



Gyeonggi Province

Area : 10,000km²
Population : 12 Mil.

1

Presentation Contents

- Introduction
- 10 Strategies and Visions : Video
- Interesting features
- Conclusion

2

Birth of Gwanggyo

- Naming
 - King Wanggeon renamed Mount Gwangak → Gwanggyo. A.D. 928.
 - Gwanggyo New Town: by a citizens' naming contest in 2004.
- Goals of Gwanggyo
 - 2000 Gyeonggi-provincial office Relocation Suwon -convention Center
 - 2002 New town project Growth pole of southern Seoul
 - 2006 Masterpiece

3

Outline

首都圈宅地開發事業地區現況

Location	20Km away from South Seoul (30 min by metro)
Area	11,304,000m ² (88% of Suwon, 12% of Yongin) 2,800 acre ≍ Dama 7,500 Milton Keynes 21,000
Number of households	31,000 households(77,500 people)
Developers	Gyeonggi-do, Suwon City, Yongin City, Gyeonggi Urban Innovation Corporation
Construction situation	2002 : Conception of the project June 2004 : Districts to be developed as sites are designated December 2005 : Development plans are approved June 2007 : Implement plans are approved October 2007 : Start of the construction September 2008 : Start of installment sale of houses December 2011 : Completion of the construction

4

Under Construction

- > Cost : 10 billion USD
 - Land : 4.5 Bil.
 - Const : 3.0 Bil.
 - Others : 2.5 Bil.
- > Construction period :
 - 2007. 7~2011.12
- > Construction Ratio :
 - 50%

5

Project promotion structure



6

What is the biggest characteristic ? Conversion of the project goal

	Project period [Housing supply rate]	Project goal	Project contents
Other new towns	1980~2000 (60%~80%)	Housing supply + self-sufficient town	Housing site : 30% Self-sufficiency site : 10%
Gwanggyo	2004 ~ 2011 (100% level)	Housing supply + self-sufficient town [Masterpiece]	Housing site : 18.8% Self-sufficiency site : 26.7%

7

Before development : 2002



8

Land Use Plan



9

After development: The center of Gyeonggi new millenium in 2018

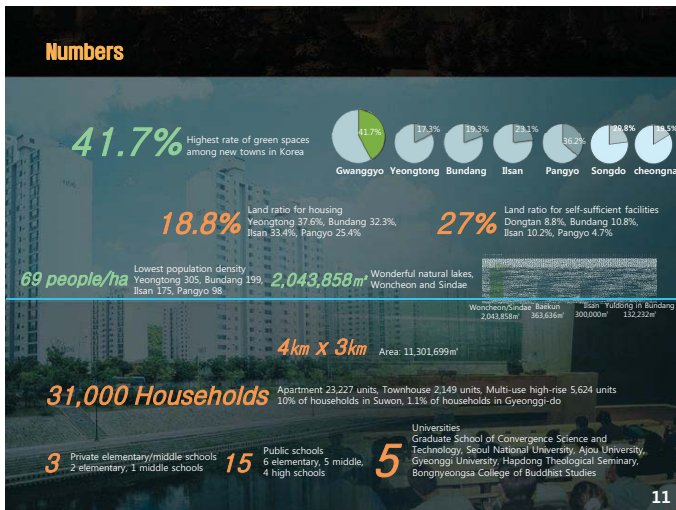


10

Vision and Strategies

- Vision : Happy Together
- 10 Strategies



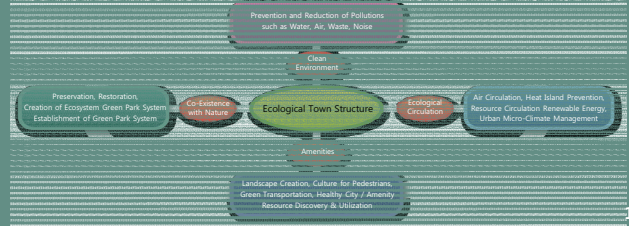


Environment-friendly strategies

1. GreenPlan
2. Greenway
 1. Regional Greenway 30Km
 2. Local Greenway 60Km
 3. 17 Green Bridges
3. Water Plan
 1. Water circulation system
 2. Nonpoint source pollutants
4. T.O.D(Transit-Oriented Development)

