangju Declaration, participating mayors and city representatives to Gwangju Summit have expressed their strong intention to support Urban Environment Evaluation Index and Urban CDM.
- Not only simple announcement, Gwangju Declaration further provides a concrete platform to handle urban environmental improvement.
- Contents
 - Recognizing the significance of cities' roles to tackle the climate change, it urges worldwide cities and society to be aware the necessity of Urban Environment Evaluation Index and Urban CDM, and further asks for international support.
 - Efforts are to be made by signatory cities in 5 sectors for the sake of urban sustainability, and best practices are to be shared one another.
 - 'Global Low-Carbon Green City Award' and UEAMA(UEA Members Alliance) will enable cities to get together for urban sustainability as well as to support Urban Environmental Evaluation Index and Urban CDM.

3-2. Introduction of a message to send G20, COP17, and Rio+20

 Agreed to the application of Urban CDM by participating NGOs and city representatives, a message to be sent to G20, COP17, and Rio+20. "A global network to tackle climate change and create eco-cities was set up."

3-3. Establishment of Urban Environmental Accords Members Alliance (UEAMA)

《Background》

Recalling and recognizing the spirit of Urban Environmental Accords(UEA) signed in 2005, UEAMA strengthens inter-city exchanges and cooperations. By founding a secretariat, it proceeds with the regularization of biannual conference in regional rotation, supports the development of Urban Environmental Evaluation Index and Urban CDM, and help cities share best practices one another.

- As agreed by participating cities of Gwangju Summit and interim UEAMA member cities, UEAMA is regularized on a biannual basis having a secretariat.
 - Mr. Kang Un-Tae, Mayor of Gwangju and Mr. Edwin Lee, Mayor of San Francisco have been approved as the first chairs of UEAMA
- UEA Secretariat is confirmed to be located in Gwangju
- Executive Committee Cities : 10 cities (and an organization)
- Gwangju(Korea), San Francisco(USA), Delhi(India), Baghdad(Iraq), Cape Town(South Africa), Sinaia(Romania), Iloilo(Philippines), Nioro du Rip(Senegal)
- Ex Officio Member : San Antonio(Single candidate of the next summit), UNEP



Opening Ceremony of 2011 UEA Gwangju Summit.

 San Antonio was appointed and approved as a single candidate of the next Summit in 2013 after deliberate consideration other than Delhi (planning to host in 2015) and Baghdad (planning to host in 2017). It has set up a basis to advance toward the united collective of worldwide local governments.

3-4. Facilitation of Inter-Agency Advisory Group

 International Inter-Agency Advisory Group have acted and will act to present the feasibility study of Urban Environmental Evaluation Index and Urban CDM at Gwangju Summit, review its outcomes, provide advices and coordination on the development and registration of Urban CDM, and discuss global action plans to create low-carbon and green cities.

- Overview
 - Members : 14 members including UNEP, UN-HABITAT, UNDP, OECD, World Bank, UNESCO
 - Period : Sep. 2011~ Dec. 2013 (By the time of completion of Urban Environmental Evaluation Index and Urban CDM)
 - Objectives : To advise and coordinate the development and registration of Urban Environmental Evaluation Index and Urban CDM
 - Action Plans : It provides advices on;
 - $\cdot \mbox{The development}$ and application

4. Plans(What to do next?)

4-1. Continued support of developing Urban Environmental Evaluation Index and Urban CDM

- Send the message from Gwangju Summit to G20, COP17, Rio+20 in an effort to:
 - Appeal for the international application of Index and Urban CDM Gwangju Summit at G20 in Cannes.
 - Suggest Urban CDM be applied to cities during COP17, by Ministry of Environment
 - Convey the message at the local government session at Rio+20, by mayor himself
- Support administratively via UEAMA Secretariat (in Gwangju) to complete Urban Environment Evaluation Index and Urban CDM by 2013
- Seek the opportunity to be supported by World Bank (Trust Fund for Korean green growth) for the pilot test of Urban CDM.
- Support Inter-Agency Advisory Group via UEAMA Secretariat to continuously carry out the development of Urban CDM
- Set up 'Global Low-Carbon Green City Award' to award cities as an incentive
 - It is to be awarded biannually from 2014 when Urban Environmental Evaluation Index and Urban CDM are finalized.
 - Efforts will be made to be approved by UNEP governing council so that the award can be co-established by Gwangju and UNEP.
 - Operation Expenses will be prepared through the potential support from World Bank, Gwangju's city revenue, or sponsoring from companies.

