



Strategic Winter Development in Inje County for Climate Resilience

Good morning (Good afternoon), everyone. I am

Park Hyeon-bong, the Deputy Mayor of Inje-gun County in the Republic of Korea.

Today, I will discuss the “Strategic Winter Development in Inje County for Climate Resilience.”

Let me share with you the reality that Inje-gun County is facing amid the challenge of climate change, our vision, and the strategies we aim to implement to overcome these difficulties.



My presentation will proceed as follows.

First, I will give an overview of Inje-gun County's case.

Second, I will discuss the key issues that arise because of climate change.

Third, I will go over the response strategies from infrastructure- and content-related perspectives, and lastly, I will share the vision and direction of our county.



Warm winters,
A lake that never freezes,

**The city, once called a winter wonderland,
May now exist only in memories.**

A warm winter! A lake that never freezes!

In the future, the term “winter city” may disappear.

Today, I will discuss the current challenges faced by Inje-gun County and the measures we are taking to overcome them.

01 Overview the Inje County Case

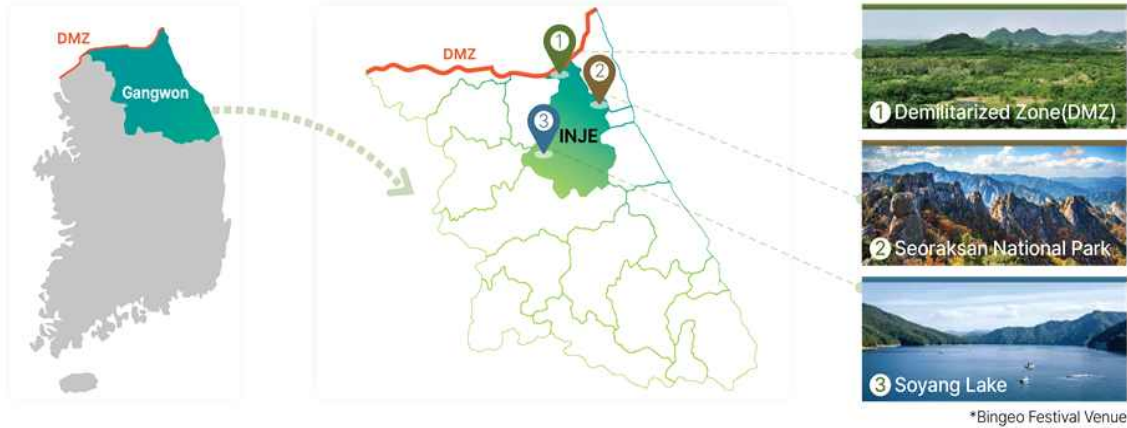
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- 1) Introduction to Inje County
 - 2) Introduction to Smelt Village



So, what does our county look like amid climate change?



Autonomous County of Gangwon Special Self-Governing Province

Inje CountyArea : 1,646.20km² Population : 31,587**Inje County Location Map**

Inje County, located near the DMZ, is home to Seoraksan National Park and Soyang Lake. Its proximity to the East Sea, paired with Gangwon Province's unique continental climate, brings severe winter conditions yet breathtaking snowy landscapes.

Inje-gun County, a treasure trove of nature that encompasses Seoraksan National Park and Soyangho Lake, is renowned for its winter landscapes and cold snaps, which are characteristics of Gangwon-do Province's continental climate.

The geographical proximity of the county to the Demilitarized Zone enhances our county's ecological value, offering potential as a year-round tourist destination through its diverse, natural ecosystems.



The 23rd Inje Bingeo Festival in 2023 attracted approximately 203,020 visitors.

The Smelt Festival, a renowned winter event in Korea, is held in the Bingeo Lake area of Inje County. This festival offers a variety of programs, ensuring enjoyment and entertainment for visitors of all ages.

Bingeo Village, which means an icefish village in Korean, is a key asset representing the winter tourism of the county. It serves as the main venue for the Inje Icefish Festival, which attracts over 200,000 tourists annually.

However, due to shorter winters and difficulties with lake freezing caused by climate change, the festival's future is in jeopardy.

