

# Company Profile

2022. 08.



**HALLA E&C**

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## Part 1.

# Halla E&C Overview

<b>General Information</b>	<b>1.1</b>
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## Halla E&C Overview

<b>Name of Company</b>	Halla E&C Co., Ltd.
<b>C.E.O</b>	Beom-Heon, Kim
<b>Telephone</b>	053-763-1010
<b>Fax</b>	053-767-6253
<b>E-mail</b>	h1763@hallae.co.kr
<b>Address</b>	20, Dongdaegu-ro, Susung-gu, Daegu
<b>Category</b>	Electricity

<b>Value of Construction Ability</b>	U\$ 31,217 thousand
<b>Credit rating</b>	BB0
<b>Technical rating</b>	T-3
<b>Business number</b>	502 – 81 - 88495
<b>Rank(In Korea)</b>	180 / 19,323
<b>Rank(In Daegu)</b>	6 / 688

※ 1USD = 1,200KRW

# 1.1 General Information

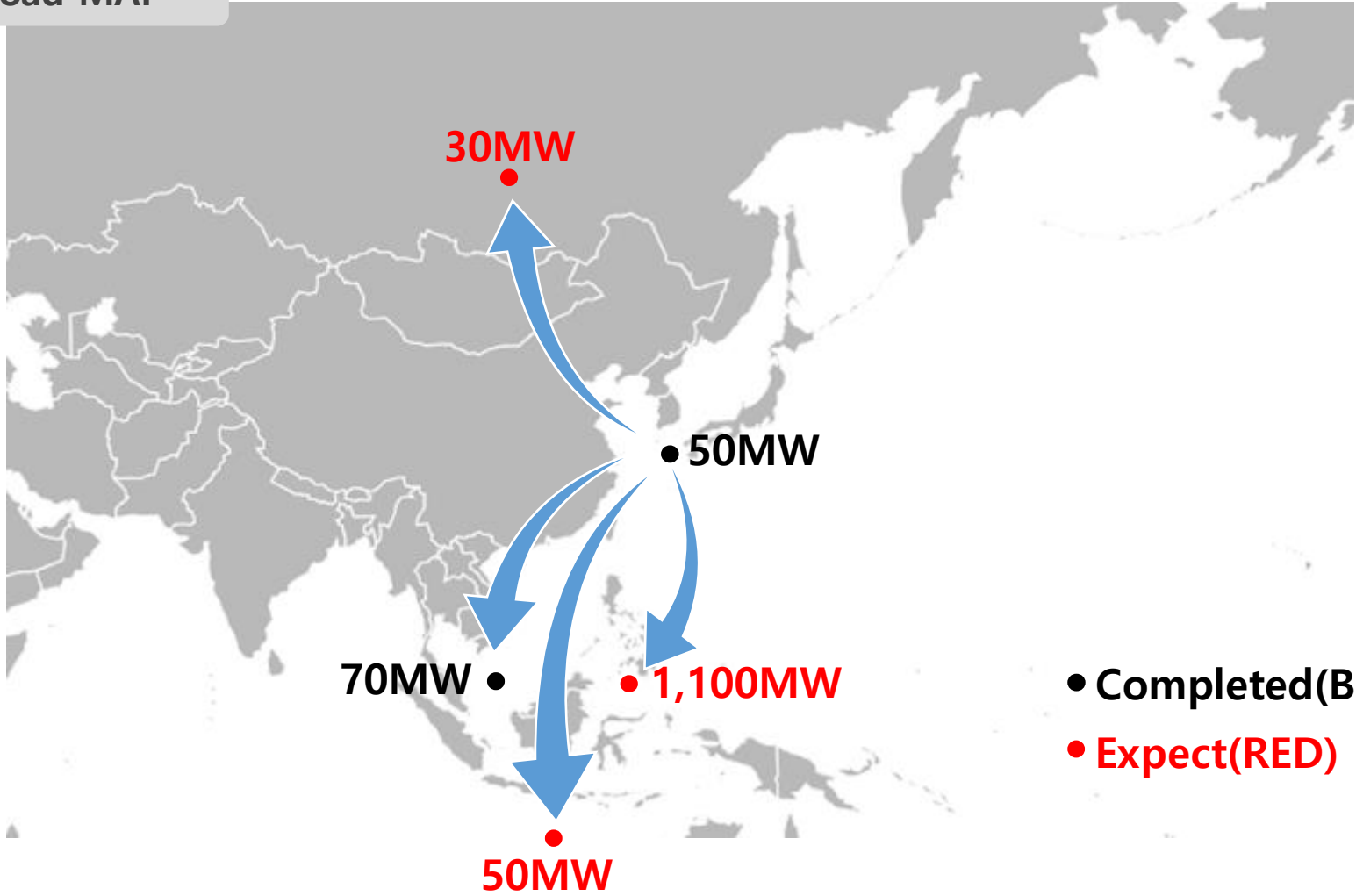
## Halla E&C And Subsidiary Company

	Annual Sales (USD)	Total Assets (USD)	Stockholder's Equity (USD)	Capacity (MW)	COD
