2016
New Renewable Energy

Investment Opportunities In Korea
Korea’s new and renewable energy industry has been growing, as evinced in the increasing exports of the photovoltaics and wind power sector. On this note, the Korean government is striving to promote sustainable R&D and commercialization of the new and renewable energy industry.

### Industry Overview
Production status and share of new and renewable energy by source

### Competitiveness
Korea’s level of technological development for renewable energy sources compared to those of advanced countries
Localization rate of new and renewable energy source technologies

### Where to Invest
New and renewable energy clusters in Korea

#### Location descriptions
1. Naju Innovation Industrial Complex
2. Ochang Foreign Investment Zone
3. Gumi National Industrial Complex
4. Jingok General Industrial Complex
5. Chungbuk Jinchon-Eumseong Innovation City
6. Pyeongdong Foreign Investment Zone
Industry Overview

Production status and share of new and renewable energy by source

Waste, bio, and hydraulic energy account for about 90% of the production of domestic new and renewable energy. The Korean government plans to reduce the share of waste energy, promote photovoltaics and wind power as core energy sources, and supply 11% of primary energy as new and renewable energy.


Competitiveness

Korea’s level of technological development for renewable energy sources compared to those of advanced countries

The overall technology level of domestic new and renewable energy sources is about 81.7% of that of advanced countries, and among them, photovoltaics, hydraulic power, and bio energy sources are comparatively closer to that of advanced countries.

The localization rate of domestic new and renewable energy technology in 2013 was 76.9% based on technology and 68.4% based on the market. The localization of photovoltaics and bio energy shows a comparatively higher rate than others.

New and renewable energy clusters in Korea

- **Chungbuk Innovation City: Solar Power Technology Support Center**
  An advance base for nurturing the photovoltaics industry. The center has the largest test equipment in Korea.

- **Seonageum Solar Power Cluster**
  Plans to attract photovoltaics related companies and research institutions.

- **Buin New and Renewable Energy**
  The only comprehensive complex in Korea for empirical research, industries and PR.

- **Gumri Photovoltaics Test Bed Center**
  Daegu and North Gyeongsang Province will nurture custom-tailored experts and support the R&D of SMEs to develop new parts and commercialize their products.

- **Pohang POSTECH's New and Renewable Energy Lab**
  Testbed for hydraulic fuel cells.

- **South Gyeongsang Province Uiryeong Wind Farm Project**
  Plans to build 25 wind generators (750kW).

Where to Invest

Location Descriptions

1. **Naju Innovation Industrial Complex**
   A competitive industrial site suitable for promising energy-related small and medium-sized enterprises, and aims to build an energy valley by strengthening cooperation system with KEPCO and relevant organizations.

2. **Ochang Foreign Investment Zone**
   A zone, located inside the Ochang Science Industrial Complex, that is trying to attract, in particular, advanced technology businesses. A suitable site for the solar energy industry that can create a synergistic effect with Hyundai Avancis (solar module manufacturer).

3. **Gumi National Industrial Complex**
   Gyeongbuk Daegu has become a hub of solar energy-related technologies with the establishment of the solar energy test bed center, as well as an ideal site for foreign-invested companies thanks to the government’s plan to foster next-generation industries such as new renewable energy, electric car, and carbon fiber.

4. **Jingok General Industrial Complex**
   A suitable location for electric equipment manufacturing businesses related to new renewable energy, after the establishment of the Energy Valley by the Gwangju Metropolitan City Corporation, the sole owner of the land

5. **Chungbuk Jincheon-Eumseong Innovation City**
   Creation of a specialized innovation cluster being materialized through the designation of the Chungbuk solar power industry special zone. With the establishment of the U-City infrastructure, an ideal business site for solar power-related companies interested in the development of a ubiquitous city.

6. **Pyeongdong Foreign Investment Zone**
   Home to Energy Valley, the complex is a suitable site for enhancing corporate competitiveness and fostering renewable energy-related start-up businesses such as solar light energy, solar cells, and next-generation energy.
1. Naju Innovation Industrial Complex

Investment Highlights

Location Description
A competitive industrial site suitable for promising energy-related small and medium-sized enterprises, and aims to build an energy valley by strengthening cooperation system with KEPCO and relevant organizations.

Key Rationale
• New business opportunities in the nation’s only energy valley as KEPCO and energy-related organizations moved into Naju city.
• Resident companies of the Naju Complex: About 70 companies have signed the agreement (the goal is to attract 200 firms by 2017)
• Provision of local subsidies and competitive land price compared to other industrial complexes in the metropolitan area

Location Requirements

Recommended Business Sector
Electrical equipment manufacturing

Type
Pre-sale

Land Zoning
Industrial Complex

Investment Condition
Pre-sale Price: Land for industrial use 158 USD/㎡
(Tax reductions and exemptions available on an investment of 10 million USD or more in the manufacturing sector)

Location Overview

Target Area
• Total Area: 1,788,570 m²
• Available Area: 731,540 m²

1 USD = 1,200 KRW
Case References

**ABB Korea (Swiss)**

**ABB Korea Overview**
- ABB Korea signed an investment agreement on September 8 in 2015.
- Business: Investment in new energy industries such as high-voltage direct current transmission, Flexible Alternating Current Transmission System (FACTS), Battery Energy Saving System (BESS), and cyber security.
- A synergistic effect is expected to be created through cooperation with small and medium-sized companies, startups, and research institutes.
- It is the first foreign company to sign the agreement with KEPCO to move in the Naju industrial complex.

**Major Reasons behind the site selection**
- Possible to create synergies and enhance competitiveness via cooperation with KEPCO and other resident corporations and research institutes that moved into Bitgaram Innovative City.
- With the moving in of 16 public organizations including KEPCO, greater chance to generate new business opportunities is expected through R&D networks and a high degree of cooperation between KEPCO, the academic community, research institutes, and resident companies.
- Ex.) Signing of a memorandum of understanding (MOU) for business cooperation in the power generation control/monitoring sector (April 17, 2015) – the MOU specifies the development, sale, and maintenance of solutions for power generation control/monitoring; technology exchange and specialized education aimed at strengthening the information protection of the power generation control network; and other areas requiring cooperation to be determined through mutual consultation.