02 Climate Change & Strategic Winter Development

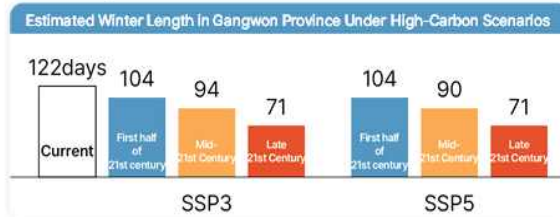
- 1) Negative Impacts of climate change
- 2) Strategic Approaches to urban development



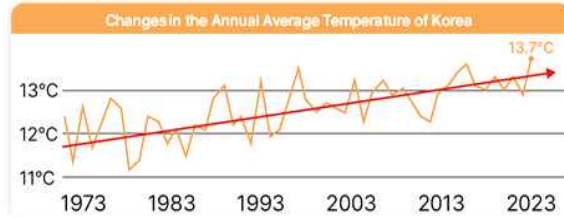
Now, let's examine the specific impacts of climate change on Inje-gun County.

Problems caused by climate change

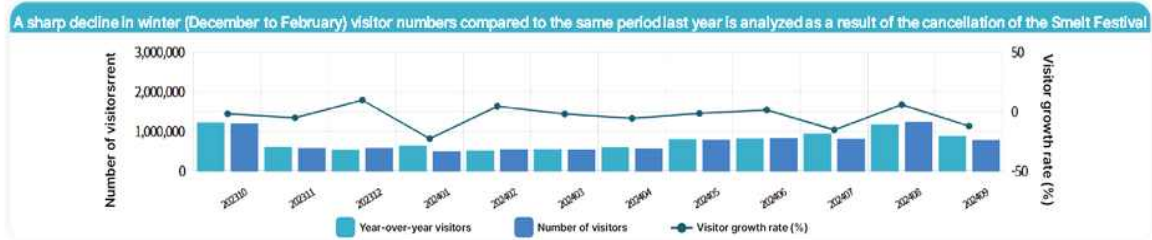
Estimated Winter Length in Gangwon Province Under High-Carbon Scenarios



Changes in the Annual Average Temperature of Korea



Trends in the Number of Visitors (Annual Total)



Climate change has led to rising temperatures and shorter winters in Gangwon Province, causing sustainability challenges for the Inje Smelt Festival and a substantial decline in visitor numbers.

Over the past century, the Republic of Korea's average temperature has risen by 1.6°C, with increased winter precipitation and shortened winters.

Under a high carbon scenario, the winter season is expected to decrease from the current 122 days to 71 days.

This decline will severely affect winter festivals and the tourism industry, including Soyang Dam's water levels and inadequate lake freezing, which are key tourist infrastructures.

Problems caused by climate change

- Soyang River water level ↑,
flooded parking lot

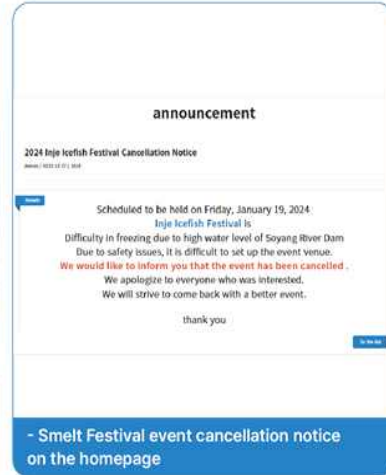


- Parking lot of the '23 Inje Smelt Festival (currently under water)

- The cancellation of the ice fishing smelt festival due to the Soyang River not freezing



- Signs prohibiting access to the ice in Bingeore Lake in Bupyeong-ri, Inje-gun



- Smelt Festival event cancellation notice on the homepage

Particularly due to climate change, rising water levels at Soyang Dam and insufficient ice formation have rendered key infrastructure such as festival parking lots and ice fishing sites unusable, highlighting the need for countermeasures

The Inje Icefish Festival, which was scheduled for January 2024, was canceled due to the warm weather and winter rain that prevented ice formation.

It has become clear that winter tourism can no longer rely solely on nature due to climate change.

