

THE CITY OF CHEONAN KOREA

Cheonan is located about 50 miles south of Seoul and, because of rolling hills and four distinct seasons, is called the "Garden City." There are many scenic attractions in the immediate area. Similarities include the primary concern of the people for education, and this is evidenced by the large number of educational facilities in Cheonan. It has been designated as the high tech headquarters for Korea. Cheonan City has a population of 200,000 and occupies the entire county of Cheonan. Cheonan became Beaverton's third Sister City in 1989.



The city of Cheonan is the high tech headquarters for Korea and is often called the "Garden City" due to its rolling hills and distinct seasons.

CHEONAN AND SUSTAINABILITY

How has your city officially defined "sustainability" or created a resolution to protect the environment, economy and society?

Cheonan is famous for the Samguri an ancient 3-corner traffic center amidst beautiful natural scenery as well as a long historical tradition of patriotism. However, rapid industrialization and urbanization has threatened the survival of the natural environment and human welfare. Now, the most important thing to do is to gather wisdom and resourcefulness to protect and preserve what inherited from the city's ancestors which are clean water and air, fertile land, and pleasant natural environment. ⁸ The citizens of Cheonan have declared to strive to preserve Cheonan as environmentally sound, minimize pollution, prevent waste, develop eco-friendly production, promote sustainable consumer habits and protect their natural environment.

Since the Declaration of Sustainability of June 1999 the City of Cheonan has also created the Ordinance of "Green Cheonan 21" Action Committee⁹ and created a Resolution of

⁸ From the Declaration of Sustainability of Cheonan established June 5, 1999

⁹ Resolution of Creation and Operation Ordinance of "Green Cheonan 21" Action Committee; May 11, 2001

Environmental Standards¹⁰. “Green Cheonan 21” is an adoption of “Agenda 21” by the Division for Sustainable Development of United Nations from June of 1992. The Resolution of Environmental Standards adopts the underlying details of a comprehensive environmental policy and systematic planning to promote sustainability of the City by preventing pollution and environmental damage and to preserve pleasant and healthy life for the citizens.

How does your city take care of recycling, garbage collection water provision or parks?

Waste and Recycling

The Cheonan recycling district covers the entire collected garbage of the city. The entire collected garbage in the year of 2009 is 213,160 tons—making a daily garbage rate of 584 tons or 1.06 kg per citizen. As new openings of express railroad service, extended services in the vicinities of the capital city, various residential and industrial developments as well as rapid increase of population more garbage was created. It shows a rate of 8.7% increase from the previous year after the Cheonan population reached over 500,000 at the end of 2004.

There are three zones for the service of daily garbage collection: Joongbu Environment, LTD; Cheonan Chung Hwa Corp; and Sechang Corporation. There are 464 employees in charge of handling daily garbage collected, 144 street cleaning employees from the City Cleaning Labor Union, 320 employees from a civilian subcontractor. The number of employees tend to decrease due to modernizing the cleaning equipment and subcontracting. The city is equipped to collect daily trash with 39 collecting vehicles, 4 general use vehicles, 18 vehicles for collecting exclusively food refuse and 3 equipment washing machines. The majority of the vehicles are used to haul away garbage. Out of the daily collected garbage 96 tons are dumped in the dumping ground, 181 tons are incinerating and 307 tons are recycled.

Water

• General Facts

- Statistics (as of Dec. 31, 2009)

Population (person)	Customers (person)	Percentage of Delivering	Delivering Quantity per person (l)	Quantity of Treatment (k tonnage/per day)	Quantity of Delivering (k tonnage/per day)
551,423	472,000	85.6%	344	243,000	162,420

- From city area: 28k tonnage per day (two treatment facilities)
- From other area: 215 k tonnage per day from Daecheong-dam