<b>HALLA E&amp;C (Holding Company)</b>	<b>3,786,608</b>	<b>11,590,044</b>	<b>1,332,000</b>	-	
1. HALLA JEONGONG	841,130	2,050,605	1,453,000	1.0	Sep-2006
2. HALLA SOLAR PARK	493,862	2,372,379	818,000	1.0	Sep-2009
3. HYOKWANG SOLAR	543,539	2,532,249	750,000	1.0	Jul-2010
4. DALSUNG SOLAR	428,213	3,350,415	1,891,000	1.4	Jun-2013
5. HYUNPUNG SOLAR	151,571	1,141,904	300,000	0.5	Apr-2014
6. DAEGU SOLAR CITY	476,150	2,971,811	9,000	2.4	Sep-2014
7. DAEGU SOLAR	650,024	4,186,296	1,000,000	3.0	Dec-2015
8. 2 <sup>nd</sup> DAEGU SOLAR	668,886	5,788,611	577,000	2.7	Nov-2017
9. 3 <sup>rd</sup> DAEGU SOLAR	656,643	5,774,877	612,000	3.0	Dec-2018
10. SH Solar Farm Vina	9,216,880	80,349,510	3,427,000	70.0	Jun-2019
<b>TOTAL</b>	<b>17,913,507</b>	<b>122,108,701</b>	<b>12,168,000</b>	<b>86.0</b>	

※ Base date : 2021.12.31 / 1USD = 1,200KRW

# 1.1 General Information

Road MAP



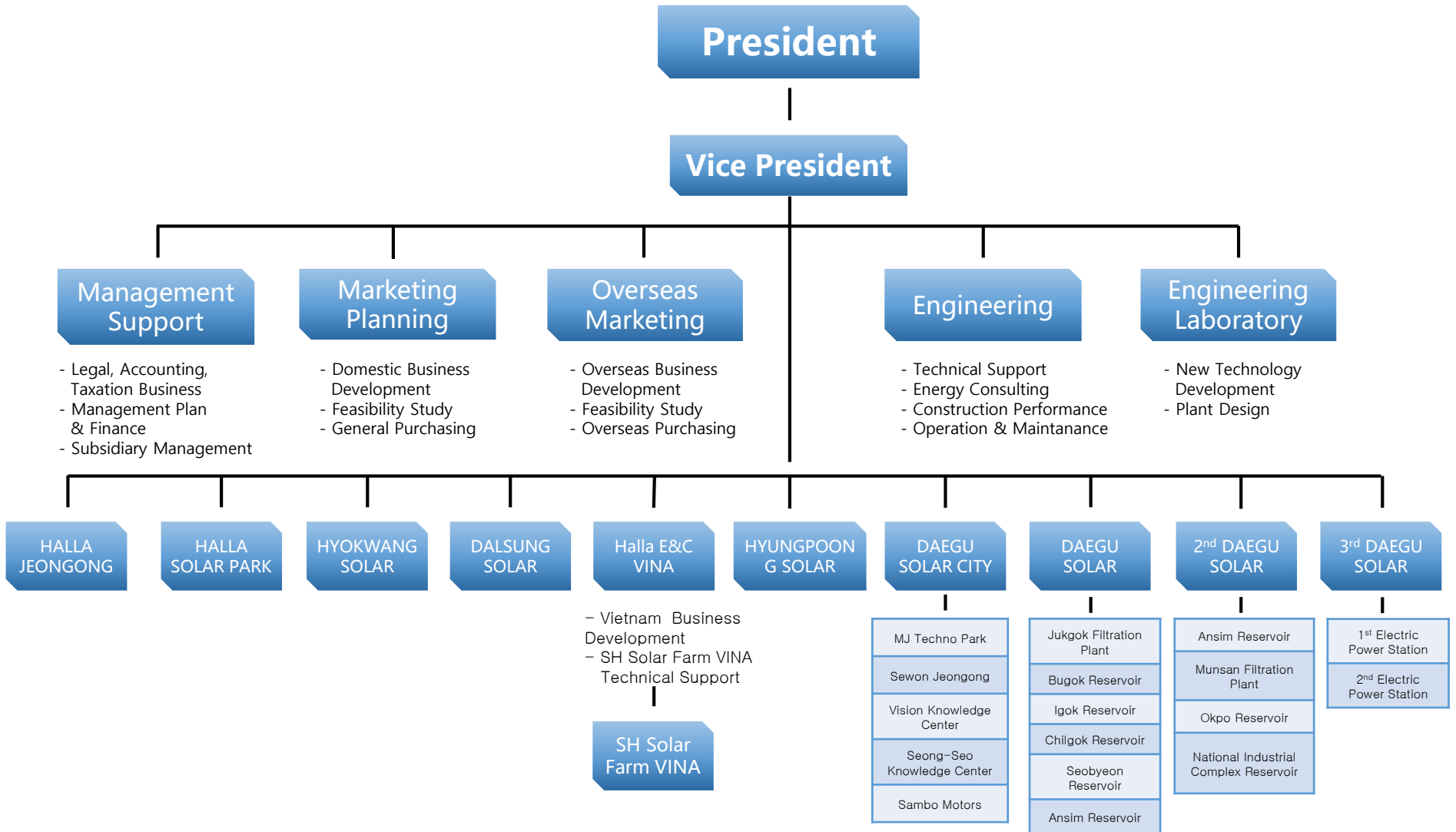
- Completed(BLACK)
- Expect(RED)

