



**Asia-Pacific
Economic Cooperation**

2014/SOM3/PD/008

Smart Green City – Integration of Green Civilization, Culture, and Future Knowledge-Industry Seoul Case

Submitted by: Sungkyunkwan University (SKKU)



**Policy Dialogue on Urbanization
Beijing, China
19 August 2014**

Urbanization and Sustainable City Development



Smart Green City

Integration of Green Civilization, Culture, and Future Knowledge-industry

August 19th, 2014


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Mega Trend

1. Mega Trend

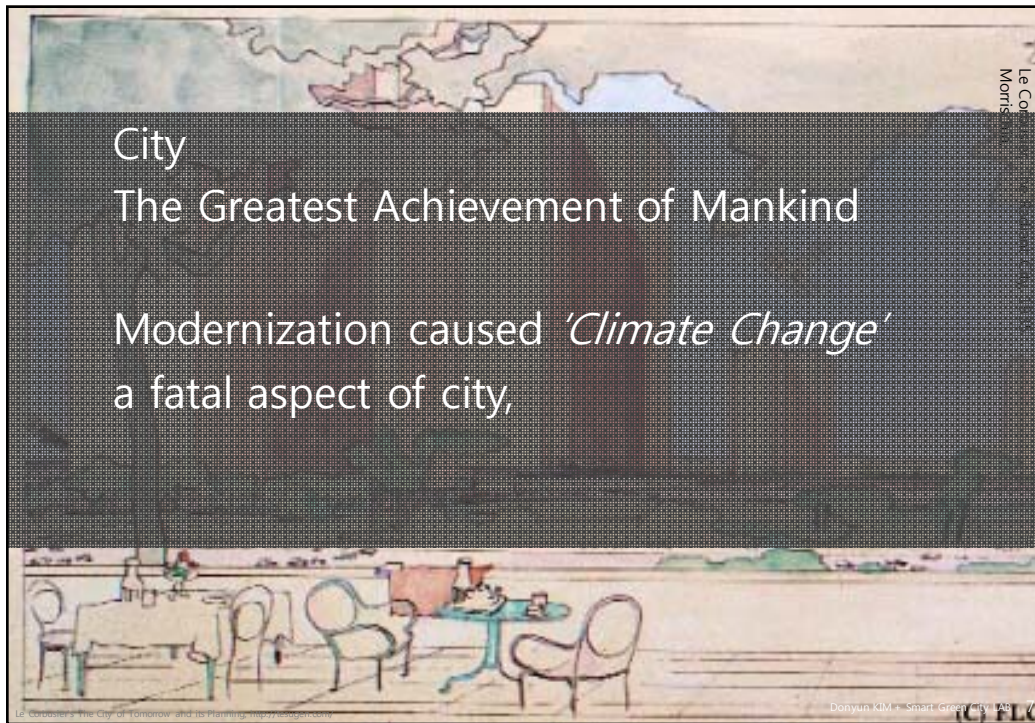
Smart Green City : 
Integration of Green Civilization, Culture, and Future Knowledge-industry

Urbanization

- Rapid Urban Population growth : 1.5 billion in the World, 0.9 billion in Asia(2030)
- Industrialization of Cities will intensify Resource and Environment Crisis
- *Establishment of New Urbanization and City Making Model is a key of survival for the mankind*

	2010	2030	2050
World Population	68 Billion	82 Billion	91 Billion
Urban Population in the World	35 Billion (51%)	50 Billion (61%)	64 Billion (70%)
Urban Population in Asia	18 Billion (26%)	27 Billion (33%)	35 Billion (38%)





Smart Green City : Integration of Green Civilization, Culture, and Future Knowledge-industry


1. Mega Trend

Definition of Sustainable Development

- *“Sustainable development” is a comprehensive concept*
- *Environmental, social, and economical sustainability*
- *The reduction of CO2 emission and fossil energy.*

