

Company Profile

Nov, 2020



HALLA E&C Co., Ltd

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Part 1.

Halla E&C Overview

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1.1 General Information

PART 1. Halla E&C Overview

Halla E&C Overview

Name of Company	Halla E&C Co., Ltd.
C.E.O	Beom-Heon, Kim
Telephone	053-763-1010
Fax	053-767-6253
E-mail	hl763@hallae.co.kr
Address	20, Dongdaegu-ro, Susung-gu, Daegu
Category	Electricity

Value of Construction Ability	U\$ 34,400 thousand
Credit rating	BB+
Business number	502 - 81 - 88495
License Number	Daegu - 00433
Rank(In Korea)	174 / 17,532
Rank(In Daegu)	6 / 652

※ 1USD = 1,100KRW

1.1 General Information

PART 1. Halla E&C Overview

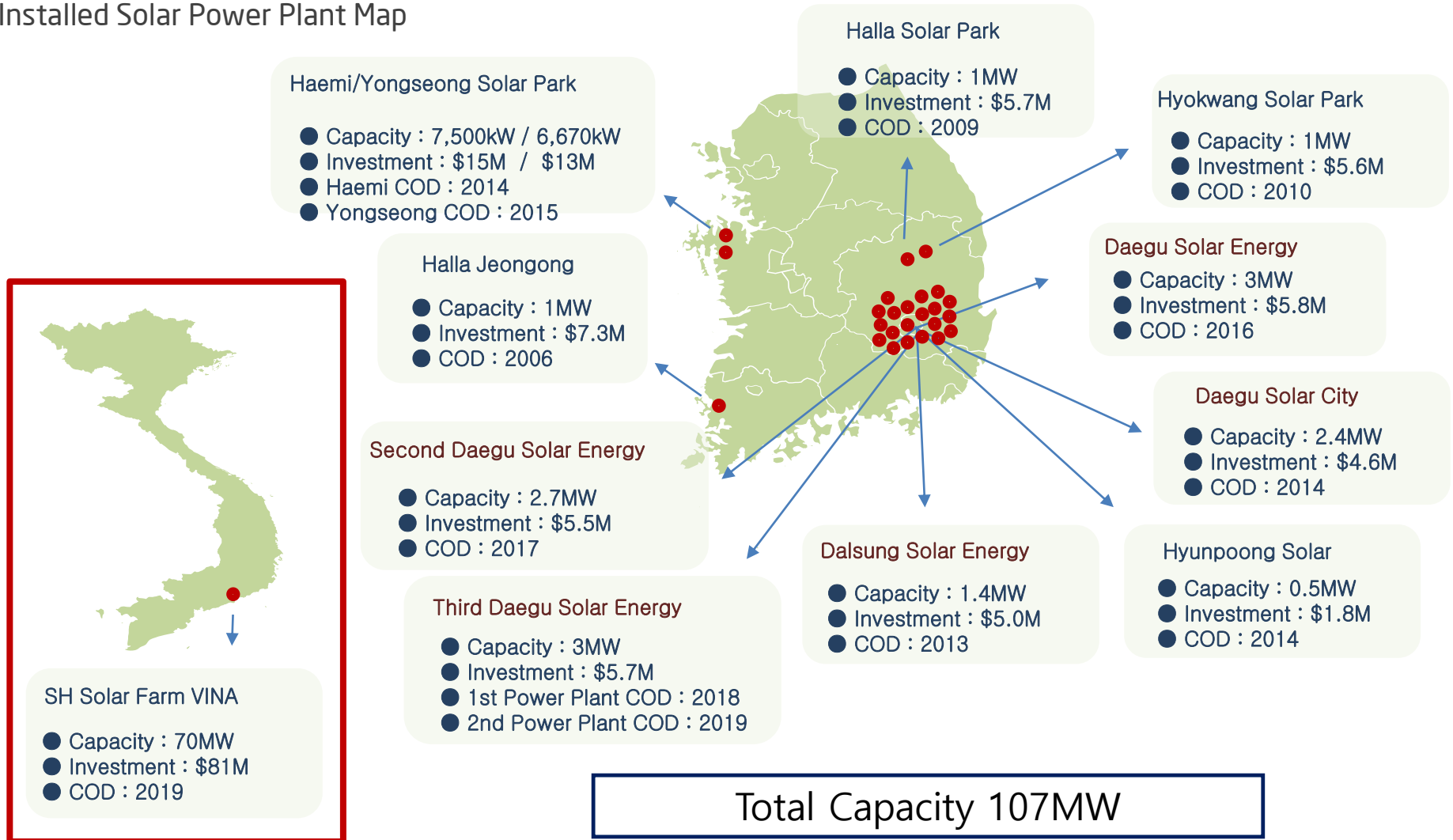
Halla E&C And Subsidiary Company

	Annual Sales(USD)	Total Assets(USD)	Stockholder's Equity(USD)	Capacity(MW)	COD
HALLA E&C (Holding Company)	5,300,000	13,584,000	1,332,000	-	
1. HALLA JEONGONG	866,000	2,566,000	1,453,000	1.0	Sep-2006
2. HALLA SOLAR PARK	513,000	2,813,000	818,000	1.0	Sep-2009
3. HYOKWANG SOLAR	566,000	2,910,000	750,000	1.0	Jul-2010
4. DALSUNG SOLAR	474,000	3,500,000	454,000	1.4	Jun-2013
5. HYUNPOON SOLAR	154,000	1,256,000	300,000	0.5	Apr-2014