# 1.2 Corporate History

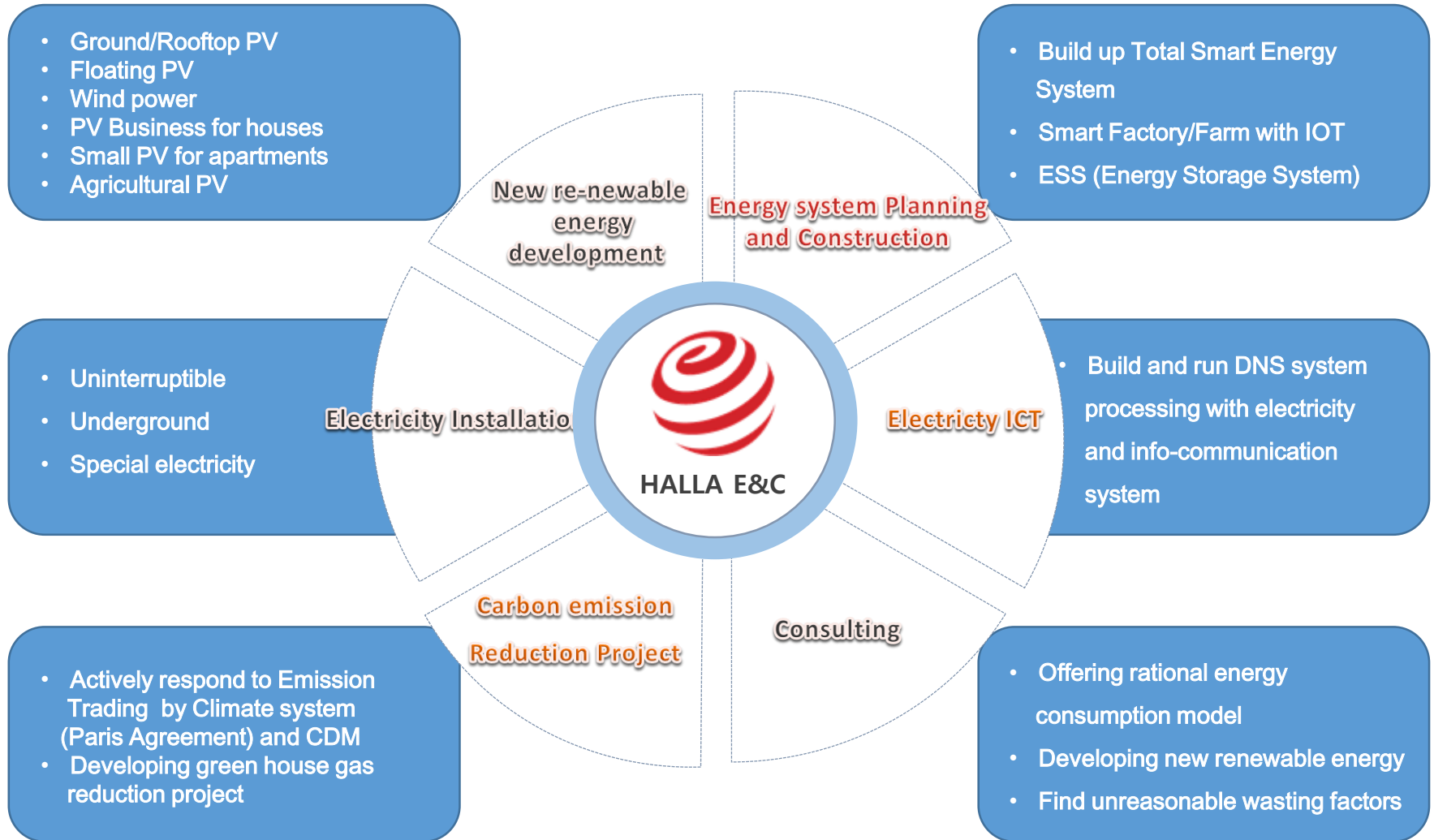
We value customers future based on company's professional skills.