1. Green Plan

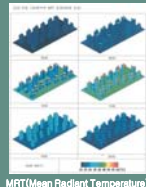
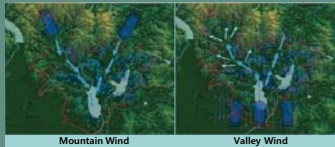
- Establishing the Green Plan which is planning nature symbiosis and eco-circulation prior to establishing land usage plans.
- Preserving areas having high natural values preferentially, and planning land use for human-beings with the remaining space.
- Preserving lake parks and broad green axes, and connecting them as green networks.
- Preserving river networks, and constructing water circulation networks using streams within the inner areas > expanding animal and plant habitats
- Micro-climate planning such as wind paths and management of heat environment.



17

1. Green Plan

- Establishing wind way plans so that the flow of air is not interrupted.
- Arranging buildings in such a way that they do not interrupt the flow of mountain winds which blows between Mount Gwanggyo and the lake night and day.
- The concentration of negative ions and pytoncides is very high in the air of Mount. Gwanggyo, and thus it is expected to contribute greatly to peoples' healths.
- Reduces the Heat Island effect due to buildings and asphalt in the inner areas.
- Having micro-climate which easily exhausts pollutants congested in the inner areas.



MRT(Mean Radiant Temperature)

18

2. Greenway – Broad greenway 120Km

Greenway 30Km

- Hiking from Yongin to Mount. Gwanak in Gwacheon is possible.
- 17 green bridges connecting mountain ranges disconnected by roads



Green bridges and hiking courses

Cycling way 90Km

- 30Km of broad cycling ways from River Han to Gwanggyo
- Expected to expand 60Km to reach Pyeongtaek Lake as a medium-to-long term project



19

2. Greenway – Connecting history, culture and art

- Historic site parks, culture arcades, Suwon Historic Museum, and other cultural facilities
- Bongnyeong Temple Citizens' Culture park



Suwon Historic Museum

Cemetery of Korean famous scholar "Simon"



Before construction of Bongnyeong Temple Citizens' Culture Park



After construction of Bongnyeong Temple Citizens' Culture Park

20

2. Greenway – Connecting Local Greenway(circumferent way)

Circumferent ways along mountains and waters Plan



Forest park Greenway 20 Km

- ① Extension: 20 Km
- ② Characteristics: A 8% gentle slope way



Waterfront park Greenway 40 Km

- ① Extension: 40 Km
- ② Characteristics: Walking path along streams



Mineral Springs 7 Points

- ① Number of mineral springs: 7
- ② Characteristics: To be developed within 500m from apartments in the new town

21

2. Greenway – Green Bridges 17

- 17 green bridges under process, 3 green bridges were designed by contest.



Greenway across Yongdong highway and nation highway No. 43



Across Woncheoll stream



Across the road from Heungdeok to Hadong

Greenway across Yeongdong highway and nation highway No. 43

- Extension: 237.2m
- Width: 32m
- Construction period: May 2010 ~ July 2012

Across Woncheoll stream

- Extension: 32m
- Width: 40m
- Construction period: May 2010 ~ July 2012

Across the road from Heungdeok to Hadong

- Extension: 52m
- Width: 50m
- Construction period: May 2010 ~ July 2012

22

3. Water Plan – Water circulation system



Water Circulation System to Improve Water Quality

The water of Woncheon - (Shindee lakes will be treated to maintain high-quality water quality where people can swim. The treated water will be delivered to reservoirs in the upper middle and lower along streams to be built. Water walls and fountains are built in the reservoirs and will serve as resting places for residents. Children can play in the reservoirs and there will be no problem even if they drink the water by mistake.

Water quality improvement water by circulation system

- Maintaining Grade 3 water quality in Woncheon and Shindee Lake
- Having walls and fountains to serve as a relaxing place for people



Hamyangji

Stream

23

3. Water Plan – Plan for processing nonpoint source

- Regarding the nonpoint source which is generated by the Gwanggyo new town development project,
- In the first process, vacuum cleaning vehicles will be operated in the roads and bridges before rainfall at the point of weather forecasts to prevent nonpoint sources.
- In the second process, filter penetrating type facilities and filter undercurrent facilities, and artificial wetlands will be established to reduce the nonpoint sources in natural methods.
- In the third process, lakes will be established inside the lakes, in Woncheon and Shindee Reservoirs, and Shindee reservoirs, to precipitate the remaining pollutants or process them ecologically.