6. DAEGU SOLAR CITY	503,000	3,291,000	9,000	2.4	Sep-2014
7. DAEGU SOLAR	737,000	4,553,000	9,000	3.0	Dec-2015
8. 2 nd DAEGU SOLAR	690,000	5,046,000	577,000	2.7	Nov-2017
9. 3 rd DAEGU SOLAR	576,000	5,518,000	612,000	3.0	Dec-2018
10. SH Solar Farm Vina	4,787,000	92,504,000	3,427,000	70.0	Jun-2019
TOTAL	15,166,000	137,541,000	9,741,000	86.0	

※ 1USD = 1,100KRW

1.1 General Information

Installed Solar Power Plant Map



1.2 Corporate History

PART 1. Halla E&C Overview

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



PV Plant Business



Built/Operate the first 1MW PV Plant in Asia



Awarded Industrial Medal (Electricity, Architecture, Civil engineering)



Made an electricity safety agreement (KESCO)



Winning the Renewable Energy Awards (Renewable Energy)



Commendation for contribution to Environmental preservation (Ministry of Environment)



Established SH Solar In Vietnam (70MW)

2000

2006

2009

2010

2014

2016

2019

Established Halla Jeongong Co.,Ltd (Electric Construction)

Division of Company Halla E&C Co.,Ltd

Established renewable Energy subsidiary research institute

Management Innovation Certificate

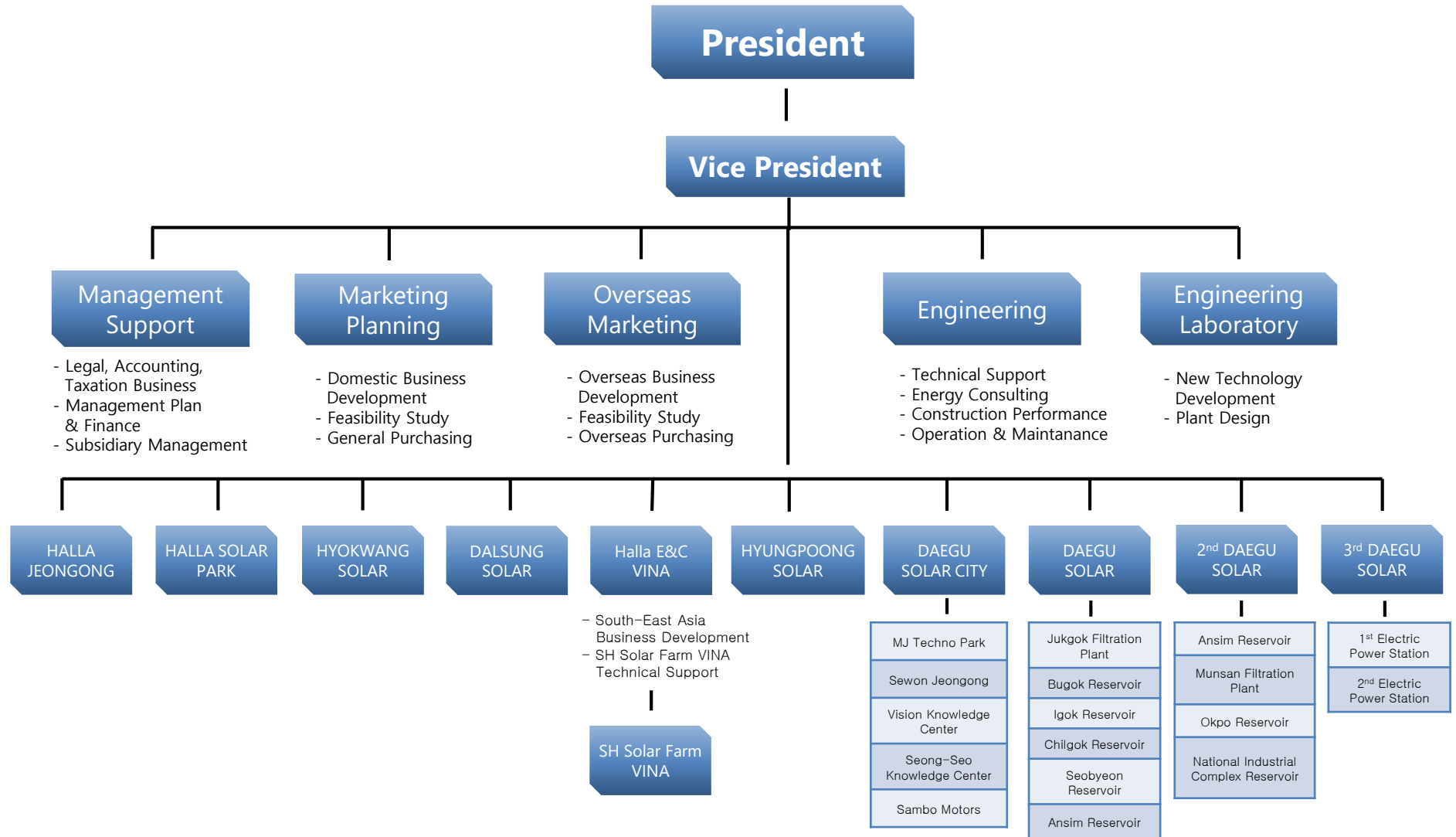
Established Haemi Solar (7.5MW)