From the Keynote Speech from Amina Mohamed, Deputy Executive Director of UNEP



As a co-organizer of the Gwangju Summit, UNEP is supporting the development of two key studies that will be further debated during these three days.

The first one relates to the development of an Urban Environmental Framework, which is being carried out in close cooperation with the Institute of Veolia Environment. The Framework will assess the state of the urban environment and the performances of urban activities. It will allow cities to compare their performance and analyze their differences.

The second report relates to the development of a feasibility study on Urban CDM, using the Clean Development Mechanism (CDM) to support Green House Gas (GHG) mitigation at a city-wide level with the ultimate goal of supporting cities in accessing carbon finance. The report, compiled by Perspective Climate Change, review existing methodologies and approaches relevant to an Urban CDM, as well as featuring some case studies with the aim of providing recommendations and



way forward to overcome the inherent challenges of the current CDM system.

I would like to take this opportunity to thank the experts who have guided and reviewed the development of these studies. They come from the most renowned and prestigious institutions in the sustainable urban development field and in addition to the one mentioned above, I would like to acknowledge UN-HABITAT, UNESCO, the World Bank, UNFCCC, OECD, GIZ and private sector organization such as Siemens, together with experts from Gwangju and Korean Environment Institute.

4-2. Facilitation of UEAMA

- Efforts will be made to make UEAMA, born on the occasion of Gwangju Summit, recognized as an international collective.
- UEAMA Secretariat will be established. - Independent secretariat of UEAMA will be located in Gwangju and the secretary general

who is highly experienced will be appointed.

- Staff member(s) could be dispatched from UNEP when and if necessary
- More UEAMA member cities will he appreciated.
 - Collect more member cities of UEAMA through San Francisco, the single candidate of the next Summit.
- Executive committee member cities shall be acting a regional office on each continent and collect member cities.
- UEAMA Secretariat will support the hosting of the next Summit
 - Provide the next host city with the experience of leading Gwangju Summit to a success
- Operate information center for member cities
 - Share best practices of member cities, release newsletters
 - Connect to Urban Knowledge Center of World Bank



Mr. Kang, Un-Tae, Mayor of Gwangju Metropolitan City, announcing Gwangju Cities Declaration.

5. Guideline to join UEAMA



Attending city mayors and representatives of 2011 UEA Gwangju Summit.

5-1. Purpose of UEAMA establishment

- The purpose of establishing the Urban Environmental Accords Members Alliance (UEAMA) is to share the spirit of UEA, set in 2005, and to further fortify the cooperation and exchanges amongst member cities.
- In this light, a UEAMA Secretariat is to be established, to address issues including the biannual hosting of the Summit, supporting Urban Environmental Evaluation Index and Urban CDM, and sharing member cities' best practices.

5-2. How to join UEAMA

 To join UEAMA, please fill out the registration form and send it to the UEAMA secretariat. It is available to download at www.2011uea.com. Membership will be completed once the forms are received by the UEAMA, and the applicant cities will be notified of the results

5-3. Roles as a UEAMA member city

- Member cities shall attend biannual summits or documentary conferences to vote on issues addressed by UEAMA.
- Member cities shall join the procedure of development of the Urban Environmental Evaluation Index and Urban CDM and contribute to building a sounder global climate by expanding global carbon markets.
- UEAMA information center, linked to Knowledge Platform of World Bank, will be founded. Member cities, as operating parties shall exchange and share information necessary to conduct UEAMA projects.