# 1.3 Company Chart



# 1.4 Business Area





# 1.5. Business Partners



# 1.6. Certificates And Awards



< Certificate of Specializing in Renewable energy equipment Installation >



< Certificate of Technical Grade >

# 1.6. Certificates And Awards



Type of Business : Electrical



Type of Business : Civil Engineering Works

< Certificate of Overseas Construction Business Registration >

# 1.6. Certificates And Awards



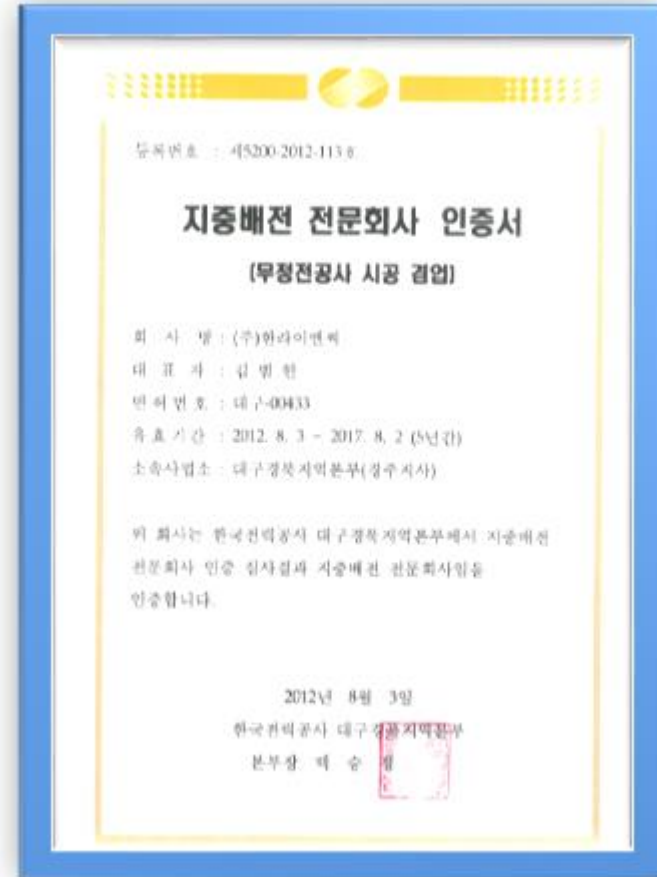
< Certificate of Research Institute >



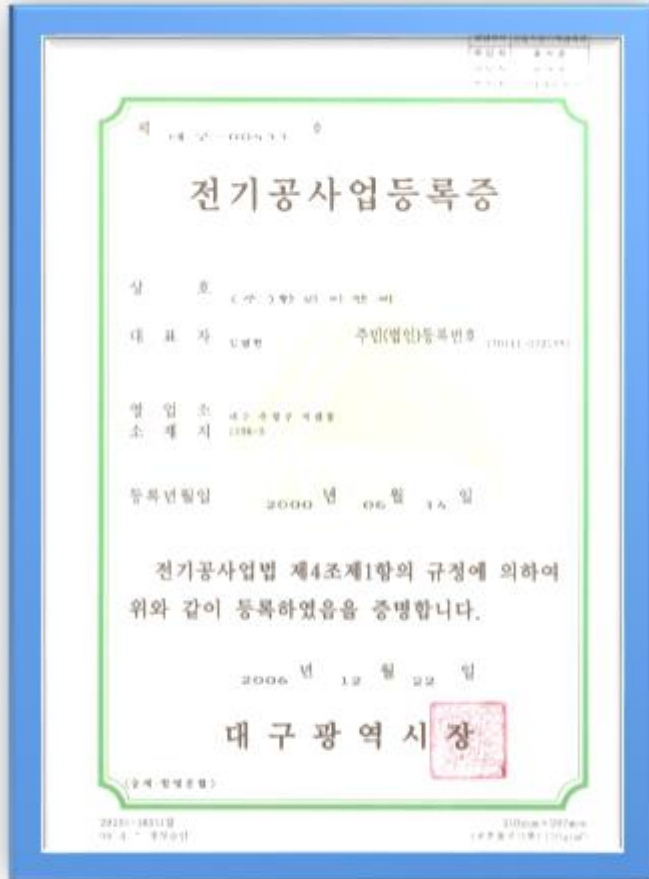
< Certificate of Main-Biz >



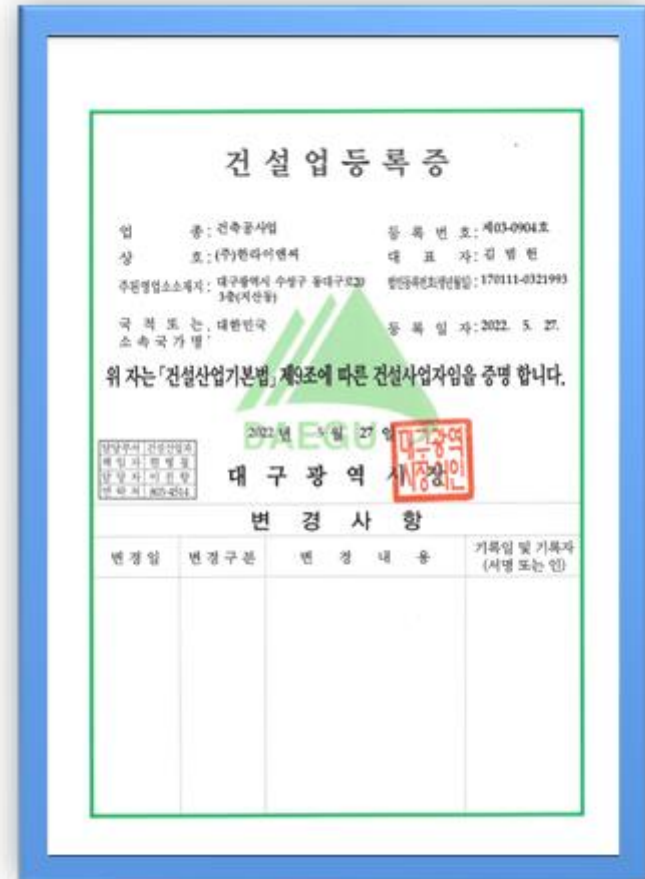
< Certificate of Research Institute >



< Certificate of Main-Biz >



< Certificate of electric construction business >