Designated as construction company 'Mini PV plants in apartment project'

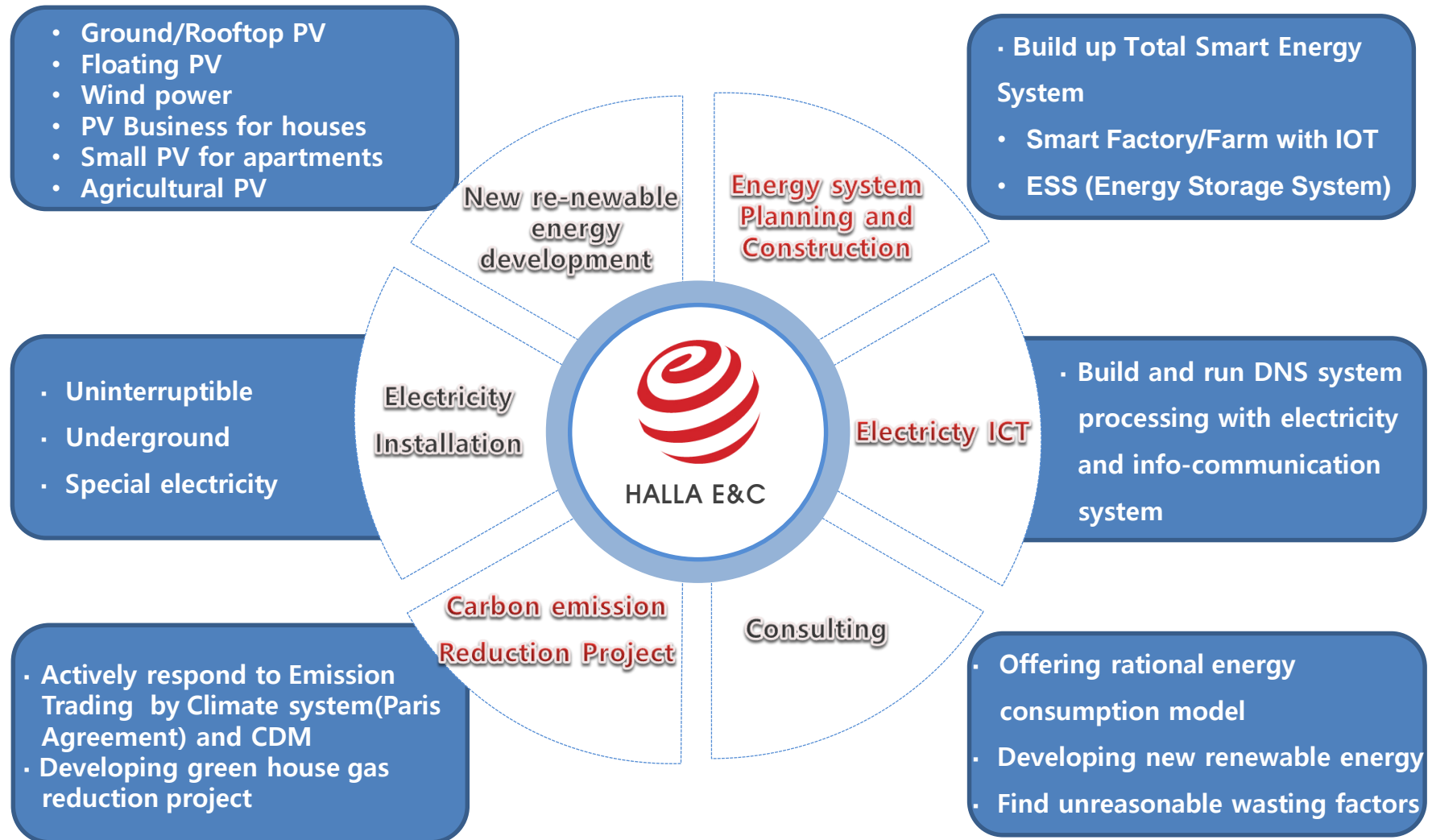
Korea Energy Award, Awarded Iron Tower Industry