5-4. UEAMA member city Benefits

- Member cities shall be entered for the 'Global Low-Carbon Green City Award', in cooperation with UNEP, to be accredited as an eco-city, and potentially win the award.
 - * The Award will be inaugurated in 2013 upon completion of the Urban Environmental Evaluation Index and Urban CDM.
- Member cities shall be continuously provided with various forms of reports on the development of the Urban Environmental Evaluation Index and Urban CDM. They shall have the opportunity to join Urban CDM pilot testing.
 - * Applicant cities will be screened for pilot testing.
- Newsletters will be issued and distributed to member cities to share best practices and development procedures collected through UEAMA information center.
- At Rio+20, to be held in June 2012, a side event and exhibition booth will be prepared together with UEAMA, UNEP, UN-HABITAT, and World Bank. UEAMA Secretariat will support in order to make member cities participate.
- An Inter-Agency Advisory Group, consisting of worldwide environmental experts, shall provide advice and support to the development of Urban Environment Evaluation Index and Urban CDM.
- By utilizing UN climate fund, member cities shall be able to join the global carbon market and be supported by reducing GHG emissions.

UEAMA Secretariat

- Address : Kimdaejung Convention Center, 30 Sangmunuriro, Gwangju City, the Republic of Korea
- \cdot e-mail : gjsummit@2011uea.com
- ·Website:www.2011uea.com
- · Phone : +82-62-611-3744,3754
- ·Fax:+82-62-611-3799

Proposal for Urban Environmental Accords (UEA) Members Alliance

Preamble

Cities joining the Urban Environmental Accords Members Alliance (UEAMA), hereinafter Member Cities

Sympathizing with the realization that urbanization has not only brought radical economic growth and dramatic improvement of conveniences in human lives, but also caused shrink age of green areas in cities and consequent environmental pollution, primarily due to the expansion of urban areas, thus further becoming a key factor of global environmental issues such as global climate change.

Aware, in particular, of difficulties in housing, transportation and leisure activities, of heavily congested traffic, and of the shortage of green spaces and environmental deterioration due to excessive consumption and cramped space in cities.

Noting that the negative impacts of climate change, and the rise of sea levels, flood, drought, unusual weather phenomena, changes in ecology and spread of diseases as its consequences are the main concerns of citizens and that cities are key causes of these occurrences.

Acknowledging that all the Member Cities hereto bear common responsibilities, albeit at different levels, for the response to global features of climate change, thus participation is necessary in the international response of effective and proper dimensions with their utmost cooperation depending upon their capacity and socioeconomic conditions,

Noting that even though cities and urban residents manifest enormous significance and roles due to the fact that urban inhabitants account for more than 50% of the world's population, 69% of global energy consumption, and 70% of greenhouse gas emissions worldwide, yet the importance of cities is not fully accepted according to the principle of national sovereignty commonly used in the international community,

Keenly aware of the responsibility of city governments for tackling environmental issues that cities are facing and for spearheading the formulation and implementation of leading policies against climate change, acknowledging that city governments with the closest influences over the life of citizens can become the most effective channel for countermeasures against climate change, and declaring also that the goals of the United Nations Framework Convention on Climate Change can be ultimately attained when city governments unite together to establish common goals, thereby moving forward in solidarity for the fulfillment of those goals,

Respecting the Urban Environmental Accords (UEA) instituted on June5, 2005 in San Francisco in honor of the World Environment Day,

Pledging application of evaluation indicators and standards for environmental cities and urban CDM codeveloped by the UNEP and Gwangju Metropolitan City to foster the transformation of member cities into environmental cities and the prevention of global warming,

Committed to solidifying cooperative relationships among member cities of Urban Environmental Accords (UEA) during their collective action for the fulfillment of the aforementioned goals,

Have agreed on the "Proposal for Urban Environmental Accords Members Alliance (UEAMA)", as follows on October 13, 2011, in Gwangju Metropolitan City, the Republic of Korea:

Paragraph 1. Objectives

The objective of UEAMA is to preserve the global environment through the creation of urban roles in response to urban pollution and climate changes plus to establish the collaboration among UEA member cities for the promotion of sustainable urban development.