Filter penetrating type(62)



Filter undercurrent type(7)
Areas where penetration is not possible

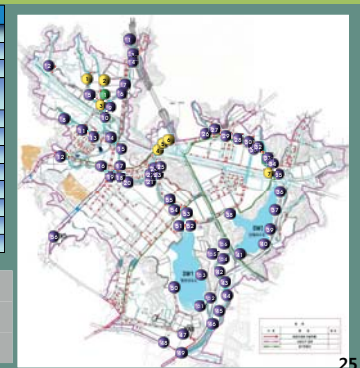


Artificial wetland(1)

24

3. Water Plan – Plan for processing nonpoint source

Type	Plan	Note
Undercurrent type	2	Shindee, Woncheon reservoirs
Filter undercurrent type	7	Nonpenetrable area
Artificial wetland type	1	Neighborhood park
Filter penetrating type	62	Broad roads and lake parks included
Food life water way	-	-
Total	72	-
Swirl type	-	-
Filter type	-	-
Total	-	-
LLD facilities	-	-
Total	72EA	-
Nonpoint source cleaning vehicles	3EA	Bridges and big roads



- Filter undercurrent type established in non-penetrable areas such as underground water and natural bedrock areas
- Cleaning vehicles for removing nonpoint sources in river bridges and roads
- Filter penetrating types included in lake parks
- Lakes having buffering and sinking land functions constructed inside the reservoirs

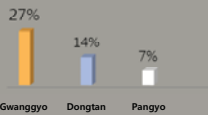
25

4. Transit Oriented Development



Self-sufficiency facilities site rate

- Self-sufficiency facilities site area 27%

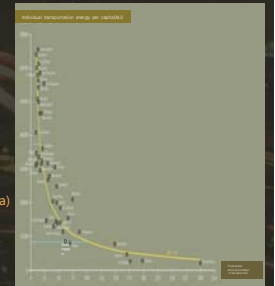


26

4. T.O.D (Transit-Oriented Development)

Energy reduced by high density

- New towns in England and France Population density is 20~50 people/ha
- Housing, work and businesses are widely dispersed
- Transportation energy per capita in low population density towns increases sharply
- Gwanggyo's population density is in the middle (69 people/ha)
- Inner area's activeness → stability of the inner area
- Parks that are close to amenities → enhances living quality



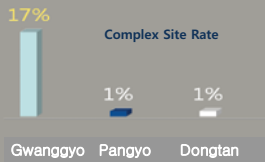
27

4. T.O.D (Transit-Oriented Development)



• Competitiveness of the knowledge society: meeting and communicating

- Public transportation + compression + complex + way of love
- CBD surrounding Docheong Station in Gwanggyo: Compression and complex of administration, business, commerce, housing, culture and entertainment
- Meeting and communicating idea strong knowledge society



4. T.O.D (Transit-Oriented Development)



• Transfer center constructed to connect railway and buses

- Three-dimensional transfer center in the Gyeonggi-do Office station
- Railway platforms, waiting lobbies, bus platforms, bus stations, transferring to bicycles
- Connected to Gyeonggi-do Office Square, increases pleasantness and convenience



4. T.O.D (Transit-Oriented Development)



• Inevitable outer transportation demand handled by public transportation

- Housing and amenity facilities constructed within 800m of transit area: TOD compressed town
- Maximizing public transportation rate: 60%
- Maximizing division of public transportation with three-dimensional transfer facilities

Energy reduction + safety + sustainability + wellbeing



Happy community strategy

1. u-KISS
2. CPTED
3. Masterpiece apartment project
4. Citizens' idea contest
5. Citizens' forum
6. Park discussion meeting
7. A new town that engages eternally with the citizens
8. Lake park green plan

Families' happiness is the top priority

- True happiness lies in physical health + social, economic and environmental elements
- All family members taking happiness walks in the lake park
- Making healthy memories in the broad green way every weekends
- Real-time family safety system for senior parents, children and women
- High quality medical service
- Successful education for children + lifetime education for all family members

Development of Real-time family safety system : u-KISS



□ Background

- > Kidnapping is increasing
- > 74% of kidnapped children dies within 3 hours
- > We need Real-time response.