1.3 Company Chart



1.4 Business Area

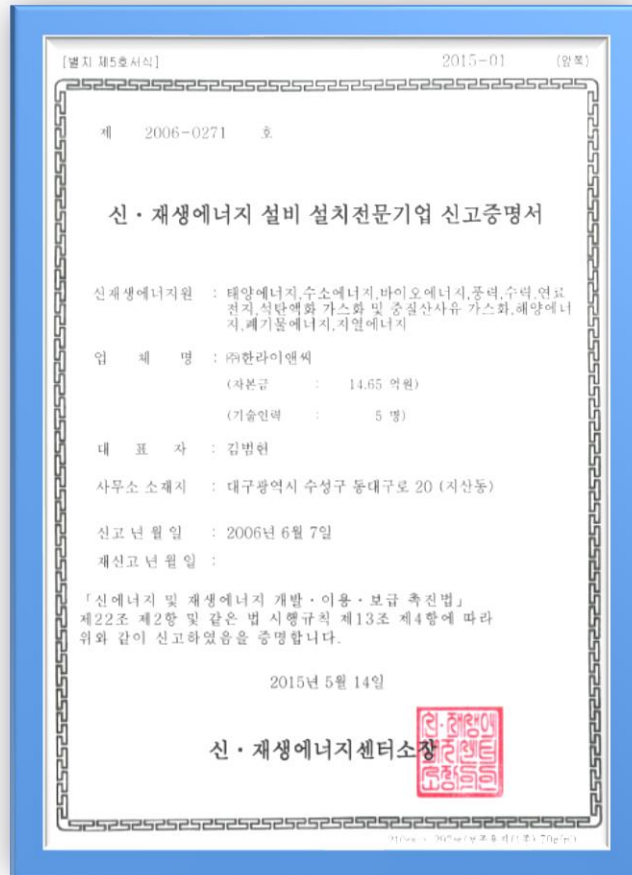


1.5. Business Partners

PART 1. Halla E&C Overview



1.6. Certificates And Awards



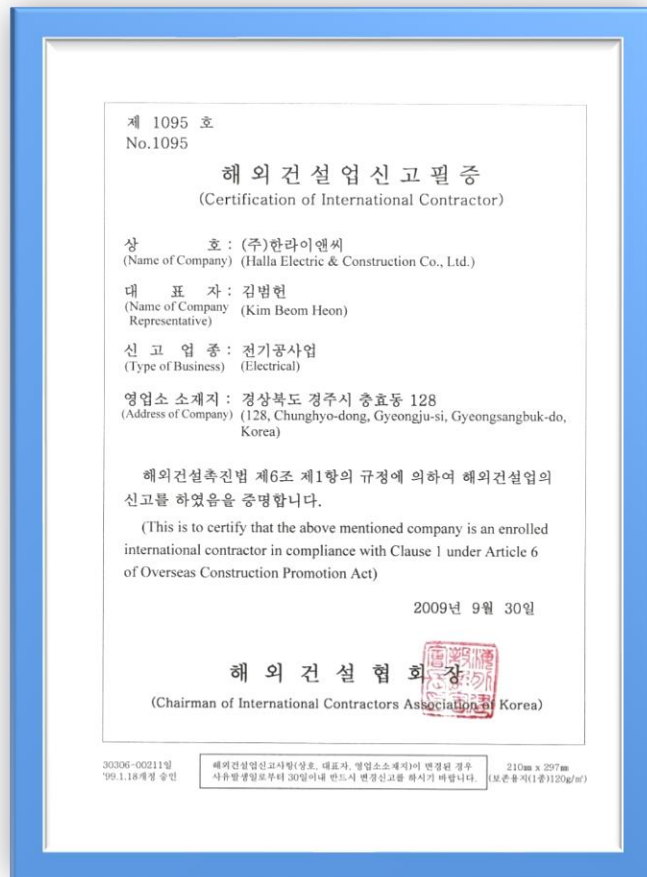
< Certificate of Renewable energy equipment professionals >