< Certificate of general construction business >

# 1.6. Certificates And Awards



< Iron Tower Order of Industrial Service Merit >

# 1.6. Certificates And Awards



< The Industry Medal of Korean Government >



< Award of Director of the Suseong Tax Office >



## 1.6. Certificates And Awards



< Award of Daegu Metropolitan City Government >



< Award of Minister Environment >

## 1.6. Certificates And Awards



< Award of Director of the Daegu Regional Tax Office >

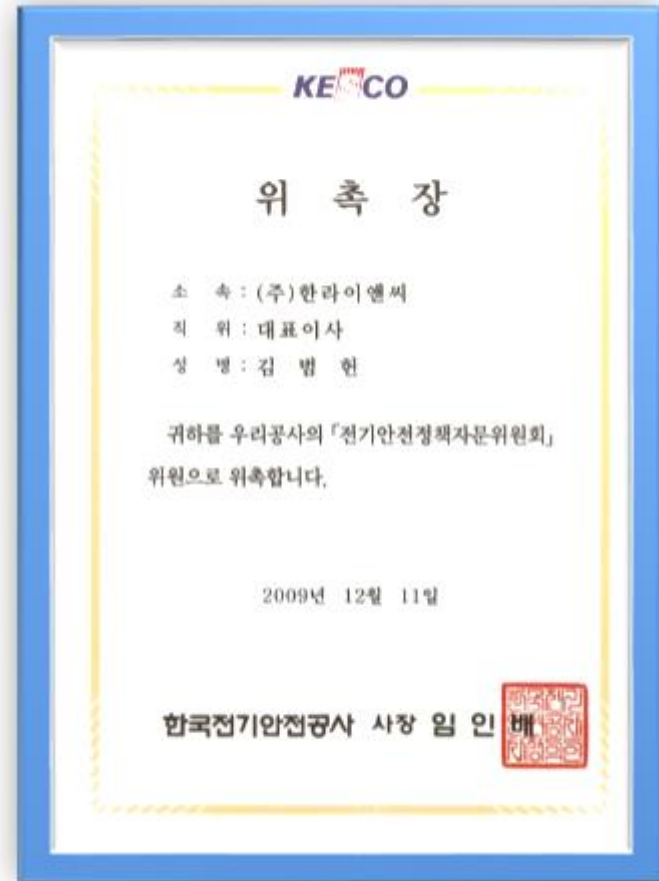


< Award of Minister Trade, Industry and Energy >

# 1.6. Certificates And Awards



< Green Management Award >



< Letter of Attorney of KOREA ELECTRICAL SAFETY CORPORATION >

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Part 2.