Paragraph 2. Use of Terms

- 1. "The Urban Environmental Accords (UEA)" means the agreement signed in 2005 in San Francisco by 52 heads of city governments for the execution of 21 provisions regarding sustainable urban development, and UEA member cities shall carry out voluntary environmental assessment until 2012with the understanding that most of the people in the world live in cities, causing concurrent occurrences of new environmental problems and opportunities.
- 2. "Urban Environmental Evaluation Index" refers to standards and evaluation indicators for environmental cities co-developed by the UNEP and Gwangju Metropolitan City as a development version of 21 provisions, which were initiated in 2005 at San Francisco, with the aim of ensuring common applicability for advanced and developing nations.
- 3. "Urban CDM", co-developed by the UNEP and Gwangju Metropolitan City, indicates a new type of international norm for citywide reduction of greenhouse gas emissions, including urban diagnosis of greenhouse gas emissions, quantification and certification of curtailment output by various projects, and the provision of incentives for such curtailment performance.

Paragraph 3. Principle

All UEAMA Member Cities shall be aware of the urban accountability for climate change, thereby planning and developing environmentally friendly urban policies for reducing greenhouse gas emissions under the goal of urban shift into low carbon and green city.

Paragraph 4. Activity

1. All UEAMA Member Cities shall agree on the promotion of cooperative relationships among cities through the sharing of exemplary cases and technologies out of respect for other cities' rights.

- 2. All UEAMA Member Cities shall promote eco-friendly policies toward low carbon and green city, and bolster up the counteractive actions of developing nations against climate change who are more vulnerable to the threat of climate change and have insufficient capability for coping with environmental deterioration.
- 3. In order to disseminate and apply the Urban Environmental Evaluation Index and the Urban CDM, which are co-developed by UNEP and Gwangju Metropolitan City, they will be used as urban policy guidelines. The method to preferentially provide leading cities in the field of greenhouse gas reduction with financial incentives such as UN Climate Fund through international organizations will be actively supported.
- 4. As for other matters of common concern, they shall directly cooperate with other UEAMA Member Cities or properly cooperate with an international organization with relevant jurisdiction, if necessary.

Paragraph 5. Conference of the Member Cities

Ordinary sessions of the Conference of the Member Cities shall be held at regular intervals of two years for the enhancement of the urban environment and the protection of global environment through the formation of an ongoing cooperative network among member cities.

As a meeting of UEAMA Member Cities, the Conference of the Member Cities shall establish its policy direction and adopt its strategic plan for attaining the objectives of this Convention, and it shall have the sole right to make decisions regarding the modification and amendment of the Statutes constitute and charters.

- (a) The official title of the Conference of the Member Cities is "The Summit of Urban Environmental Accords (e.g. UEA 'city name' Summit)"
- (b) The next hosting city shall be selected and officially declared during the previous meeting.
- (C) The Conference of the Member Cities shall pass a resolution with the quorum fulfillment of more than one fourth of the total members and approval by the majority of participants.

Paragraph 6. Executive Committee

- 1. The Executive Committee shall be comprised of within 10 Executive Members for the smooth attainment of the objectives of UEAMA and the Conference of the Member Cities' ongoing fulfillment of its functions.
 - (a) Executive Members shall be recommend by Executive Committee, and appointed at the Conference of the Member Cities given their contribution to this Convention's objectives and the regional allocation by continent.
 - (b) With the tenure of two years, they may be reappointed up to three times.
 - (c) The 1st Executive Committee will hold a regular meeting in 2013.
 - (d) Regular meeting shall be held during the Conference session and extra meeting can also be organized in by tele/video conference.

- (e) The Chairperson takes the portfolio of the Chief of Executive Committee.
- (f) One fourth of the members of the Committee constitutes a quorum, and a majority of attending voters is required to pass a bill.
- 2. The Executive Committee shall have the following authority:
- (a) Approval of plans and projects in the pursuit of UEAMA's purpose.
- (b) Decision on contribution, and approval for budget and settlement of accounts.
- (c) Establishment of regional branches on each continent
- (d) Competence over matters mandated by the Conference of the Member Cities.
- (e) Selection of the next host city.

Paragraph 7. Secretariat

- 1. A Secretariat shall be established and operated as part of the preparation and support for the regular general meeting.
- 2. A Secretariat will be set up in Gwangju Metropolitan City, the Republic of Korea, for the preparation and support for the next regular general meeting of the UEA conference and for the effective application of new evaluation indicators, the Urban environment evaluation Index and the Urban CDM.