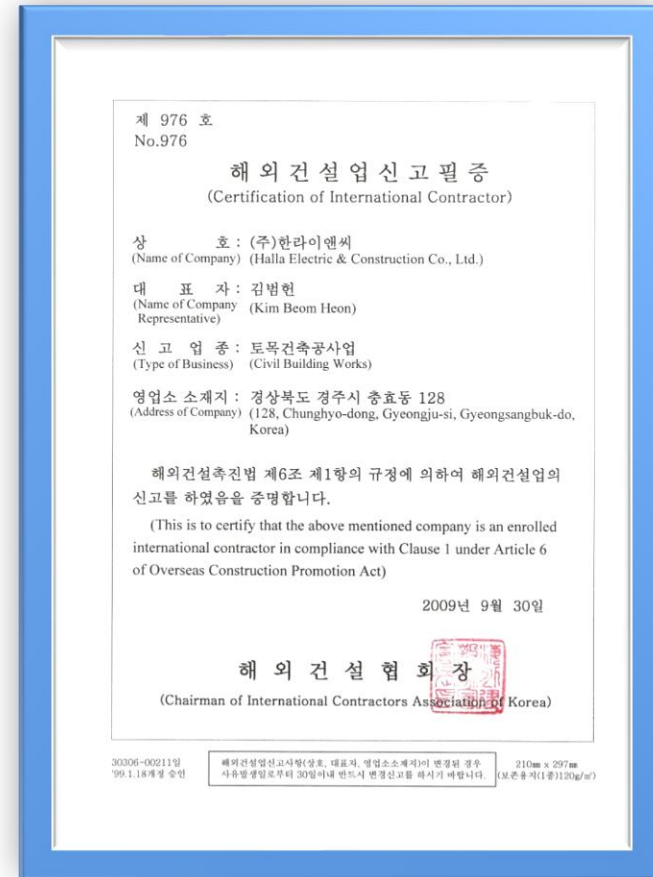
< Certificate of Korea Advanced Corporation >

1.6. Certificates And Awards

PART 1. Halla E&C Overview



< Certificate of International Contractor >
Type of Business : Electrical



< Certificate of International Contractor >
Type of Business : Civil Building Works