### Business Considerations

<table>
<thead>
<tr>
<th>Market Perspective</th>
<th>New Energy Industry (MG, ESS, HVDC)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Global Market Volume: 18.9 billion USD (2014) -&gt; 91.7 billion USD (2020)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business Suggestion</th>
<th>Manufacturing facilities for manufacturing business within the industrial complex</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Opportunity to enhance competitiveness through cooperation with KEPCO and relevant organizations, and resident companies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Main Costs</th>
<th>Pre-sale Price: Land for industrial use 158 USD/㎡</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wage: 2,590 USD (Real wage of Jeollanam-do Province)</td>
</tr>
</tbody>
</table>

### Business Cluster

<table>
<thead>
<tr>
<th>Major Corporations in the region</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Upstream</strong> : KEPCO</td>
</tr>
<tr>
<td><strong>Downstream</strong> : 14 companies including JW Business Co., Ltd., Baekkwang Electric Co., DMI Systems Inc., Saeil Systems Inc. have moved in. Around 50 others signed a contract to move in.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity-related enterprises in the new energy industry (including companies related to IT and apparatus and materials).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Related Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Institutes : National Radio Research Agency and Korea Rural Economy Institute</td>
</tr>
<tr>
<td>Government organizations : 16 agencies including KEPCO, Korea Power Exchange, and KEPCO KDN</td>
</tr>
</tbody>
</table>
Infrastructure

Utilities
- Water Supply: Industrial water - 7,000 tons/day
- Waste Water Treatment: 9,100 m³/day
- Electricity: 104,057.35 kW
- Communications: 1,012 lines
- Energy Supply: LNG gas supplied in consultation with Haeyang City Gas Co.
- KEPCO’s policy support
- The initiative to promote overseas marketing (support for overseas expansion of Korean small and medium-sized companies)
- Establishment of an energy valley center: Aiming to open in December 2016, with the goal of supporting startups and research centers R&D
- Raising of the upbringing fund for SMEs: 83.4 million USD (41.7 million from KEPCO, 41.7 million from others)
- Business types eligible for support: small and medium-sized enterprises in the new energy industry; electricity and ICT-related SMEs/venture businesses located in the energy valley, SMEs/venture businesses based in Gwangju / Jeonnam (jointly conducted by Korea Venture Investment and the Korea Industrial Technology Association)
- Creation of the upbringing fund for SMEs: 83.4 million USD, loan interest support for small and medium-sized enterprises (IBK Industrial Bank)
- Abundant Utilities
- Tax Reductions and Exemptions
- Reliable supply of raw materials:

Transportation
- With establishment of a KTX station, accessible to the metropolitan area within about 2 hours
- Commuting from Naju-si to a business destination is possible through the National Highway Route 23.
- Airport: Gwangju Airport (30 min.), Muan International Airport (25 min.)
- Railroad: Naju Station (5 min.), Songjeong Station (20 min.)
- Road: Seohaean Expressway Muan IC (26 km, 20 min.), Honam Expressway Jangsgeo IC (40 km, 25 min.), the National Highway Route 1 bypass (4 lanes) passing through the complex, the National Highway Route 13 , the National Highway Route 23 (4 lanes, adjacent)
- Port: Mokpo Port (30 km): cargo handling capacity 2.536 million tons, cargo berthing capacity 9 ships

Labor & Material

Labor Condition
- Regional population: (Unit: persons, %)
<table>
<thead>
<tr>
<th>Items</th>
<th>Total Population</th>
<th>Available labor force</th>
<th>Bachelor’s</th>
<th>Master’s</th>
<th>Ph.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeollan-do</td>
<td>Population 1,728,749</td>
<td>1,037,817</td>
<td>148,836</td>
<td>14,093</td>
<td>2,586</td>
</tr>
<tr>
<td>Ratio</td>
<td></td>
<td>60.0</td>
<td>8.6</td>
<td>0.8</td>
<td>0.1</td>
</tr>
<tr>
<td>Naju-si</td>
<td>Population 77,825</td>
<td>47,078</td>
<td>5,005</td>
<td>414</td>
<td>79</td>
</tr>
<tr>
<td>Ratio</td>
<td></td>
<td>60.5</td>
<td>6.4</td>
<td>0.5</td>
<td>0.1</td>
</tr>
</tbody>
</table>
- Average wage: 2,590 USD (as of April 2015, real wage of Jeollanam-do Province)

Core Resource Supply
- Environment
  Abundant Utilities: An ample source of electricity (4 plants including Hanbit Nuclear Power Plant) and industrial water (2 dams including Juam Dam, Seomjin River, and Yeongsan River)
  Reliable supply of raw materials: The world’s single largest crude steel producer, Gwangyang Steel Works Production Process (18 million tons/year); Korea’s largest petrochemical complex, the Yeosu National Industrial Complex (fertilizer 1.36 million tons/year), oil refining (650,000 barrels/day), petro chemicals (5.7 million tons/year)
  Suitable environment for creating the value chain: The optimal environment for the creation of synergies through KEPCO and relevant organizations, and resident corporations in the Naju Innovation Industrial Complex

Living Conditions
- Education: 46 kindergartens (1,277 students), 5 vocational high schools (3,777 students) / 14 middle schools (3,362 students), 7 high schools (2,575 students) / 2 junior college (2,881 students), 1 university (8,300 students)
- Medical Facilities: 4 general hospitals, 64 clinics, and 30 community health centers

Government Support
- Cash Grants: Advanced technology-involving enterprises, with more than 30% of foreign investment ownership
- Tax Reductions and Exemptions: 100% exemption on corporate tax and income tax (for 3 years), 100% exemption on acquisition tax and property tax, 100% exemption on custom duties (for 3 year)
- Investment and Employment Subsidies: When more than 10 residents in the province are newly hired, 500 USD per person from the 11th employee is provided per month up to 12 months (up to 0.84 million USD per company).
- Education and Training Subsidies: When more than 10 residents in the province are trained to be newly hired, 500 USD per person from the 11th employee is provided per month up to 12 months (up to 0.84 million USD per company).
- Property Grants: Less than 1 year from the date of pre-sale contract (up to 0.25 million USD)
- Facilities Grants: Less than 5% of the installation costs exceeding 1.67 million USD (up to 0.42 million USD)
2. Ochang Foreign Investment Zone

Investment Highlights

Location Description

A zone, located inside the Ochang Science Industrial Complex, that is trying to attract, in particular, advanced technology businesses. A suitable site for the solar energy industry that can create a synergistic effect with Hyundai Avancis (solar module manufacturer).