International Organization				NGO						
UN	WB	UNEP(environment)	WMO(climate)	WWF(conserv)	IEA(energy)	UNDP(development)	OECD	Greenpeace	Friends of the earth	WWF
Absolute poverty and hunger	Growth, job, and poverty	Climate change	Protection of life and health	Global change and risk management	Preparation for crisis	Increase in poverty level and HDI achievement	Monetary, healthy ecosystem	Transition of energy (according to climate change)	Climate change and energy	Reduce the plurality of organisms
Elementary education	Organizational requirements	Threat and conflicts	Security in land, marine and air	Human development and MDG achievement	Market analysis on oil and natural gas	Democratic governance	Economic growth without environmental damage	Preserve old forest	Food and technology	Reduction of human biological resources
Gender equality	Peace, resource and gender equality	Ecosystem management	Improvement on quality of life	Management of water resource equity	Energy and environment	Crisis management	Transparency improvement for decision making	Preserve the ocean	Ocean and ship	
Reduce infant mortality	Sustainable development	Environment governance	Sustainable economic development	Governance	Energy efficiency	Encouragement of sustainable development	Harmony between society and environment	Sustainable agriculture	Economic policy	
Maternity protection	Development on finance and real sector	Hazardous material and waste product	Environmental protection	Finance	Energy technology network		Mutual dependence of each interest	Consumption by basic material		
WV/AVEL, Water Interconnecting Cities		Resource efficiency	WMO effect improvement	Education, knowledge, and ability development						
Sustainable environment										

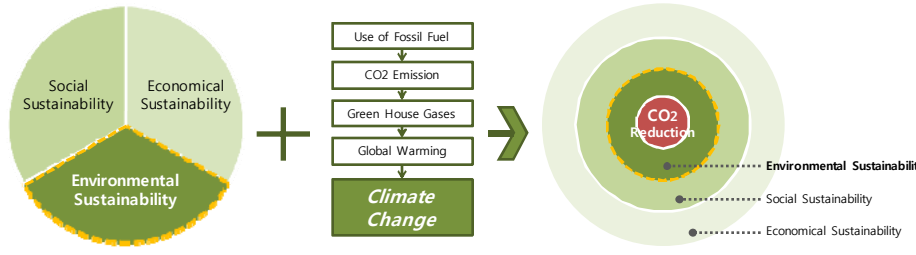
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Smart Green City :
Integration of Green Civilization, Culture, and Future Knowledge-Industry 