1.6. Certificates And Awards

PART 1. Halla E&C Overview



< Certificate of Research Institute >



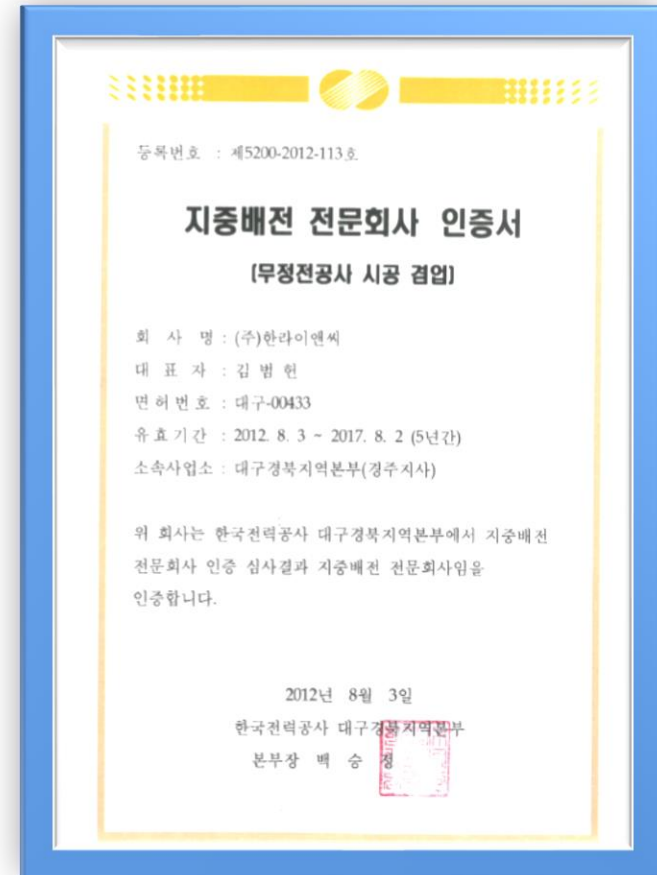
< Certificate of Main-Biz >

1.6. Certificates And Awards

PART 1. Halla E&C Overview



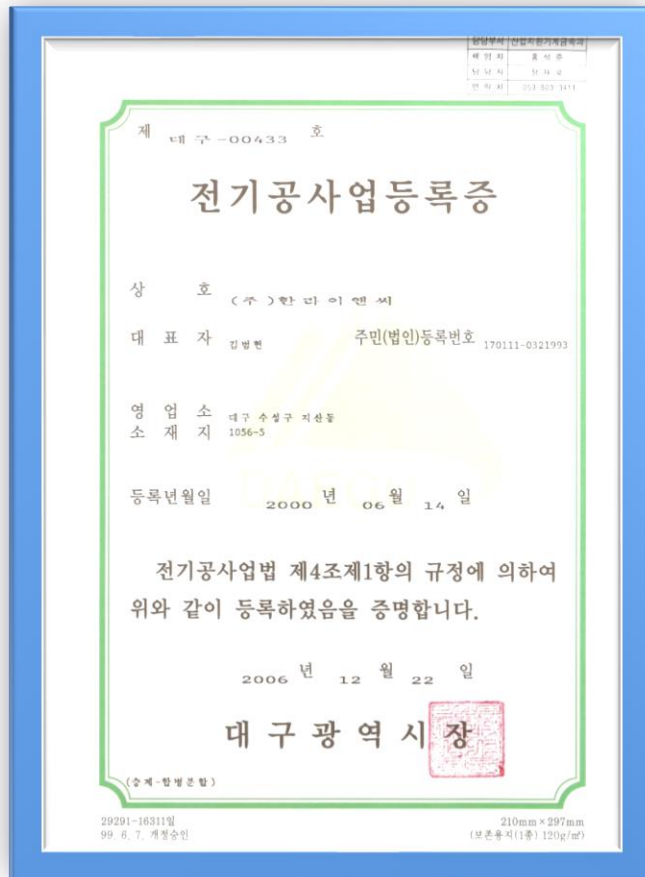
< Certificate of Uninterruptible construction >



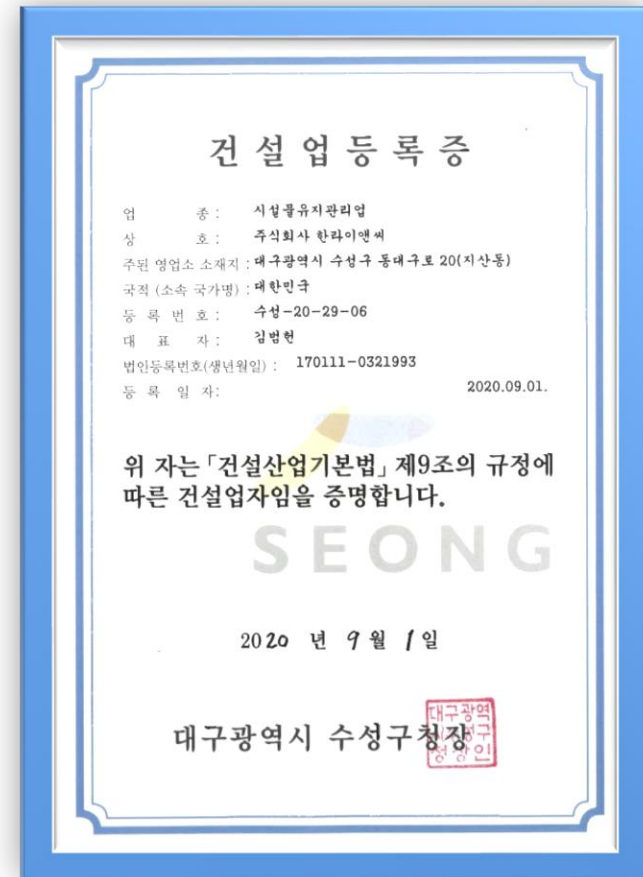
< Certificate of underground distribution >

1.6. Certificates And Awards

PART 1. Halla E&C Overview



< Certificate of electric construction
business >



< Certificate of facilities maintenance
business >

1.6. Certificates And Awards

PART 1. Halla E&C Overview



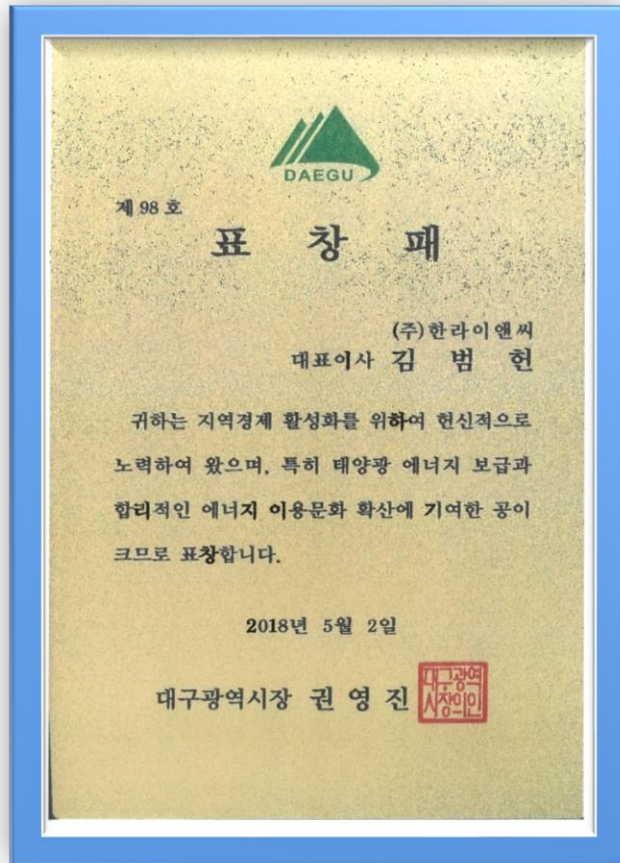
< Iron Tower Order of Industrial Service Merit >