Paragraph 8. Election of the President

The Mayor of the hosting city for the Conference of the Member Cities shall assume the role of the President. Tenure will be commenced at the closing ceremony to be held at the hosting city, and ended at the next closing ceremony to be held at the next hosing city. But, the first President shall be the Mayors of Gwangju Metropolitan City and City and County of San Francisco, co-hosting cities for the Gwangju Summit of the UEA.

Paragraph 9. Accession

The accession of cities to this proposal shall be made through their signature hereof on October 12-13, 2011 in Gwangju Metropolitan City, the Republic of Korea. Any city wanting the accession to this proposal shall sign this proposal and then deliver it to the Secretariat which will approve of its accession hereto.

Paragraph 10. Withdrawal

All UEAMA Member Cities may withdraw from the proposal by sending its written notice to the Secretariat. Such withdrawal shall come into effect after the receipt of such notice by the Secretariat.

IN WITNESS WHEREOF, the undersigned, being duly authorized to that effect, have signed this proposal.

Done in Gwangju Metropolitan City, the Republic of Korea, on the 13th day of October, 2011

Message to the G20, COP17, and Rio+20

The city is a space of life and center of economic activities where more than 50% of world population resides. On the other hand, it is also a main culprit of climate change all over the globe as it consumes 69% of energy and emits 70% of greenhouse gas worldwide. While rapid urbanization progressed, green space decreased, and many environmental problems have occurred such as traffic jam, air pollution and refuse disposal.

Recognizing the significance of urban environmental issues, 52 cities from around the world have gathered in San Francisco, signed Urban Environmental Accords (UEA), which defines a guideline of 21 actions including water, waste, and energy, and agreed to its implementation on the occasion of the 60th anniversary of the signing of the United Nations Charter and the establishment of World Environment Day in 2005.

Further recognizing, however, there are still many issues pending in the cities including reduction of energy consumption, restoration of ecosystem and sustainable urban development, city leaders and participants of 2011 UEA Gwangju Summit hereunder agreed to the following messages.

- 1. City mayors and representatives understand that continuous and balanced economic growth is crucial to improve the quality of citizens' lives and request for all the more effort of the world's major 20 countries.
- 2. The roles and experiences of each local government, the core of economic activities, are the essential part in economic growth, and the support for local government should be reinforced through policy decision and budget allocation of the nation.
- 3. Active response to global climate change is needed for continuous and balanced economic growth, and especially the effort must be concentrated upon changing urban area, which is the epicenter of energy use and greenhouse gas emission, into the green city.
- 4. Mayors and representatives acknowledge the validity of Urban CDM, developed by UNEP, Gwangju and Korea Environment Institute for creating low carbon green city, and urge its application to be discussed at the G20, COP17, and Rio+20.
- 5. To strengthen roles of local governments, city mayors and representatives urge the reduction of greenhouse gas at a city level and establishment of Urban CDM Platform.

October 13th, 2011

All mayors and representatives of 2011 UEA Gwangju Summit

Gwangju Cities Declaration

Recognizing that cities draw on ecosystems for goods and services, use large amounts of energy for buildings and transport, and therefore contribute significantly to global greenhouse gas emissions, with major impacts on local, national, and global ecosystems.

Noting the challenges faced by cities due to global shifts in resource management, urban population increase and growing demand for resources, with resulting climate change pressures

Considering that the cities of the 21st century are increasingly becoming the main hubs of social, economic, environmental and technological change,

Recognizing that cities are core actors of sustainable development, that there can be no sustainable development without sustainable cities and that cities are critical in transformative change towards sustainability,

Noting that cities play a key role in promoting resource efficiency and sustainable consumption and production and can trigger innovation for green, low-carbon sustainable developmental trajectories,

Believing that Mayors and Local Authorities worldwide have a unique opportunity to lead the transformative change towards a more resource efficient and green economy,

Recalling some of major conferences where the importance of cities were highlighted such as the Earth Summit in Rio in 1992, 2002, the Habitat II conference in Istanbul (1996), the Millennium Development Summit in 2000, and the ICLEI Summits, the World Urban Forum, the Shanghai World Expo on "Better Cities, Better lives" where local governments demonstrated leadership and implemented innovative actions,

Recalling the Urban Environmental Accords (UEA) launched in 2005 with 109 cities signatories worldwide today with a common aim to "realize the right to a clean, healthy and safe environment for all members of our society",