## **Business area & cases**

<b>PV System</b>	<b>2.1</b>
<b>Electric Installation</b>	<b>2.2</b>
<b>Domestic and foreign cases</b>	<b>2.3</b>

### Plentiful Installation Experience

**The best installation experience in Korea(over 80MW)  
Overseas Business (70MW,Vietnam)**

**The first construction of Solar Power Plant(1MW) in Asia**

### Specialized engineers in all parts

**Providing One-stop total solution**

**Taking care of all the examination of business project, siting,  
Licensing Arrangements, Construction, Maintenance, and etc.**

### Optimized Design

**Apply the most suitable construction design for the  
business site**

**Placement of module, Application of tracking device,  
Maximize energy efficiency**

### Application of Advanced Technology

**Active application system of latest technology and products**

**Module, inverter, ESS which connected with solar power, Tracking devices,  
Floating solar panels, etc.. Analyze and apply the latest technologies**

**Satisfaction of customer**

Coexistence of Nature and Human. Innovation of Energy is the answer.

To be ready for The 4th Industrial Revolution and to improve energy efficiency ,  
Combination of Energy and ICT Technology is necessary.



### Photovoltaic system installation

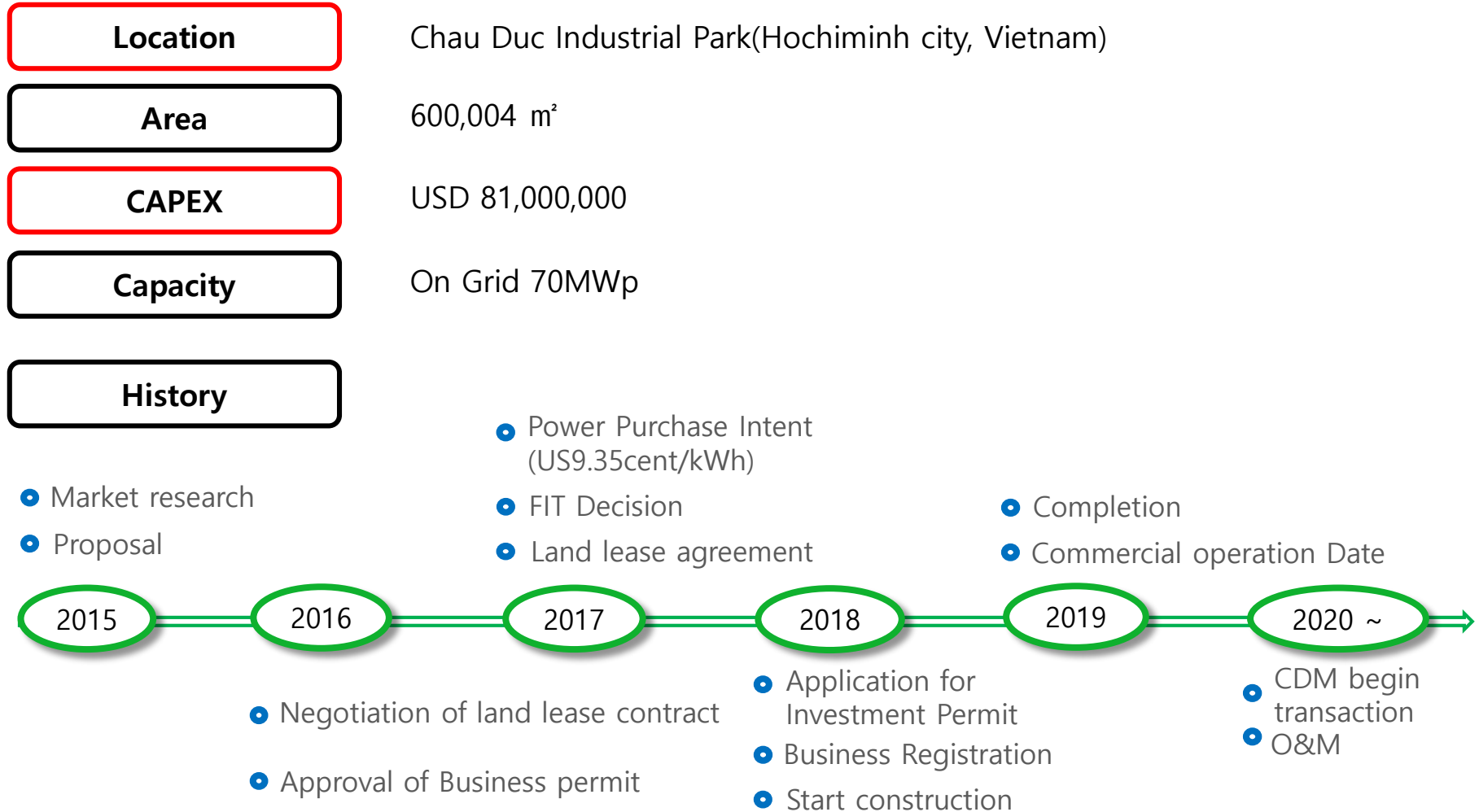
- 1** Module, Connection box
- 2** Inverter, Electrical panel