1. Mega Trend

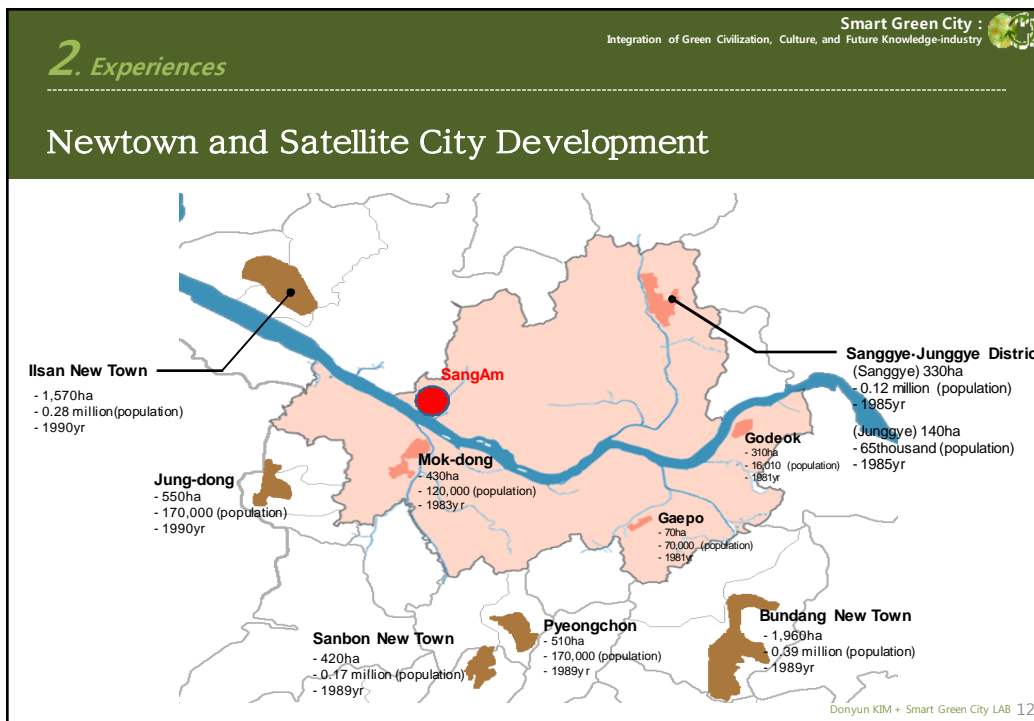
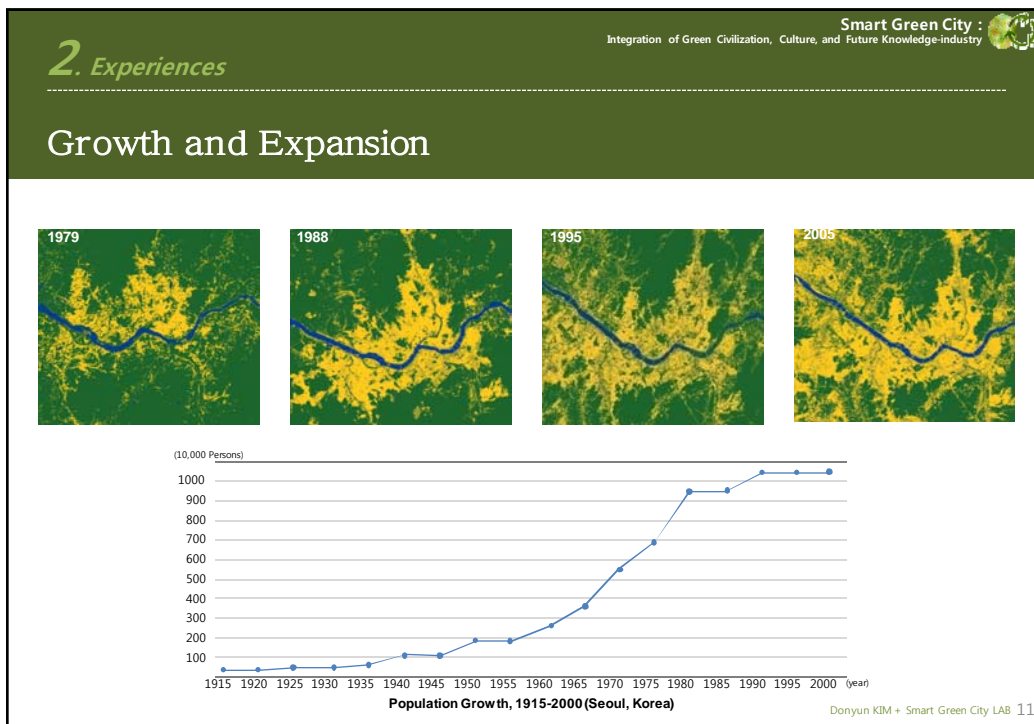
A Sustainable City Model : Smart Green City

- Integrated consideration of environmental, social, and economical sustainability
- An environmental concept that emphasizes on the reduction of CO₂, the major cause for today's climate change