Key Rationale

• Great accessibility to the metropolitan area, with a well-established infrastructure such as Cheongju International Airport and Osong KTX Station
• Possible to create synergistic effect by utilizing the BINT(BT, IT, NT) belt in the Chungcheongbuk-do area
• Possible to secure an adequate supply of high-quality manpower through locally-based universities

Recommended Business Sector

New renewable energy / solar module and cell manufacturing-related business, etc.

Type

Pre-sale or rent (up to 50 years)

Land Zoning

Foreign investment zone in the Ochang Science Industrial Complex

Investment Condition

Qualification for residence: a foreign investment ratio of at least 30%, a foreign investment amount of at least 840,000 USD

Target Area

• Total Area: 805,955 m²
• Available Area: To be discussed

Location Overview
**Case References**

**W-SCOPE (Japan)**

**W-ABLE Co., Ltd. Overview**
- W-SCOPE, based in Yokohama, Japan, is a wholly-owned subsidiary established with the aim of producing plastic films and sheets.
- The company plans to expand the facility to manufacture separator films for secondary batteries that are incorporated in cars, laptop computers, and smart phones.

**Investment Summary**
- W-SCOPE signed a residency contract to invest 30 million USD in land spanning 23,000 pyeong in the Ochang Foreign Investment Zone on November 10 in 2005 (local time in Japan).
- Under the leadership of the current governor of Chungcheongbuk-do Province Lee Si-jong, the province signed an agreement on April 19 in 2012 to invest an additional 83.4 million USD in W-SCOPE, the manufacturer of separator films for secondary battery.
- On June 19 in 2015, W-SCOPE and Chungcheongbuk-do signed an agreement at the provincial office to invest 50 million USD by 2019 for the purpose of increasing the facility's manufacturing capacity for secondary battery separator membrane in an area spanning 5,172㎡. It is expected to generate a direct effect of hiring 250 people or so.

**Major Reasons behind its continuously increased investment**
- Since it moved in the Ochang Foreign Investment Zone, W-SCOPE, which successfully attracted investment from Japan in November 2005, has contributed to reinvigorating the local economy by achieving continuous growth, being awarded "Republic of Korea Technology Grand Prize," "30 million-dollar Export Tower Achieved," and "Gold Tower Order of Industrial Service Merit in the Job Creation Sector."
- One of the reasons is the fact that the Ochang plant plays an important role in establishing itself as a future global leader in the business sector of secondary battery parts and materials, which are incorporated in cars, laptops, and smartphones.

### Business Considerations

| **Market Perspective** | Global Solar Market Volume: 58 GW (2015) (28% up from the previous year) / Korea’s solar energy installed in 2015: 1,025 MW
|                       | The world’s solar cell production capacity: 66 GW, solar module production capacity: 79 GW (2015) |
| **Business Suggestion** | Creation of a new value related to new renewable energy, in collaboration with other clusters nearby
|                       | Strengthening of the R&D part through cooperation with resident companies in the Ochang Science Industrial Complex |
| **Main Costs**         | Rent: 0.2 USD/㎡, rent fee for 1 year to be pre-paid (Official land value: 220 USD/㎡ on average)  
|                       | Wage: 2,320 USD (Real wage of Chungcheongbuk-do Province, as of April 2015) |

### Business Cluster

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<th><strong>Major Corporations in the region</strong></th>
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<tr>
<td><strong>Ochang Foreign Investment Zone</strong> : STEMCO Co., JSR Micro Korea Co., Borgwarner TTS Ochang Co., and Hyundai Avanics Co. Ltd.</td>
</tr>
<tr>
<td><strong>Chungbuk Technopark</strong> : Solar Fusion Co. Ltd., GAIA Energy Co. Ltd., and Dass M&amp;S Co.</td>
</tr>
<tr>
<td><strong>Ochang Science Industrial Complex (general complex)</strong> : Hansol Technics Co. Ltd., and Dasstech Co.</td>
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<tr>
<td>Chungcheongbuk-do : <a href="http://www.cb21.net">www.cb21.net</a></td>
</tr>
<tr>
<td>Korea Industrial Complex Corp. : <a href="http://www.kicox.or.kr">www.kicox.or.kr</a></td>
</tr>
<tr>
<td>Industry-University Integrated Information Network : <a href="http://www.e-cluster.net">www.e-cluster.net</a></td>
</tr>
</tbody>
</table>
Infrastructure

Utilities

- Water supply: Industrial water (supply 55,000 tons/day), residential water (supply 24,000 tons/day)
- Waste water: All disposed at the sewage treatment plant in the complex (residential waste water 23,000 tons/day, industrial waste water 40,000 tons/day)
- Electricity: Entry route (Cheongwon power plant → Seocheonju transforming station → transforming station in the complex → resident companies), supply capacity (voltage 154 KV, capacity 157 MVA)
- Communications: Cheongju Telephone Office provides 34,719 lines (15,377 lines for residential use, 3,971 lines for industrial use, 893 lines for research, 14,249 lines for business and commercial use, 319 lines for public phones)
- Industrial waste: Disposed at the waste treatment facility in the complex, the amount disposed in landfill 166 tons/day (possible to use for 15 years)
- Energy supply facilities: B – C Oil (supplied by refineries in the Daejeon & Cheonan regions), city gas supplied by Cheongdo City Gas Co.

Transportation

- Airport: Cheongju International Airport (17 km) - Jeju (15 flights/day), Beijing (2 flights/day), Shanghai (Pudong) (2 flights/day), Shenyang (1 flight/day)
- Railroad: Osong KTX Station, Gyeongbu Line Cheongju Station (10 km) - Seoul (137 km), Busan (330 km), Daegu (170 km), Daejeon (32 km)
- Road: Gyeongbu Expressway Cheongwon IC (15 km), Jungbu Expressway Jeungpyeong Cheongwon IC (8 km)
- Port: Gunsan Port (100 km) - berthing of ships in the 2~50,000-ton class, cargo handling capability: 2,183 million tons

Labor & Material

Labor Condition

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<th>Ph.D.</th>
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<tbody>
<tr>
<td>Chungcheongbuk-do</td>
<td>1,495,984</td>
<td>916,277</td>
<td>244,711</td>
<td>28,822</td>
<td>6,541</td>
</tr>
<tr>
<td>Cheongju-si</td>
<td>662,102</td>
<td>407,498</td>
<td>134,030</td>
<td>16,874</td>
<td>4,013</td>
</tr>
</tbody>
</table>

- Average wage: Wage 2,320 USD (as of April 2015, real wage of Chungcheongbuk-do Province)