### The others

- 3** Uninterruptible installation
- 4** General installation

## 2.2 Domestic and Foreign Cases

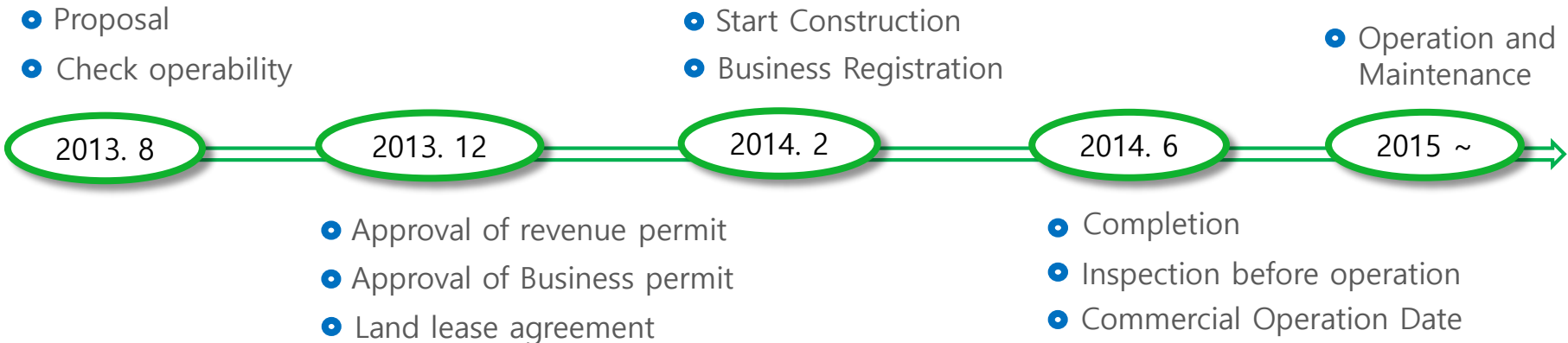
### 1. Summary



## 2.2 Domestic and Foreign Cases

### 1. Summary

<b>Location</b>	ROKAF 20 <sup>th</sup> Fighter Wing(Seosan, Korea)
<b>Area</b>	200,568 m <sup>2</sup>
<b>CAPEX</b>	USD 28,000,000
<b>Capacity</b>	On Grid 14.2MWp
<b>History</b>	





### 2. Creative Thinking

#### Utilization of idle runway

##### Obstacle factors

1. Highly classified **military base/protection zone**
  - Flight safety zone
  - Limited altitude
  - Reflectance of PV panel
  - Conduct normal flight/emergency/ warfare air mission command during peacetime
  - Military communications failure/ Ladar beam shielding / Frequency and radio interference
2. **Construction difficulties on the mud structure** of reclaimed land
  - Structural safety issue
  - Excessive construction costs for civil engineering such as pile construction



### 2. Creative Thinking

#### Suggestion of creative solutions

1. Provide various simulation data using technology and information application capabilities.
2. Practical test flight for pilots glare phenomena.
3. Installation of fire prevention function by stray bullet.
4. Use the suitable construction method for mud structure through geological analysis of landfill site.
5. Request to participate in eco-friendly policies by creating a green base.
6. Share the power generation revenue : Air force academy development fund / Fund for the children of pilots on duty/ subsidiary development.



Haemi solar energy completion ceremony (2014)



View of Yongsung solar energy(2015)

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## Part 3.