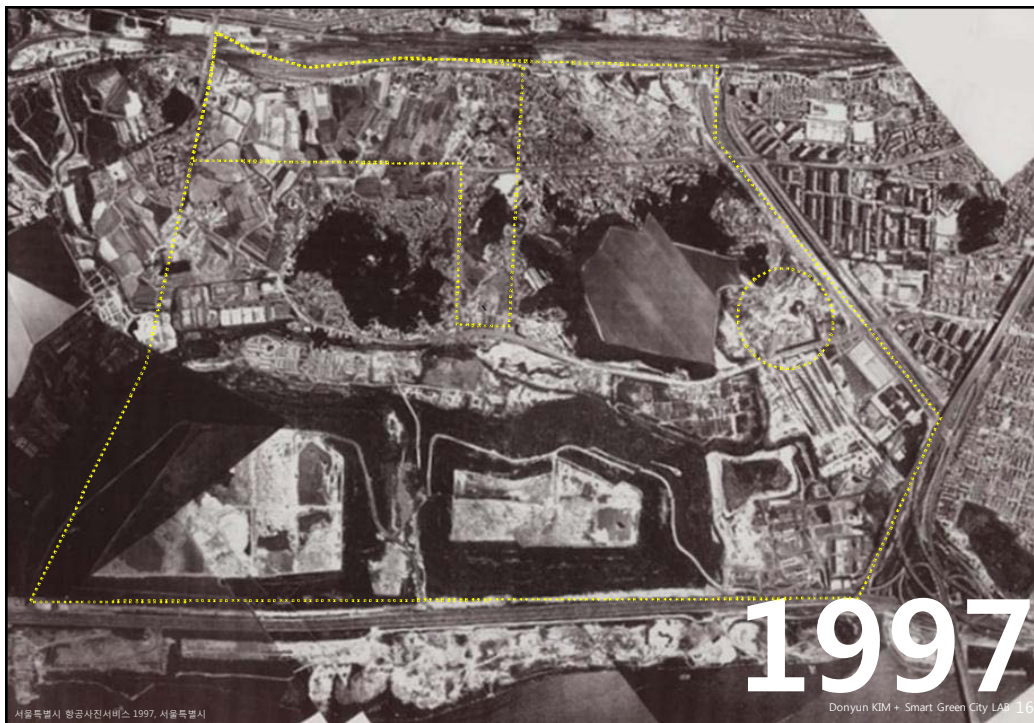
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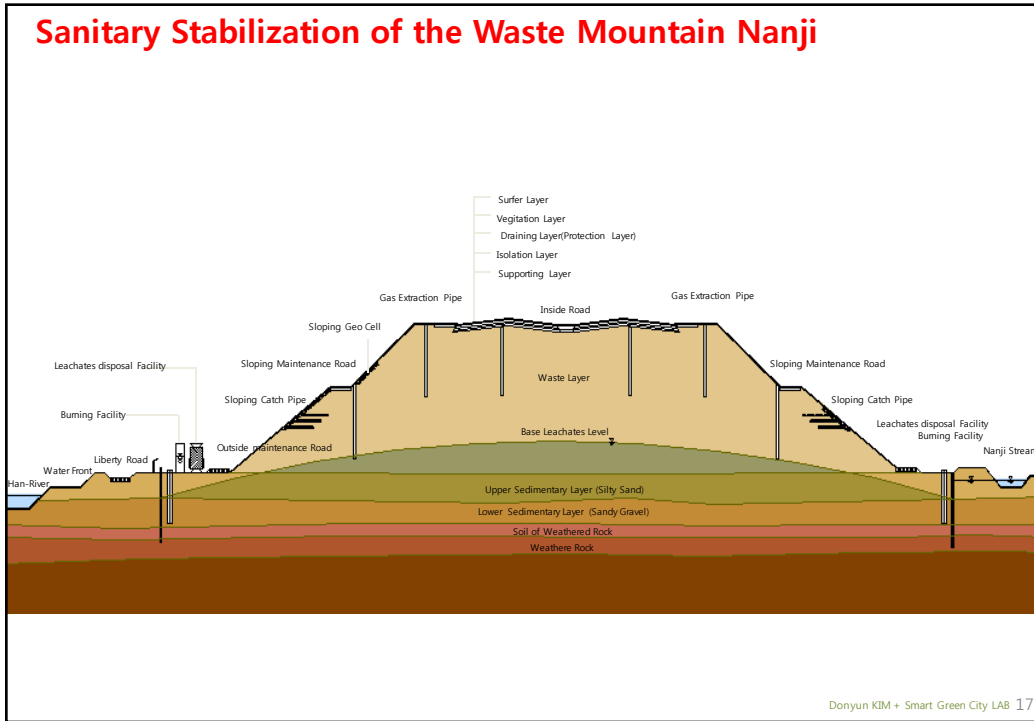
Experiences



Seoul Worldcup Park and Sangam Digital Media City









New Media Cluster
20 Billion USD, 840 Companies, 36,700 Workers

Broadcasting companies including MBC HQ, SBS and KBS Satellite, and YTN(S)
 Newspaper company including Chosun Daily, Donga Daily, JoongAng Daily, Hankook Daily(4)
 Contents business of IT like Samsung SDS, movie and game like LG U+ HQ, CJ E&M HQ, Dragon Fly, Pan Entertainment
 Research institutions and incubating centers established by Seoul City including Nunkum Square, DMC R&D Center, cultural Contents Center and IT complex.