Core Resource Supply

- Suitable location for creating a synergistic effect with other industries: Favorably located for generating a synergistic effect through the BiNT(BT,IT,NT) belt covering Cheongju, Cheongwon, Jincheon, Jeungpyeong, Eumseong, and Chungju
- A reliable supply of excellent human resources: An ample supply of high-quality human resources, the establishment of the R&D support infrastructure and the production labor support infrastructure by utilizing local universities
- Superior location in the supply of solar power parts: Suitable for the supply of raw materials through the cluster in Chungcheongbuk-do (the industrial complex specialized for solar power parts and materials in the Chungbuk Innovation City [the solar power special industrial zone])

Living Conditions

- Education: 34 kindergartens (1,202 students) / 11 middle schools (3,963 students), 7 high schools (2,248 students) / 3 vocational high schools (2,200 students) / 2 colleges (24,411 students), 2 universities (3,309 students
- Medical Facilities: 3 hospitals, 41 clinics, 16 dental clinics, 20 oriental medical clinics, 15 public health clinic, and 23 public health clinic branches
- Others: 23,493 apartment households, 2 golf courses, and 1 stadium

Government Support

Tax Reductions and Exemptions for resident enterprises in the industrial complex

- Acquisition tax, registration tax: 100% exemption (Local Tax Act, Article 276)
- Property tax: 100% exemption for the first five years (Local Tax Act, Article 276)

Tax Reductions and Exemptions for small and medium-sized startups (manufacturing business-related) and venture companies

- 50% reduction on income tax for the year when the minimum income occurs and for the following five years
3. Gumi National Industrial Complex

Investment Highlights

Location Description
Gyeongbuk Daegu has become a hub of solar energy-related technologies with the establishment of the solar energy test bed center, as well as an ideal site for foreign-invested companies thanks to the government’s plan to foster next-generation industries such as new renewable energy, electric car, and carbon fiber.

Key Rationale
- The national industrial complex consisting of the Gumi Industrial Complex 1 (textiles and electronics sectors), Gumi Industrial Complex 2, Gumi Industrial Complex 3, and Gumi Industrial Complex 4 (electronics sector)
- The Gumi Industrial Complex 5 went on to pre-sale. And it aims to attract the target industries such as carbon textiles and next-generation display sectors, based on its plan to expand the complex.
- An ideal location as an industrial complex with Nakdong River running through the complex to provide a source of water

Location Requirements

<table>
<thead>
<tr>
<th>Recommended Business Sector</th>
<th>New renewable energy (solar energy), electric vehicle-related industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Pre-sale or rent</td>
</tr>
<tr>
<td>Land Zoning</td>
<td>Foreign investment zone inside the Gumi Industrial Complex 4</td>
</tr>
<tr>
<td>Investment Condition</td>
<td>Foreign investment companies with a foreign investor ownership of 30% or higher and a foreign-invested amount of 83,400 USD or greater.</td>
</tr>
</tbody>
</table>

Location Overview

Related Companies:
- Major Companies: Tophel Co. Ltd., Aewon Co. Ltd.
- Wind Power: Samsung Co. Ltd. and TGC Co. Ltd.
Case References

Toray BSF (Japan)

Company Overview

• As a major Japanese investment company, Toray BSF (Battery Separator Film) plans to invest an additional 38 million USD by 2016 and will newly hire 80 people.
• In July 2008, it signed the MOU to move into Gumi National Industrial Complex 4 and according to the agreement, the investment was completed in July 2015.
• With the company’s product ‘separator film,’ one of the four major parts of secondary batteries, Toray BSF has led the development of Korea’s secondary battery and electric car industries (2015 sales : 75 million USD).
• Toray Advanced Material, Toray BSF Korea, and Toray Chemical have moved into Gumi industrial complex, serving as an important model of economic cooperation between Korea and Japan.

Company Introduction

• Resident companies related to Toray Industries in the Gumi complex (6 factories in total, approx. 200 employees)
  - 3 factories of Toray Advanced Material
  - 1 factory of Toray BSF Korea
  - 2 factories of Toray Chemical
• Toray is a chemical material company which produces a variety of materials from basic materials to high value added high-tech materials for its core business, such as film IT materials, non-woven fabric, yarn, and resin. Also, it is a global enterprise which produces environmentally friendly materials such as carbon fiber, water treatment, and new renewable energy.

Business Considerations

Market Perspective
New Energy Industry (MG, ESS, HVDC) : 18.9 billion USD (2014)
Korea is one of the world’s top players in the ESS core secondary cell industry
  * The global market share of ESS cell : Samsung SDS (24%), LG Chem (20%)

Business Suggestion
Foreign-invested companies that involve advanced technology business, high-tech business, or parts and materials business (the complex exclusively for parts and materials industry available)

Main Costs
Rent: of Land : to be announced in the pre-sale notice
Wage : 2,450 USD (Real wage of Gyeongsangbuk-do Province, as of April 2015)

Business Cluster

Major Corporations in the region
  • Upstream :
    - Secondary Battery : Exxon Mobile, Toray, Bexel Co. Ltd., Upot Co. Ltd., and etc.
    - Wind Power : Seoltech Co. Ltd. TCL Co. Ltd.
  • Upstream, Downstream : LG Electronics, Toray and etc.

Potential Customers
• Upstream and downstream corporations to electric vehicles, solar power, and wind power

Related Organization
• Business activity support organizations: Korea Industrial Complex Corp., Customs, Tax office, Registry office, Korea Workers’ Compensation & Welfare Service, Gumi regional employment and labor office, Fire station, Gyeongbuk small and medium business support center, Solar power test bed center
Infrastructure

Utilities
- Industrial water: Supply capacity 72,327 tons/day
- Waste water: Processing capacity 330,000 tons/day
- Electricity: Entry route (Ulijin nuclear power plant, complex cogeneration plant → 4 complex substation → companies, supply capacity (voltage 22.9kV, capacity 840MW/h / voltage 154kV, capacity 1,200MW/h)
- Industrial waste: The site for waste treatment facility is designated inside the Gumi National Industrial Complex 4
- Telecommunication: 60,400 lines
- Energy supply facilities: Cogeneration plant (Supply capacity: steam facility capacity 850 tons/h, electricity 97,100kW/h), city gas (Supply capacity 700,000m³/day, Gumi City Gas), industrial gas (Supply capacity 340 tons/day)