□ Current status

- > May 2008: Patent application
- > August 2010: Patent certification

Development Real-time family safety system: u-KISS

- u-KISS(Ubiquitous-Kid Safety System)

1. A Child carries a small emergency pager
2. A Child presses the pager
3. CCTV aims at the pager
4. Images are sent to the police station.
5. The police come at once.



A clip from the program aired on KBS's 'Science Cafe'

33

2. CPTED : Crime Prevention Through Environmental Design

- Preventing crimes by wise plan
- Staircases able to be seen from outside, veranda windows to be more higher, parking lots in the basements to be more brighter
- Ways to schools to be more openly arranged to be able to be seen from far away



34

3. Masterpiece apartment project

- Operating integrated MP advisory committee

- urban plans, architecture, CPTED, women, elderly & disabled-friendly system , u-city, renewable energy, colors, design etc.



35

3. Masterpiece apartment project

- Ideas of housewife prosumers

- Consumer participation in product development and distribution processes.
- Model house reviews, surveys on residents, installment sales market survey, opinions on application of specialization concepts



36

4. Citizens' Idea contest

Contest(May 2004 ~ December 2004)

- Fields which create citizens' relaxing places such as parks, green lands, and tourist sites: 14 cases
- Beautiful and pleasant town amenity field such as beautiful boardsign culture: 14 cases
- Fields which create citizens' jobs such as establishment of education and state-of-the-art infrastructures : 3 cases
- Fields for handing over beautiful sites for the descendants such as saving energy and water and recycling: 8 cases
- Fields for creating beautiful three-dimensional town such as parking lots, tunnels, and ground video recording: 6 cases
- U-city and so on: 11 cases

37

5. Citizens' forum

- To invite citizens' idea contest winners regularly and hold forums(2005~2007)

- Discussing the proceedings of citizens' idea first presented
- Reporting the current overview of the town plan
- Creating Mount Gwanggyo greenway, measures to preserve hiking paths, and ecological connection routes



38

6. Park conference

- Conference on park plan, which drew much citizens' attention



•Date : 2009. 2. 6 20:00 → 3 times

39

8. A new town which evolves eternally with citizens

"One who survives is not someone who is strong, intelligent.
It is someone who responds to changes well"



Charles Darwin

40

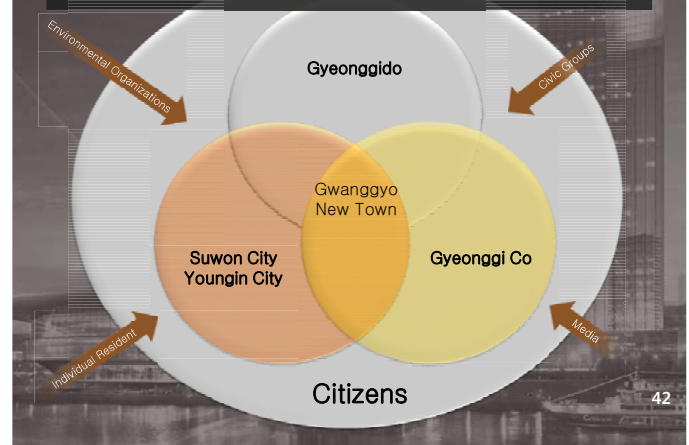
정조대왕 화성의꿈 광고가 이뤄졌습니다

King Jeongjo's Dream on Hwaseong Fortress, Gwanggyo Will Make Come True



41

Conflict, Rivalry, and Balance → Full agreement



42

Conclusion



Comfortable town

Living : Education, Transportation, Culture, Medicare
Jobs : Global business and small business.

Beautiful town

external: house, facilities, park, road
internal: meaning, history, high-culture town

Full Agreement

rivalry and balance
conflict and harmony

Happy Together + Forever

43

Gwanggyo park Movie



44