Fountain Head of Digital Media Culture
Paradigm Shift for Sustainable Environment and Environmental Rehabilitation

DMC 10년사 및 발전방향(DMC백서)

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0 LIFE
0 PRODUCTION
0 CULTURE

From a Land of Pollution to a Land of Environmental Rehabilitation and Creative Industry

Park and Forest
36,700 Workers

\$20 Billion (annual revenues)
840 Companies

Fountain Head of
Digital Media Culture and
Environmental Rehabilitation

1996-2000: Pollution of the River Han, and 2000-2009: Pollution of the Han River

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New Century Cities emerging from New York to Seoul

MIT Tech : USA

Science Cities : Campus scientifiques et clusters dans les métropoles du XXI^e siècle

IAU Science Cities : France

上海城市规划

Shanghai Urban Planning Review: China

Innovation Goes Downtown

BusinessWeek : USA

El milagro del río Han

CincoDias : Spain

La Digital Media City de Seúl

CincoDias : Spain

2. Experiences

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Sharing Experiences

- **200,000 visitors, 5,000 delegation**
- **International benchmarking practices**
 - British Olympic Committee (National Assembly)(2006) → Media City UK Project
 - UN Habitat (2012) → Danang Vietnam Hi-Tech Park
 - Russian governor of Irkutsk(2013) → Russia Baikal Smart City Master Plan

<'04~'12 Cumulative>

Domestic
Visitors

149,258

Foreign
Visitors

53,534

Visit Group

129,950

(5,094 times)

SBA. 2012

Visit the British Olympic Committee
(2006.5)

Visit the Ministers' OECD Inspection Team
(2008.6)

G20 Meeting In Seoul Press Tour
(2010.11)

Visit the Russian governor of Irkutsk
(2013.11)

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Key Elements

2. Experiences

Smart Green City :
Integration of Green Civilization, Culture, and Future Knowledge-Industry

Key elements

- Vision: New Place Making and Smart Green City
- Evolving Urban Design : Reflects the needs from market, industry and Megatrend
- Role Design : mapping out stake holders, specially the public and private
- Infrastructure : Foundation of urban activities as cutting edge urban
- Implementation system : Management system construction for the Promotion Plan

Vision

Estimated scenario of the state for each place

Evolving Urban Design

Reflects periodical changes

Role Design

Public and Private

Infrastructure

Foundation of Urban Activities

Implementation system

Ordinance of Management Organization

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Master Plan, 2001

Key

- 1. Media Lab
- 2. Incubator Town
- 3. Main Science Museum
- 4. Monorail or aerial tram link
- 5. Main vehicular intersection "center of town"
- 6. Retail mixed use ped. street

- 7. Main pedestrian street / intersection
- 8. Experimental media theatre
- 9. Broadcasting Site
- 10. SBC site
- 11. Hotel
- 12. Conference
- 13. Entertainment

- 14. Corporate
- 15. Higher density corporate
- 16. Residential
- 17. Higher density residential
- 18. Education
- 19. Train Station
- 20. "Gateway" (distinctive forms)