Moving forward, we need more innovative approaches and solutions.

 Problems caused by climate change

Countermeasures

**For strategic winter development,
infrastructure and content should be reconsidered**

Pain point

Climate change
reduces winter lengthReduce
carbon footprintLocal economies suffer
as disruptive winter events

Background

Tourism resources
like Seoraksan &
Soyang Lake
near the DMZKorea's 1st Vegan
Village of the animal
liberation wave Flower
CowKorea's most famous
winter festival
Inje Smelt Festival &
smelt village created
by the festival

To minimize the impact of climate change and ensure the sustainability of winter tourism, Inje-gun County has developed four-season tourism resources and an eco-friendly transportation system from an infrastructure-related perspective.

From a content-related perspective, it aims to sustain tourists' interest through environmentally friendly transformations of festivals and the adoption of cutting-edge technologies.

03 Infrastructure perspective

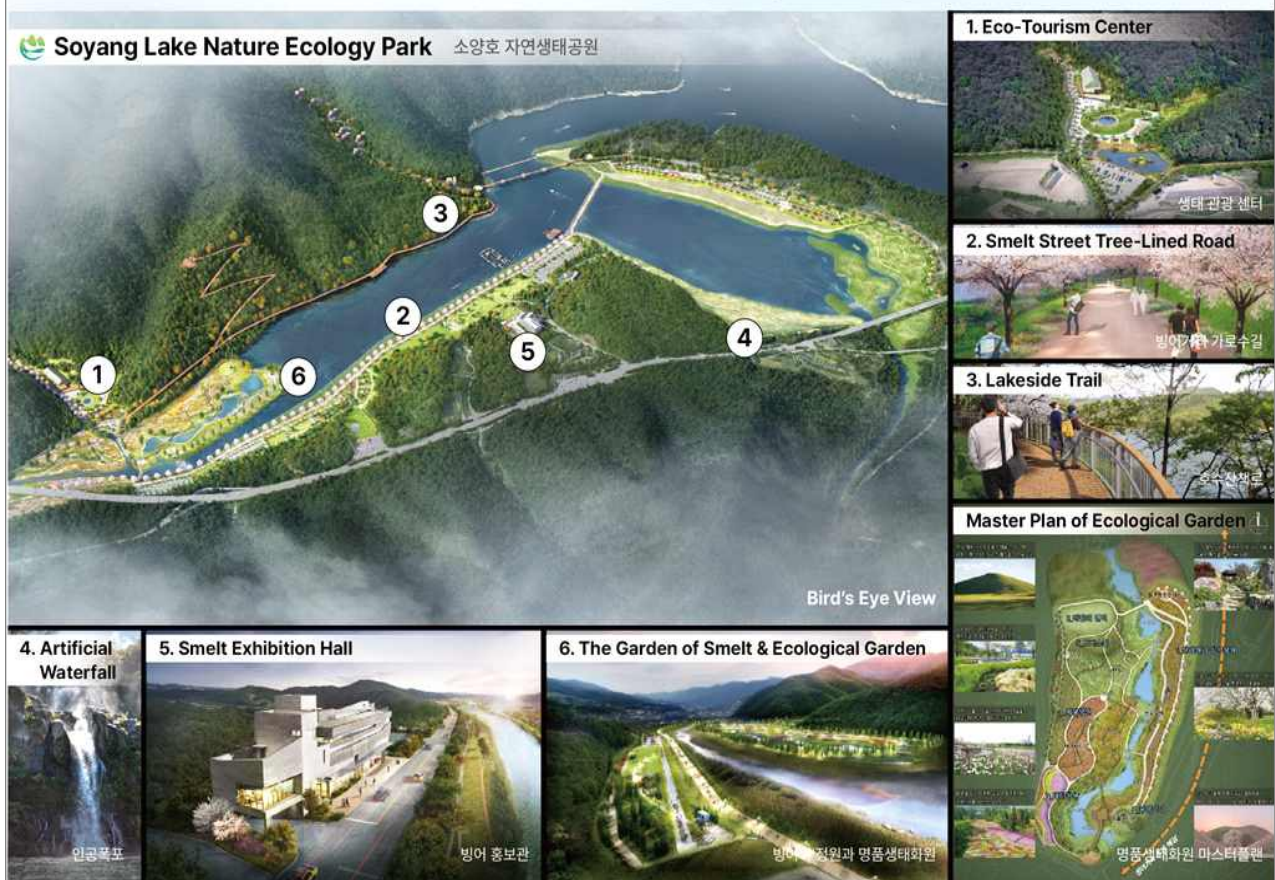
- 1) Create a four-season destination
- 2) Eco-friendly transport in Baekdam Valley
- 3) DMZ Peace Bio Resource Center in Korea