Transportation
- Airport: Daegu Airport (40km) (Incheon International Airport 14 flights/week, Jeju 95 flights/week, International flights – regular flights to China, Japan, and South East Asia)
- Railroad: Gyeongbu Line Gumi Station (3.5km), KTX Gimcheon Gumi Station (18km, Dong Daegu - Daejeon transfer), Seoul 227km (3 hours 10 min.), Busan 167km (2 hours), Daegu 46.4km (30 min.)
- Road: Gyeongbu Expressway South Gumi IC (1km) (Seoul 257km, Busan 180km, Daegu 33km)
- Port: Busan (150 km, cargo berthing capability 201 ships, cargo handling capability 91 million tons/year), Old / New Pohang (130 km, cargo berthing capability 46 ships, cargo handling capability 53.41 million tons/year)

Labor & Material

Labor Condition
- Regional population: (Unit: persons, %)

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</tr>
</thead>
<tbody>
<tr>
<td>Gyeongsangbu</td>
<td>2,575,370</td>
<td>1,565,022</td>
<td>236,794</td>
<td>22,984</td>
<td>4,652</td>
</tr>
<tr>
<td>k-do</td>
<td>Ratio</td>
<td>60.77</td>
<td>9.19</td>
<td>0.89</td>
<td>0.18</td>
</tr>
<tr>
<td>Gumi</td>
<td>Population</td>
<td>399,019</td>
<td>258,287</td>
<td>41,137</td>
<td>3,842</td>
</tr>
<tr>
<td>si</td>
<td>Ratio</td>
<td>64.73</td>
<td>10.31</td>
<td>0.96</td>
<td>0.12</td>
</tr>
</tbody>
</table>
- Average wage: 2,450 USD (as of April 2015, real wage of Gyeongsangbuk-do Province)

Core Resource Supply
- Environment
  - Suitable environment for the development of renewable energy technology: provides the optimal environment for various kind of fusion research, with the establishment of the Research & Development Special Zone in the Gumi area.
  - Abundant Utilities: An ample source of electricity (Toptec Co. Ltd., E&R Solar Co. Ltd., etc.) and industrial water (Nakdong River and Gumicheon Stream, etc.); smooth logistics through the adjacent Gyeongbu Line railway and Gyeongbu Expressway
  - Possible collaboration with electricity business-related companies through the IT industrial belt that runs from Gumi to Gimcheon to Chilgok to Daegu

Living Conditions
- Education: 98 kindergartens (9,409 students) / 26 middle schools (17,423 students), 20 high schools (17,610 students) / 4 Universities (20,116 students)
- Medical Facilities: 3 General hospitals, approx. 400 hospitals
- Others: Sports stadium, indoor stadium, Olympic hall, Cultural Arts Center, and etc.

Government Support

Tax Reductions and Exemptions:
- Individual-type foreign investment zone: income tax, corporate tax → 100% for 5 years, 50% for 2 years, custom duties, individual consumption tax, value-added tax → exemption (capital goods to be introduced within 5 years)
- Complex-type foreign investment zone: income tax, corporate tax → 100%, for 3 years, 50% for 2 years, custom duties, individual consumption tax, value-added tax → exemption (capital goods to be introduced within 5 years)

Rent Fee Reductions and Exemptions:
- Individual-type foreign investment zone: 100% exemption
- Complex-type foreign investment zone: Industry support service business with a foreign investment of at least 1 million USD, business that involves a highly sophisticated technology, or manufacturing business with a foreign investment of at least 2.5 million USD and at least 200 full-time employees
4. Jingok General Industrial Complex

Investment Highlights

Location Description
A suitable location for electric equipment manufacturing businesses related to new renewable energy, after the establishment of the Energy Valley by the Gwangju Metropolitan City Corporation, the sole owner of the land.

Key Rationale
- Easy to supply high-quality human resources through the Solar City Center, Solar Cell R&D Technical Support Center, Next-generation Energy Research Center, Korea Technology Institute’s Energy Conversion Research Center, and Jeonnam University’s Hydrogen Fuel Cell Research Institute.
- Possible to create a synergistic effect in collaboration with adjacent industrial complexes, such as the Bitgreen Industrial Complex and Pyeongdong General Industrial Complex (including the Pyeongdong Foreign Investment Zone located inside the complex).

Location Requirements

<table>
<thead>
<tr>
<th>Recommended Business Sector</th>
<th>New renewable energy, electrical equipment manufacturing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Pre-sale</td>
</tr>
<tr>
<td>Land Zoning</td>
<td>General Industrial Complex</td>
</tr>
<tr>
<td>Investment Condition</td>
<td>The development of land and infrastructure was completed in 2015 (9 companies moved in)</td>
</tr>
<tr>
<td></td>
<td>Acquisition tax : 100% exemption / Property tax : 100% exemption for the first 5 years</td>
</tr>
<tr>
<td></td>
<td>Gwangju Metropolitan City’s Small and Medium Business Support Fund (approx. 1.67 million USD)</td>
</tr>
</tbody>
</table>

Location Overview

- Total Area: 1.909 million m²
- Available Area: 0.357 million m²

Target Area

- Major Companies: Dayou A-tech Co. Ltd. and Hi-Korea Co. Ltd.
- Wind Power: Insung Machinery Co., Ltd., etc.
## Case References

### Fraunhofer

**Fraunhofer Overview**
- One of the world's leading German research institutes for Organic Light Emitting Diode (OLED)
- As the world's best optics laboratory and established in memory of the 18th century physicist Josef von Fraunhofer, it has a research personnel of 16,000 people and more than 80 laboratories.
- In Germany, there are two global research foundations: One is Max Planck Research Foundation in the basic science field, the other is Fraunhofer Research Foundation in the applied science and engineering field industry. Among the two, Fraunhofer Research Foundation has earned a very high level of reputation and reliability from the industry.

**Fraunhofer's Investment Summary**
- In Dresden, Germany, the Fraunhofer Institute for Optics and Rene Tech signed the agreement to invest 140 million EUR (175 million USD) in establishing the Gwangju OLED production base (June 7, 2011).
- On October 2011, Gwangju City purchased a site of 330,000 m² in the Jingok Industrial Complex and applied for the designation of the site as Foreign Investment Free Zone, and developed the industrial complex into OLED Valley with world-class technological capability and size by attracting materials, components, and equipment enterprises related to OLED.
- Reasons behind Investment: Major factors in its investment decision include the mining industry infrastructure established in Gwangju City, as well as a trustworthy relationship it has with the president of RENETEC Bak Jong-seon, a former attorney in Germany, who is doing tidal power business by establishing a joint-venture company with Voith Hydro, the world's largest hydroelectric power plant based in Germany.
- If an OLED manufacturing factory based on Fraunhofer's technological capability is built in Gwangju City, which has a well-established mining industry infrastructure, a global enterprise that dominates the global market share is expected to be born (2011).