DMC 종합발전계획 1. 물리적 계획 및 외연확대

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Planning Progress

1997

1998

1999

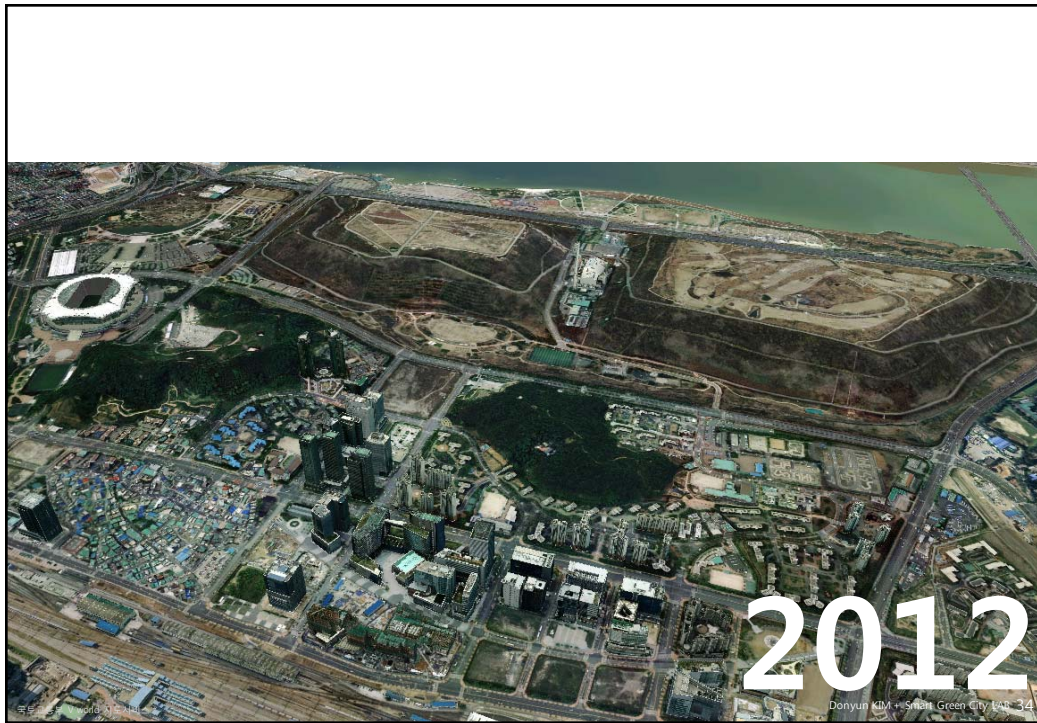
2000

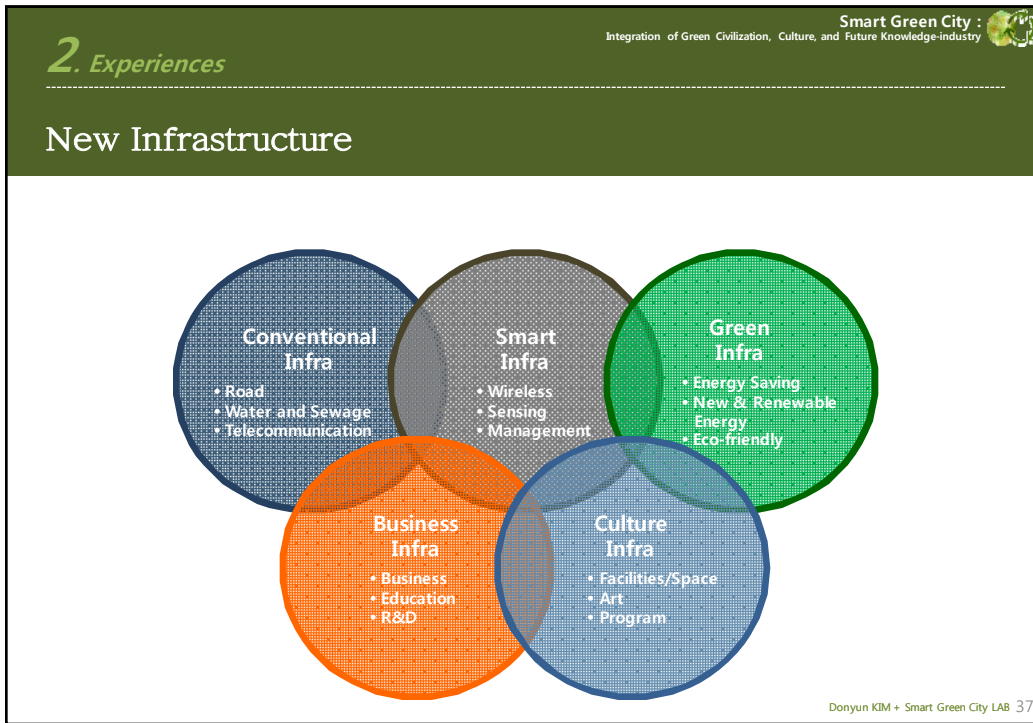
The Cradle of IT and Venture Companies

DMC 종합발전계획 1. 물리적 계획 및 외연확대

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PLAN 2014 : Digital Media + Eco Culture Living Laboratory and Experimental Testbed



Lessons

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3. Lessons

- Define Smart Green City

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Smart Green City :
Integration of Green Civilization, Culture, and Future Knowledge-Industry 


3. Lessons

- Define Smart Green City
- Integrate Regulatory Environment
 - Establish a system of regulations that integrates
Legal System of environment, energy, and urban planning



The diagram consists of three overlapping circles: an orange circle on the left labeled 'Environment', a blue circle on the right labeled 'Energy', and a red circle at the bottom labeled 'Urban Planning'. These three circles overlap a central green circle with a dashed border labeled 'Integrated System'.

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Smart Green City : 
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3. Lessons

- Define Smart Green City
- Integrate Regulatory Environment
- Customized Planning and Strategy for Local Characteristics

Feasible and appropriate directions that satisfy environmental, industrial, economical, and social conditions of cities.



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3. Lessons

- Define Smart Green City
- Integrate Regulatory Environment
- Customized Planning and Strategy for Local Characteristics
- Build Smart Green City Knowledge Platform

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