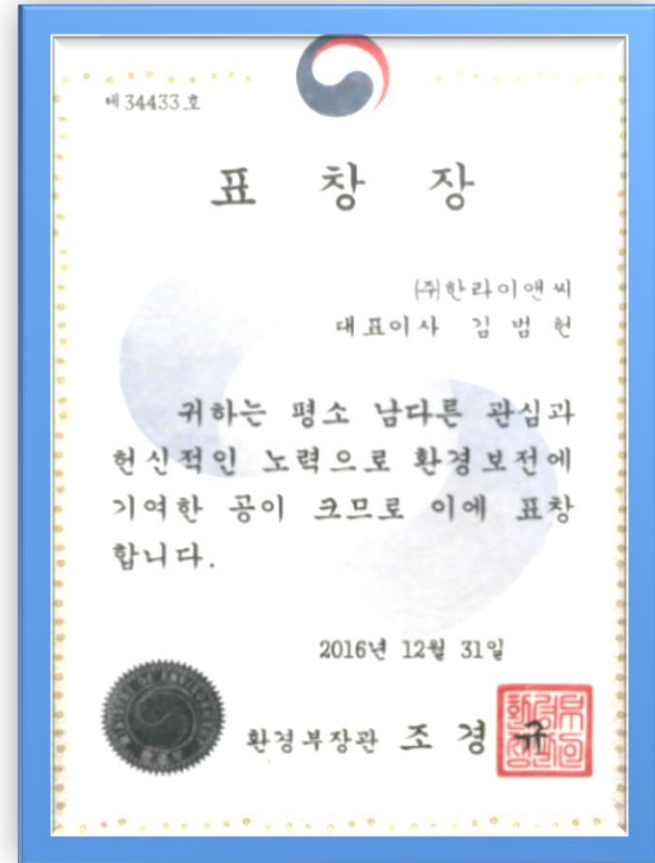
< The Industry Medal of Korean Government >