## Business Considerations

<table>
<thead>
<tr>
<th>Market Perspective</th>
<th>New Energy Industry (MG,ESS,HVDC) : 18.9 billion USD (2014)</th>
</tr>
</thead>
</table>
| Business Suggestion | Starting up and fostering of new renewable energy-related enterprises  
Development of next-generation energy technology  
The power service sector that can create synergy with KEPCO |
| Main Costs | Pre-sale Price of Land / Rent Fee : To be discussed  
Wage : 2,590 USD (Real wage of Jeollanam-do Province, as of April 2015) |

### Business Cluster

| Major Corporations in the region | Upstream : KEPCO and the Korea District Heating Corporation’s Regional Cooling & Heating Plant  
| Potential Customers | Electricity-related enterprises in the new energy industry (including companies related to IT and apparatus and materials) |
| Related Organization | Business activity support organizations : Innopolis Foundation Center for the Promotion of Entrepreneurship  
Business activity training institutes : A multitude of specialized manpower training institutes including the Gwangju Vocational Training Center  
Financial institutes: Gwangju Bank, Korea Exchange Bank, Woori Bank, Industrial Bank of Korea, Hana Ban, Kookmin Bank, Shinhan Bank, NH Bank |
Infrastructure

Utilities
- Water supply: 30,000 tons/day
- Waste water: Disposed at the sewage treatment plant (31,000 m³)
- Electricity: Total demand for electricity 93,370 KVA
- Communications: Gwangsan Telephone Office provides 1,733 lines
- Industrial waste: All amounts are contracted out to be disposed.

Transportation
- Airport: Gwangju (7.4 km), Muan International Airport (60 km)
- Railroad: Honam Line, Gwangju Songri Station (8.4 km) - Seoul (347 km), Busan (464 km), Mokpo (67 km), Daejeon (186 km)
- Road: Honam Expressway, Gwangsan IC - Seoul (277 km), Busan (285.6 km), Daegu (227.3 km), Mokpo (60 km)
- Port: Gwangyang Port (122 km), Mokpo Port (76 km), Yeosu Port (159 km) / Mokpo Port (cargo handling capability: 2,536 million tons, cargo berthing capability: 9 ships)

Labor & Material

Regional population: (Unit: persons, %)

<table>
<thead>
<tr>
<th>Items</th>
<th>Total Population</th>
<th>Available labor force</th>
<th>Bachelor's</th>
<th>Master's</th>
<th>Ph.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeollanam-do Population</td>
<td>1,728,749</td>
<td>1,037,817</td>
<td>148,836</td>
<td>14,093</td>
<td>2,588</td>
</tr>
<tr>
<td>Population Ratio</td>
<td>-</td>
<td>-</td>
<td>6.0</td>
<td>8.6</td>
<td>0.8</td>
</tr>
<tr>
<td>Gwangju Metropolitan City</td>
<td>1,466,143</td>
<td>876,614</td>
<td>242,191</td>
<td>22,997</td>
<td>7,030</td>
</tr>
<tr>
<td>Population Ratio</td>
<td>-</td>
<td>-</td>
<td>59.8</td>
<td>16.5</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Average wage: 2,590 USD (as of April 2015, real wage of Jeollanam-do Province)

Core Resource Supply Environment

Core Personnel: Gwangju Institute of Science and Technology ranks sixth in the world, in terms of research and development (according to the data unveiled by QS, the UK rating agency of global universities); there are a multitude of think tanks vital to the new renewable energy industry, such as the Solar City Center, Solar Cell R&D Technical Support Center, Next-generation Energy Research Center, Korea Technology Institute’s Energy Conversion Research Center, and Jeonnam University’s Hydrogen Fuel Cell Research Institute

Greater chance to create a synergistic effect through cooperation with adjacent clusters: Possible to create synergy in cooperation with nearby industrial complexes, such as the Bitgreen Industrial Complex and Pyeongdong General Industrial Complex

Living Conditions

Education: 295 kindergartens (22,676 students) / 88 middle schools (61,684 students), 67 high schools (65,636 students) / 15 vocational high schools (11,679 students), 1 high school for technical training (19 students) / 6 colleges (26,502 students), 11 universities (76,631 students) / Gwangju Institute of Science and Technology, 2 industrial special schools (489 students)

Medical Facilities: 21 general hospitals, 64 hospitals, 2 special hospitals, 834 clinics, 531 dental clinics, 57 oriental medical clinics, 5 public health clinics, 1 assistant delivery room

Others: 18 tourist hotels, 188 golf driving ranges, 1 convention center

Government Support

- Site Purchase Grants: up to 20% of the pre-sale price (purchase price) (not applicable along with Area Selection Grants)
- Facilities Grants: up to 5% of the installation costs exceeding 1.67 million USD
- Area Selection Grants: up to 10% of a foreign investment amount exceeding 1 million USD (up to 0.17 million USD)
- The Size of Upbringing and Management Stability Fund for SMEs: 166.7 million USD (Bank convention fund, the first half 116.7 million USD / the second half 50 million USD)
- The Size of Upbringing Fund for Venture Companies: 6.25 million USD (Bank convention fund, the first half 3.33 million USD, the second half 2.92 million USD)
5. Chungbuk Jincheon-Eumseong Innovation City

Investment Highlights

Location Description
The creation of a specialized innovation cluster is being materialized through the designation of the Chungbuk solar power industry special zone. With the establishment of the U-City infrastructure, it is an ideal business site for solar power-related companies interested in the development of a ubiquitous city.

Key Rationale
• Designation of a specialized industrial zone for solar power parts and materials in the Chungbuk Innovation City (Solar Power Industry Special Zone)
• Creation of the Eco Industrial Complex focused on the solar power industry
• The establishment of the R&D infrastructure by utilizing local universities, and the strengthening of R&D capabilities through the public organizations that moved in the complex

Location Requirements

<table>
<thead>
<tr>
<th>Recommended Business Sector</th>
<th>Solar cell-related factories and research institutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Pre-sale</td>
</tr>
<tr>
<td>Land Zoning</td>
<td>Urban High-tech Industrial Complex</td>
</tr>
<tr>
<td>Investment Condition</td>
<td>Occupancy limited: Businesses that emit specific air pollutants and specific water pollutants The development of infrastructure was completed in 2015</td>
</tr>
</tbody>
</table>

Location Overview

Target Area
• Total Area: 6,899,000 m²
• Available Area: 565,373.5 m²
Case References

Wacker Chemicals Korea Inc.