# Halla E&C Competitiveness

<b>Co-operation with the Government</b>	<b>3.1</b>
<b>The Pioneer</b>	<b>3.2</b>
<b>Challenge spirit</b>	<b>3.3</b>
<b>Creativity</b>	<b>3.4</b>
<b>Professional</b>	<b>3.5</b>



PV for water supply facility (Daegu Solar)

### Growth with Government Energy Project

- Public confidence ; 10 years of housing PV project
- Reliability ; Selected for A/S (Korea Energy Agency)
- Qualification ; unnecessary A/S  
(Construction for 12 site in 9MW power plant)
- 3 years of selected for Korea Water Headquarter  
(Attending to 'Solar City Daegu' project)



2nd Daegu Solar



3<sup>rd</sup> Daegu Solar



### The First 1MW Power plant in Asia 2006

- Halla Mu-An PV Plant(1MW)
- Location : Muan, KOREA

- ✓ Recorded for the first new-renewable energy company in Korea
- ✓ No accident for 13 years even from sea breeze



### **The Biggest** power plant 70MW in Vietnam 2019

: Only 5% of foreign companies get permission

- ✓ The scale of construction experience makes growth of foreign business.
  
- ✓ Project in progress
  - Theme Park in Lombok, Indonesia(50MW)
  - Islam temples in Indonesia(3kW, 5kW)
  - PV-Diesel hybrid in Maldives(3.5MW)



Dalseong  
Solar Energy

- Outside -



- Inside -

### Creativity Challenge

- Dalseong Solar Energy (1.5MW)
- Location : Daegu, KOREA

Creative and outstanding construction design

- ✓ **Representative roof-top PV  
(requesting for field trip)**
- ✓ Economical effect of roof-top PV
- ✓ Save cooling expenses(avoid direct Sun-light)
- ✓ No effect of customer inflow even in raining
- ✓ Additional rent-income from extra area

#### General Electric Company



Electric work(Only)

#### HALLA E&C



Qualification of Solar + Construction

**Roof-Top Solar Power System is essential for Qualification of Solar and Construction.**



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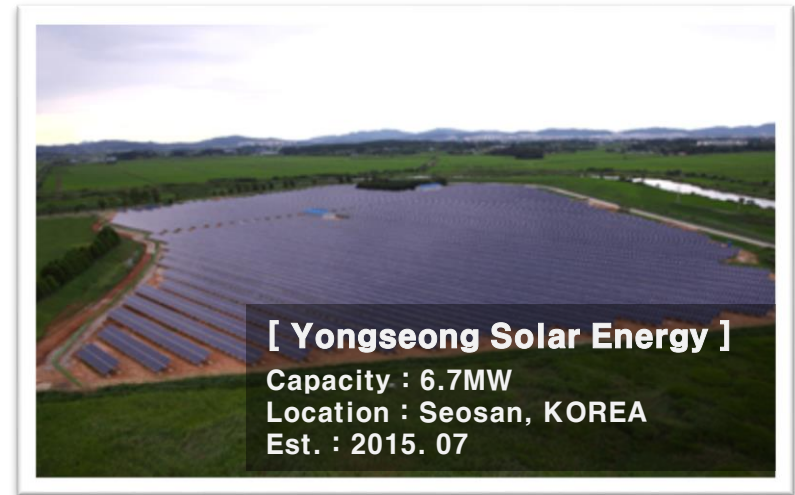
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## Part 4. **Projects**

1. Completed Projects	4.1
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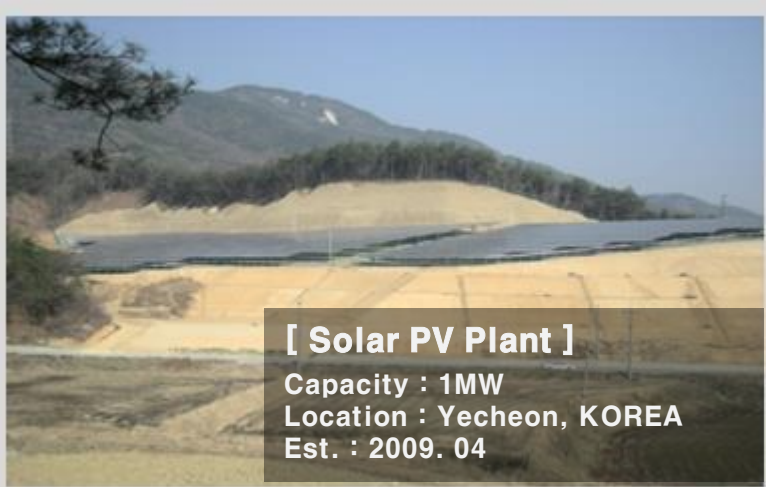
## 4.1 Completed Projects



## 4.1 Completed Projects



## 4.1 Completed Projects



## Contact Us

# Total-Solution Provider for New & Renewable Energy.

For more information, please contact:  
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