First, let me introduce the response measures from an infrastructure-related perspective.

03. Infrastructure perspective

- 1) Development of a year-round integrated tourist destination
- 2) Establishment of an eco-friendly transportation system in Baekdam Valley
- 3) Attraction of the DMZ Peace Biodiversity Center to Korea



Inje County is actively transitioning into a year-round tourist destination centered around Bingeo Village and Soyangho Lake.

This project entails creating tree-lined streets, walking trails, an artificial waterfall, and an ecological flower garden, among others, to develop year-round tourist attractions that are not bound by seasonal constraints.

Create a four-season destination

<p>Soyang Lake Smelt Experience Village 소양호 빙어체험마을</p>	<p>Soyang Lake Ecological Flower Garden 소양호 명품생태화원</p>	<p>Creating a themed border region 테마형 접경거점지역 조성</p>	<p>Creation of Soyang Lake Ecotourism Center 소양호 생태관광센터 조성</p>
			
<ul style="list-style-type: none"> • Revitalizing the local economy by attracting visitors from outside the city during the smelt festival and other seasons 	<ul style="list-style-type: none"> • Creating an attractive and competitive "tourism triangle" to attract purposeful tourists 	<ul style="list-style-type: none"> • Developing a tourism belt around the lake in three municipalities (Inje, Yanggu, and Chuncheon) 	<ul style="list-style-type: none"> • Creating a four-season tourist destination utilizing the natural ecosystem of the vast Smelt Lake

The goal is to expand year-round tourism resources through the development of the Soyang Lake Smelt Experience Village, a premium ecological garden, themed border region hubs, and an ecotourism center, contributing to sustainable local economic revitalization and job creation.

The county also aims to offer diverse tourism content through large-scale projects, such as the development of an ice-fishing experience village at Soyangho Lake, a premium ecological flower garden, and DMZ-themed hub areas.

These initiatives are designed to boost tourists' return rates and promote sustainable local economic growth.

03. Infrastructure perspective

1) Development of a year-round integrated tourist destination | 3) Attraction of the DMZ Peace Biodiversity Center to Korea
2) Establishment of an eco-friendly transportation system in Baekdam Valley

Eco-friendly transport in Baekdam Valley



The establishment of an eco-friendly transportation system presents a sustainable urban development model in response to climate change, while pursuing both nature conservation and the revitalization of tourism, making it a potential leading example.

To achieve sustainable urban development, Inje-gun County is introducing an eco-friendly transportation system.

These efforts will not only boost tourism but also contribute to the preservation of the natural environment.

 DMZ Peace Bio Resource Center in Korea



• **Establishing a Foundation for a Year-Round Tourist Destination**

The DMZ Peace Biodiversity Center provides infrastructure for a year-round tourist destination, supporting the conservation and research of biological resources, as well as offering educational programs and exhibitions to attract visitors year-round.

• **A Hub for Biodiversity Sovereignty and Environmental Conservation**

"As a hub dedicated to securing biodiversity sovereignty and managing endemic species, the Bio Resource Center plays a vital role in reinforcing environmental conservation and sustainability in the era of climate change."

• **Strengthening Climate Resilience through Eco-Friendly Infrastructure**

"Utilizing the ecological resources of Baekdudaegan and the DMZ, the DMZ Peace Bio Resource Center establishes eco-friendly infrastructure, addressing uncertainties surrounding winter festivals caused by climate change and reinforcing the region's image as an environmentally sustainable destination."