- Wacker Chemicals Korea, the German company with a 100-year history, produces and sells Lucky Silicone, the high-quality silicone sealant product used for construction.
- As WACKER’s local subsidiary in Korea, the company advanced into the Korean market in the mid-1980s.
- Wacker Chemicals Korea has been dedicated to green and energy-efficient technology to develop innovative construction materials. Wacker Chemicals Korea was awarded the Minister Award from the Ministry of Environment in the category of 2010 Healthy Housing for its eco-friendly products to improve indoor air quality and maintain pollutant-free indoor environment.
- In the same year, Citizen’s Coalition for Economic Justice honored the company with Excellence Award for the manufacturing industry at the 10th Best Foreign Corporation Awards, in recognition of Wacker Chemicals Korea’s high performance in law-abiding management, eco-friendly management, and industrial safety management.
- In addition, the German company made a foreign direct investment of 100 million USD and newly employed 460 people.
- Shinhwa Co., Ltd., Pathwel Co., Ltd., and Wacker Chemicals Korea made a combined investment of 50 million USD and newly hired a total of 140 people.

Business Considerations

Market Perspective
Global solar market volume : 58 GW (2015) (28 % up from the previous year) / Korea’s solar energy installed in 2015 : 1,025 MW
The world’s solar cell production capacity : 66 GW, solar module production capacity : 79 GW (2015)

Business Suggestion
Creation of a new value of new renewable energy by utilizing the nearby cluster related to BT, IT, and NT Manufacturing of new renewable energy-related products by utilizing the industrial complex exclusively for solar parts in the Chungbuk Innovation City

Main Costs
Pre-sale Price : 162 USD/㎡
Wage : 2,320 USD (Real wage of Chungcheongbuk-do Province, as of April 2015)

Business Cluster

Major Corporations in the region
- Downstream : Techwon Korea Co., Ltd., Aonetech Co., Ltd., etc.

Potential Customers
- Electricity-related enterprises in the new energy industry (including companies related to IT and apparatus and materials)

Related Organization
- Research institutes : Korea National University of Transportation Regional Innovation Center, Semiconductor Equipment and Parts Joint Testing Center, Electronic Components Industry Information Center, Chungbuk Technopark, and Korea Basic Science Institute
- Public organizations : Korea Information Society Development Institute, Korea Information and Communication Industry Institute, Korea Educational Development Institute, Korea Institute for Curriculum and Evaluation, National HRD Institute, Institute of Justice, Korea Gas Safety Corporation, Korea Consumer Agency, Korea Agency for Technology and Standards, Korea Employment Information Service (a total of 11 public agencies have moved in Chungcheongbuk-do Province)
Infrastructure

Utilities
- Water supply: industrial water 3,833 m³/day, residential water 14,850 m³/day
- Waste water: 15,200 tons/day at the sewage treatment plant, 8,900 tons/day at the waste water pumping facility
- Electricity: 260,443 KVA
- Establishment of the U-City
  - Establishment of the Urban Administration Network and the new traffic environment of the future
  - Possible to collect environmental and ecological information in real time
  - Development of an integrated system for the monitoring of criminal acts, and effective response to fires, floods, safety accidents, and other emergencies

Transportation
- Airport: Cheongju Airport (65 km) - Jeju (4 flights/day), Busan (2 flights/day)
- Railroad: Chungbuk Line, Cheongju Station (60 km) - Seoul (130 km), Busan (330 km), Daegu (200 km), Daeyeon (50 km)
- Road: Jungbunaeryuk Expressway - Garmgok IC (1 km), Jungbu Expressway - Iljuk IC (19 km)
- Port: Gunsan Port (150 km) (berthing of ships in the 2~50,000-ton class, cargo handling capability: 2.183 million tons)

Labor & Material

Labor Condition
- Regional population: (Unit: persons, %)

<table>
<thead>
<tr>
<th>Items</th>
<th>Total Population</th>
<th>Available labor force</th>
<th>Bachelor’s</th>
<th>Master’s</th>
<th>Ph.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chungcheongb.</td>
<td>Population: 1,496,984</td>
<td>916,277</td>
<td>264,711</td>
<td>28,822</td>
<td>6.541</td>
</tr>
<tr>
<td>uk-do Ratio:  -</td>
<td>61.2</td>
<td>16.4</td>
<td>1.9</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Chungcheongb.</td>
<td>Population: 81,645</td>
<td>52,737</td>
<td>5,968</td>
<td>621</td>
<td>60</td>
</tr>
<tr>
<td>Eumseong-gun</td>
<td>Ratio: -</td>
<td>64.6</td>
<td>7.3</td>
<td>0.8</td>
<td>0.1</td>
</tr>
</tbody>
</table>
- Average wage: Wage 2,320 USD (as of April 2015, real wage of Chungcheongbuk-do Province)

Core Resource Supply
- Environment
  - Suitable location for creating a synergistic effect with other industries: Favorably located for generating synergy through the BINT(BT, IT, NT) belt that covers Cheongju, Cheongwon, Jincheon, Jeungpyeong, Eumseong, and Chungju
  - A reliable supply of excellent human resources: Suitable for the supply of high-quality human resources through the development of the R&D support infrastructure and the production manpower support infrastructure by utilizing local universities
  - Superior location in the supply of solar power parts: Designation of the industrial complex exclusive for solar power parts and materials (the solar power special industrial zone) inside the Chungbuk Innovation City

Living Conditions

- Education: 24 kindergartens (935 students) / 9 middle schools (3,013 students), 2 high schools (1,639 students) / 1 vocational high school (311 students) / 1 college (4,865 students), 1 university (6,420 students)
- Medical Facilities: 5 hospitals, 38 clinics, 15 dental clinics, 15 Chinese medicine clinics, 1 community health center, and 18 community health clinics
- Others: 1 tourist hotel, 2 indoor stadiums, and 2 sports complexes

Government Support

- Employment Subsidies: If it has not been five years since a business is registered as a foreign investment company and the company newly hire 20 people or more, 84~417 USD is provided per month for up to 12 months.
- Education and Training Subsidies: If it has not been five years since a business is registered as a foreign investment company and the company newly hire 20 people or more and then provide them with education and training, 84~417 USD is provided per month for up to 12 months.
- Administrative Support: PM System - dedicated service provided by central & local government officials and IK employees from an early stage of each project through completion; and one-stop service – the professional follow-up management system of Korea Industrial Complex Corp. and one-stop licensing service of related local government
6. Pyeongdong Foreign Investment Zone

Investment Highlights

Location Description
Home to Energy Valley, the complex is a suitable site for enhancing corporate competitiveness and fostering renewable energy-related start-up businesses such as solar light energy, solar cells, and next-generation energy.