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Acknowledging the need for metrics to measure and report urban sustainability so as to be able to reduce urban environmental degradation

Acknowledging as well the need for tools and incentives for cities to access financing mechanisms including carbon finance,

Acknowledging the valuable preparatory work done by Gwangju Metropolitan City and UNEP in support of the 2011 Gwangju Summit, including on an Urban Environmental Framework and Urban CDM feasibility,

We, representatives of cities from all regions of the world gathered in Gwangju commit to:

Improve our environmental sustainability in the transition towards sustainable cities, and take necessary measures to this end, on a voluntary basis and in the context of national and regional policies and priorities,

Develop or strengthen city knowledge platform to better understand pressures and trends, barriers and opportunities and take necessary relevant actions to address them,

Find ways and means to better access finance mechanisms such as the Clean Development Mechanism and promote advocacy efforts with governments at the 17th Session of the Conference of Parties (COP 17), of the United Nations Framework Convention on Climate Change, to be held in Durban, South Africa, in December 2011,

Identify enabling conditions to develop sustainable cities including policies and regulations, market incentives and tools, and take actions for implementation,

Contribute to the development and piloting of a common benchmarking system against which cities can assess their progress towards sustainability, through a comprehensive MRV system, and from 2013 Gwangju plans to proceed with "Global Low-Carbon Green City Award" under the support and cooperation of UNEP and other UN organisations to cities with excellent performances.

Promote an integrated and multi-stakeholder approach towards resource-efficient and low-carbon city development in the following 5 sectors:

Energy efficiency: in particular in the building sectors with adequate information, labeling schemes, incentives and supporting measures

Sustainable Urban Transport: with a focus on integrated transport system, with priority to safe, reliable and accessible public transportation systems,

Waste management : converting waste to energy, waste to resources, promoting 3Rs and waste minimization,

Water and wastewater : efficient sanitation systems, safety and health, reliable distribution systems with access to all, improved management of resources and water demand,

Ecosystems: habitats, food supply chain, fragile ecosystems, risk prevention and cities resilience;

Develop actions in at least two of these sectors by 2012 and share best practices

Rethink as necessary planning, development and management of cities giving due consideration to innovation, integration, inclusiveness and participatory governance,

Identify and form partnerships between cities with the support of relevant multilateral organisations for the implementation of above actions, with a view towards developing technical and institutional capacity, including technology transfer

Cooperate with key actors and institutions such as governments, civil society, private sector, industry and multilateral organizations to better promote and build sustainable cities, in close cooperation with local government networks,

Establish an "Urban Environmental Accords Members Alliance" as UEA steering organization as well as its Secretariat in Gwangju to facilitate global application of Urban Environment Evaluation Index and Urban CDM, which are being co-developed by Gwangju and UNEP. A biannual conference will be held among member cities to report achievements and progress.

Request UNEP, UN-Habitat, UNDP, UNESCO, the World Bank, OECD and other international organizations and partners to support advocacy for and implementation of this declaration,

Spread this message to the G20, COP 17, Rio+20, and any other relevant international events.

October 13, 2011

From all attending cities of 2011 Gwangju Summit of the Urban Environmental Accords

Urban Environmental Accords Members Alliance

<u>Onconconconconconco</u>

Signatory City Form

City of	of	City,	Country	

Authorized Signature(Mayor) |

Date	
Mayor	
Address	
Email	
Primary Staff Contact	
Title	
Address	
Emai	Phone

Please email this signed form to : gwangju@2011uea.com Or Fax: 82-62-611-3799 Attn: 82-62-611-3744, 3754

Breeneeneeneeneeneenee

Gwangju is the main city in Korea's southwest region, is a city of art,

human rights and ecology. Gwangju has been transformed towards a green creative city, through the establishment of eco-friendly surroundings in urban areas in order to stimulate the green industry, and by carrying out eco-friendly practices in daily life.



2011 UEA Gwangju Summit Office

Office Kimdaejung Convention Center, 30 Sangmunuriro, Seo-gu, Gwangju, Republic of Korea (Zip: 502-828) TEL: +82-62-611-3754 FAX: +82-62-611-3799 www.2011uea.com