The DMZ Peace Biodiversity Center plays a pivotal role in enhancing climate change resilience and facilitating the transition to a year-round tourist destination through the conservation of biological resources and the development of eco-friendly infrastructure.

Additionally, the county plans to establish a Peace Biological Resource Center, utilizing the biological resources and ecological characteristics of the DMZ area.

By developing the center into an ecological experience tourism site, the county aims to both conserve the region's biodiversity and draw tourists.

04 Content perspective

- 1) Elevating the Smelt Festival
- 2) Developing content for all seasons
- 3) Vegan Village & Vegan Food



Now, let's examine the strategies from a content-related perspective.

Elevating the Smelt Festival



Plastic



Vinyl



**“ Low-Carbon Festivities ”
to Raise the Bar**

As an eco-friendly festival that leads the way in limiting the use of disposable items, vinyl, and plastic, we are establishing sustainability, branding Bingeoho as an eco-friendly travel destination, and increasing the rate of revisit and recommendation.

The Inje Icefish Festival is set to transition toward an eco-friendly approach by reducing the use of disposable items and plastics and branding the ice-fishing lake as an eco-friendly travel destination to enhance visitor retention.

Through this, the county aims to develop a sustainable festival model.

 Developing content for all seasons

Promoting the integration of the core content of the Smelt Festival into daily life and connecting it with non-traditional festivals.



Expected benefits of a contactless Smelt Festival experience using AR/VR technology.

Experience all **four seasons**,
anytime, anywhere

+

Maximize **physical appeal**
on the festival floor

*Physical appeal: It refers to the appeal of tangible products, representing the consumer tendency to prefer experiencing things in physical form, even in the face of technological progress.

By integrating the metaverse, visitors can engage with Inje County's natural resources throughout the year

The county also plans to create a virtual environment utilizing the metaverse technology. This virtual environment will enable visitors to experience the natural beauty and attractions of the county throughout the four seasons.

This approach will also maintain tourists' interest even during seasons when physical visits are challenging, leading the way in pioneering a new type of tourism.

Vegan towns and vegan food as eco-cities

Fostering the vegan industry to create jobs and expand markets



Progression

- Preparing to establish the Inje Vegan School and Research Institute in Wontong-ri by 2026 to train youth and support startups
- Creation of Sewol-ri Youth Vegan Village in Nam-myeon (completed in 2026)

Sinwollid-dalta village, home to the 'Kkot Pul So', becomes the first 'Vegan Village' in Korea



What we're doing

- To spread the culture of protecting animals and the environment, the youth in the village will be the center of the community, and the village will be transformed into the first vegan village in Korea where people can experience vegan food and culture.

By leveraging its geographical advantages and embracing the vegan trend, Inje aims to establish a wildlife protection village and evolve into a 'pure' destination.

With 89% of its area covered by forests, Inje-gun County is leveraging its geographical characteristics to foster industries aligned with the vegan trend.

By promoting vegan foods and creating a vegan village, the county is planning to spread a culture of environmental protection while

strengthening the image of “white Inje, a city as pure as white snow.”

05 Conclusion

Winter City Inje-gun Vision



By turning the challenge of climate change into opportunities, Inje-gun County is evolving into a sustainable year-round tourist destination and an ecological city.