Key Rationale
- Easy to supply high-quality human resources through the Solar City Center, Solar Cell R&D Technical Support Center, Next-generation Energy Research Center, Korea Technology Institute’s Energy Conversion Research Center, and Jeonnam University’s Hydrogen Fuel Cell Research Institute
- Possible to create synergy in collaboration with the adjacent industrial complexes, such as the Bitgreen Industrial Complex and the Jingok General Industrial Complex

Location Requirements

Recommended Business Sector
Enterprises with advanced technology in renewable energy, as well as solar modules and cells, are subject to tax reduction and exemption.

Type
Pre-sale

Land Zoning
Foreign Investment Zone in the General Industrial Complex

Investment Condition
The development of site was completed in 2010 and 3 companies moved in.

Location Overview

Target Area
- Total Area: 4,865,000 ㎡
- Available Area: 6,000 ㎡
RMI (USA)

RMI Overview

• Founded in 1957, RMI is an American manufacturer of optical components based in Lafayette, Colorado, holding the world’s leading state-of-the-art technology in optical materials.

Reasons behind RMI’s Investment Decision

• On March 28 in 2011, Gwangju and RMI signed the agreement to invest 40 million USD in the Pyeongdong Foreign Investment Zone with the aim of establishing manufacturing factories for high-tech night vision lens, and founded Phoenix Tek Co., Inc.

• RMI has been performing R&D activities including the development of products applicable to a variety of industries, such as precision processing, automobiles, environment, medical industry, defense industry, and satellites, based on the source technology of Zinc selenide, the infrared optical material.

• The president of RMI, Han Yu-bong said “We decided to make this investment because Gwangju not only has a mining industry cluster, but also an abundant supply of excellent human resources in the sciences.”

Business Considerations

Market Perspective

Global solar market volume : 58 GW (2015) (28% up from the previous year) / Korea’s solar energy installed in 2015 : 1.025 MW

The world’s solar cell production capacity 66 GW, solar module production capacity 79 GW (2015)

Business Suggestion

Starting up and fostering of new renewable energy-related enterprises

Development of next-generation energy technology

Possible to export new renewable energy and related sectors and create synergies

Main Costs

Average pre-sale price of land : 0.09 USD / ㎡
Rent : determined by the governor of the Province
Wage : 2,590 USD (Real wage of Jeollanam-do Province, as of April 2015)

Business Cluster

Major Corporations in the region

• Upstream : KEPCO and the Korea District Heating Corporation’s Reginal Cooling & Heating Plant

Potential Customers

• Electricity-related enterprises in the new energy industry (including companies related to IT and apparatus and materials)

Related Organization

• Business activity support organizations : Gwangsan-gu Office (Social Economy Division)
• Business activity training institutes : A multitude of specialized manpower training institutes including Gwangju Vocational Training Center
• Financial institutes : Gwangju Bank, Korea Exchange Bank, Woori Bank, Industrial Bank of Korea, Hana Ban, Kookmin Bank, Shinhan Bank, NH Bank, etc.
**Infrastructure**

**Utilities**
- Industrial water: supply capacity 420,000 tons/day, usage 39,000 tons/day
- Residential water: 5,000 tons/day
- Waste water: waste water is disposed at each company’s facility before, for its second treatment, being sent to the second sewage treatment plant (treatment capacity 120,000 tons/day)
- Electricity: Entry route (Simgangju transforming station → Hanam transforming station → transforming station in the complex → resident companies, supply capacity (voltage 154 KV, capacity 80 MVA)
- Communications: Songjeong Telephone Office provides 5,200 lines. (the primary industrial complex: 2,769 lines, the secondary industrial complex: 2,263 lines)
- Industrial waste: All amounts are contracted out for disposal

**Transportation**
- Airport: Gwanju Airport (5 km), Muan International Airport (56 km)
- Railroad: Honam Line, Gwangju Songjeongri Station (3.5 km) - Seoul (347 km), Busan (464 km), Mokpo (67 km), Daejeon (186 km)
- Road: Honam Expressway, Donglim IC - Seoul (294 km), Busan (297.6 km), Daegu (239.3 km), Mokpo (50 km)
- Port: Gwangyang Port (122 km), Mokpo Port (76 km), Yeosu Port (159 km)

**Labor & Material**

**Labor Condition**
- Regional population: (Unit: persons, %)

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<tr>
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<td>Population</td>
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**Core Resource Supply & Environment**

**Core Personnel**: The Gwangju Institute of Science and Technology ranks sixth in the world in terms of research and development (according to the data unveiled by QS, the UK rating agency of global universities); there are a multitude of think tanks vital to the new renewable energy industry, such as the Solar City Center, Solar Cell R&D Technical Support Center, Next-generation Energy Research Center, Korea Technology Institute’s Energy Conversion Research Center, and Jeonnam University’s Hydrogen Fuel Cell Research Institute

- Greater chance to create a synergistic effect in collaboration with the adjacent clusters: Possible to create synergy through cooperation with adjacent industrial complexes, such as the Bitgreen Industrial Complex and Jingok General Industrial Complex

**Living Conditions**
- Education: 88 middle schools (61,684 students), 67 high schools (65,636 students) / 15 vocational high schools (11,679 students), 1 high school for technical training (19 students) / Gwangju Institute of Science and Technology, 2 industrial special schools (489 students)
- Medical Facilities: 21 general hospitals, 64 hospitals, 2 special hospitals, 834 clinics, 531 dental clinics, 57 oriental hospitals, 5 community health centers, and 1 assistant delivery center
- Others: 18 tourist hotels, 188 golf driving ranges, and 1 convention center

**Government Support**
- Site Purchase Grants: up to 20% of the pre-sale price (purchase price) (not applicable along with Area Selection Grants)
- Facilities Grants: up to 5% of the installation costs exceeding 1.67 million USD
- Area Selection Grants: up to 10% of a foreign investment amount exceeding 1 million USD (up to 0.17 million USD)
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