• Water Facilities

¹⁰ Resolution of Environmental Standards; May 11, 2001

- 2 Intake Stations: **Nam-gwan**—drawing 37km³ raw water per day, built in 1935, expanded in 1994 and **Beongcheon**—drawing 3.3km³ raw water, built in 1984, expanded in 2000
- 2 Treatment plants: **Yong-gok**—treating 25km³raw water, rapid filtering, built in 1935 and **Beongcheon**—treating 3km³ raw water, slow filtering, built in 1997
- 28 Pumping Stations: 323km³ filtered water per day
- 25 Distribution Facilities: 109km³ filtered water per day

- Sustainable Drinking Water Policy

- Reinforcing water quality testing
- Monitoring filtering process
- Keeping close watch through automatic and real-time analysis
- Revealing drinking water quality reports monthly

- Master Plan of Water: Target - 2025

Target Year	Population (person)	Customers (person)	Percentage of Delivering	Delivering Quantity per day & person (l)	Quantity of Demand (k tonnage/per day)
2010	567,000	498,960	88.0	369	194
2015	660,000	627,518	95.1	371	233
2020	780,000	760,050	97.4	374	284
2025	800,000	785,766	98.2	374	294

Parks

- General Facts

*As of Dec. 1, 2009	Total		Current Parks		Planned Parks	
	Number	Area(km ²)	Number	Area(km ²)	Number	Area(km ²)
Total	225	11,557	132	2,369	118	9,188
Nature Park	4	6,201	-	-	4	6,201
Small Park	59	4,572	31	1,718	28	2,854
Children Garden	151	364	98	242	53	122
Theme Garden	4	416	3	409	1	7
Small Garden	7	3	-	-	7	3

- Recent Projects

- Restoring Cheonan Samgeori (three-forked road) Park to revive historic, cultural identity of Cheonan
- Creating 5 general parks and 5 children parks
- Creating Cheongsu Forest Park with lots of facilities, decks, trees, forest center, and wildlife in cooperation with Agency of Forest
- Creating Taehaksan Natural Garden and using as an education center
- Increasing facilities and amenity in trails of Mt. Gwangdeoksan, Mt. Taejosansan, etc.



Samgeori Park

New projects in the planning for the City of Cheonan include creating Bongsesan Natural Forest Park, Namsan Park and keeping gardening parks and green spaces throughout the city.

What are your city's goals supporting the notion of sustainability?

The City of Cheonan has well established goals towards the notion of sustainability in the areas of air, water, waste, wildlife, urban development, transportation, industry, economy and energy.¹¹

What achievements has your city made in regards to sustainability?

The City of Cheonan includes setting up the Committee of Local Agenda 21, issuing of environmental reports, and being designated as one of nine Model Cities responding to Climate Change as part of several achievements in sustainability.¹²

What activities are in place?

Activities promoting sustainability within the City of Cheonan include: conducting campaigns to make Eco-Villages; Establishing infrastructure to respond to climate change; and supporting and operating sustainability programs. Conducting Green Campaigns successively

¹¹ For a list of specific goals for the City of Cheonan see Appendix 2.2

¹² For a list of achievements and activities for the City of Cheonan see Appendix 2.2

is also among the activities supporting sustainability including green campaigns celebrating the world's environment such as Environment Day, Earth Day, Water Day and Bike Day.¹³

What challenges have you faced?

- Having difficulties with coordinating green policies with many relevant departments, divisions, and other organizations
 - Being necessary to establish green governance in the process of making and executing sustainable policies in cooperation with whole relevant people
 - Sharing information with other organizations and expanding awareness of importance of green policy
- Falling behind with prior projects, insufficient budgets and experts
 - Being necessary to be strongly pushed ahead by a chief executive and budgets need to be sufficiently supplemented through setting up a special fund
 - Need to establish a regular team, or section in charge of sustainability policy and recruiting experts
- Challenges to strengthen partnership with private sector
 - Being necessary to induce voluntary participations of private sectors and to support their programs
 - Strengthening power and roles of the Committee of Local Agenda 21 for Green Cheonan and activating projects
 - Developing diverse education programs, events, incentives, etc

¹³ For a list of achievements and activities for the City of Cheonan see Appendix 2.2