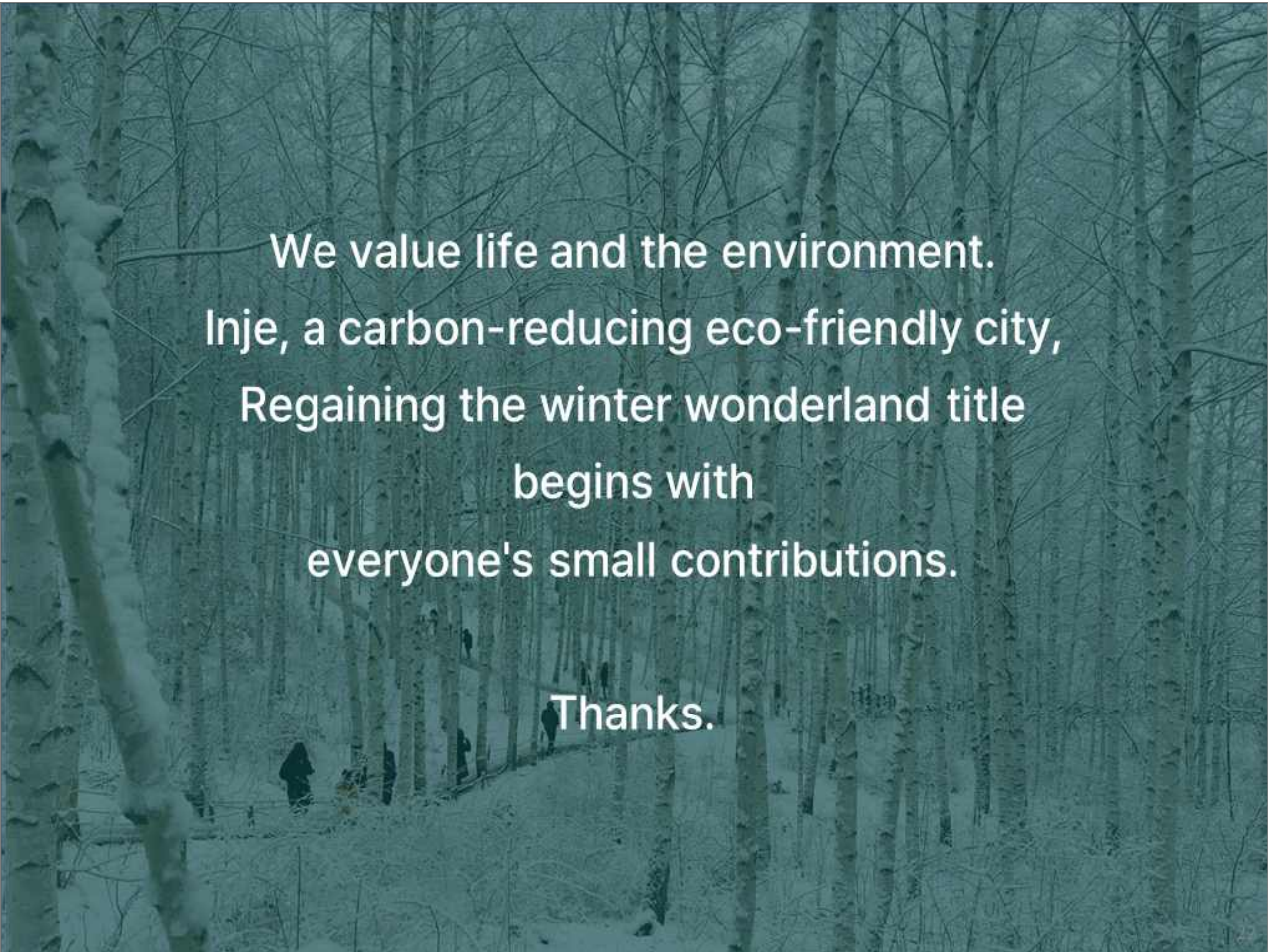
Together with its residents, the county will prepare for a better future.

05. Conclusion



Inje-gun is committed to ensuring the sustainability of its winter city and reinforcing ecological strategies to address climate change.

Through this, it will establish itself as a forest-based, cultural, and recreational city where nature and people coexist harmoniously, establishing itself as the Republic of Korea's leading ecological city.

A photograph of a winter forest with snow-covered trees and a path. The image is overlaid with a semi-transparent teal color. The text is centered and reads: "We value life and the environment. Inje, a carbon-reducing eco-friendly city, Regaining the winter wonderland title begins with everyone's small contributions."

We value life and the environment.
Inje, a carbon-reducing eco-friendly city,
Regaining the winter wonderland title
begins with
everyone's small contributions.

Thanks.

Small actions lead to significant changes.

Inje-gun County is dedicated to becoming a low-carbon ecological city that values life and ensures the sustainability of its winter tourism.

Together, let's tackle the challenge of climate change and create a better future.

Thank you for your attention.