1.6. Certificates And Awards

PART 1. Halla E&C Overview



< Award of Daegu Metropolitan City Government >



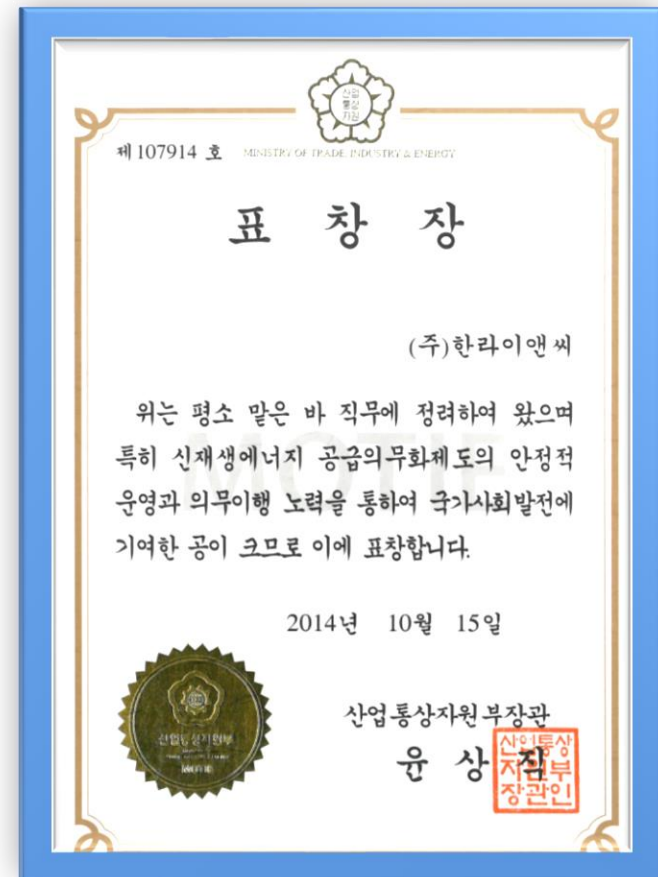
< Award of Minister Environment >

1.6. Certificates And Awards

PART 1. Halla E&C Overview



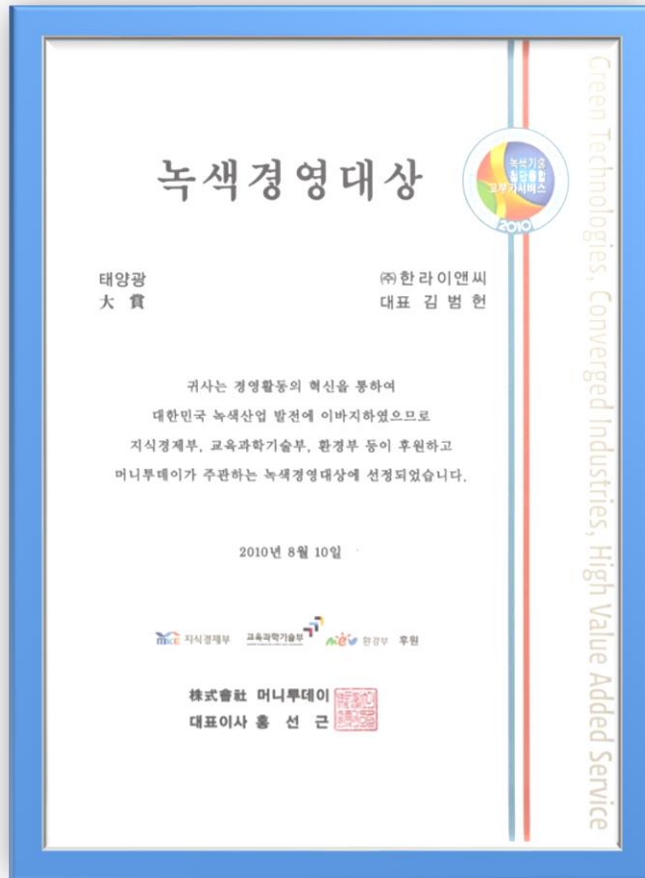
< Award of Director of the Daegu Regional Tax Office >



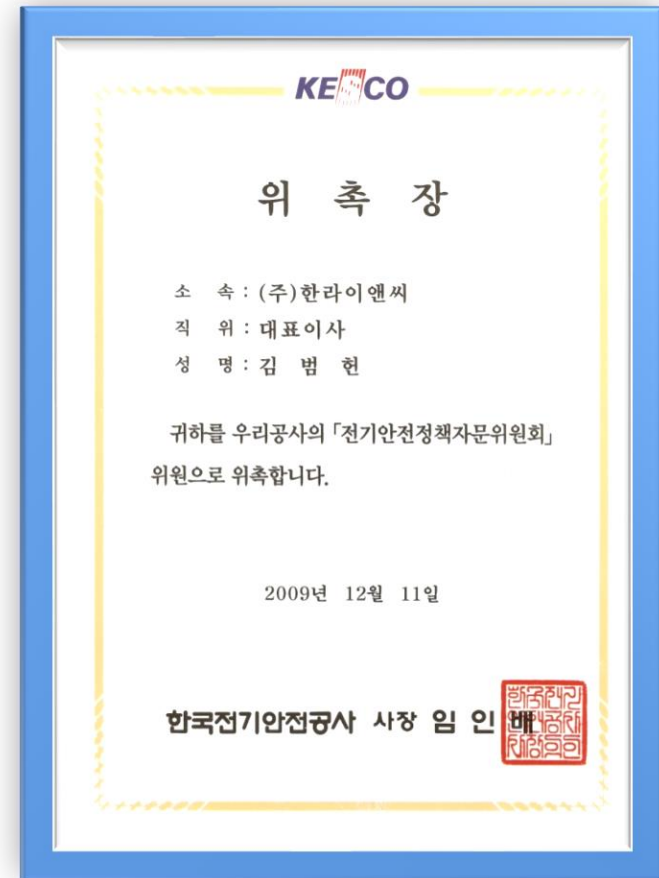
< Award of Minister Trade, Industry and Energy >

1.6. Certificates And Awards

PART 1. Halla E&C Overview



< Green Management Award >



< Letter of Attorney of KOREA ELECTRICAL SAFETY CORPORATION >

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Part 2.

Business area & cases

PV System	2.1
Electric Installation	2.2
Domestic and foreign cases	2.3

Plentiful Installation Experience

**The best installation experience in Korea(over 30MW)
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

2.2 Electric Installation

PART 2. Halla E&C Business

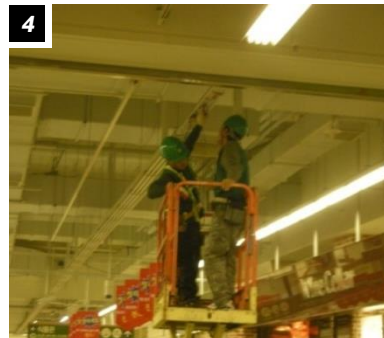
Coexistence of Nature and Human. Innovation of Energy is the answer.

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



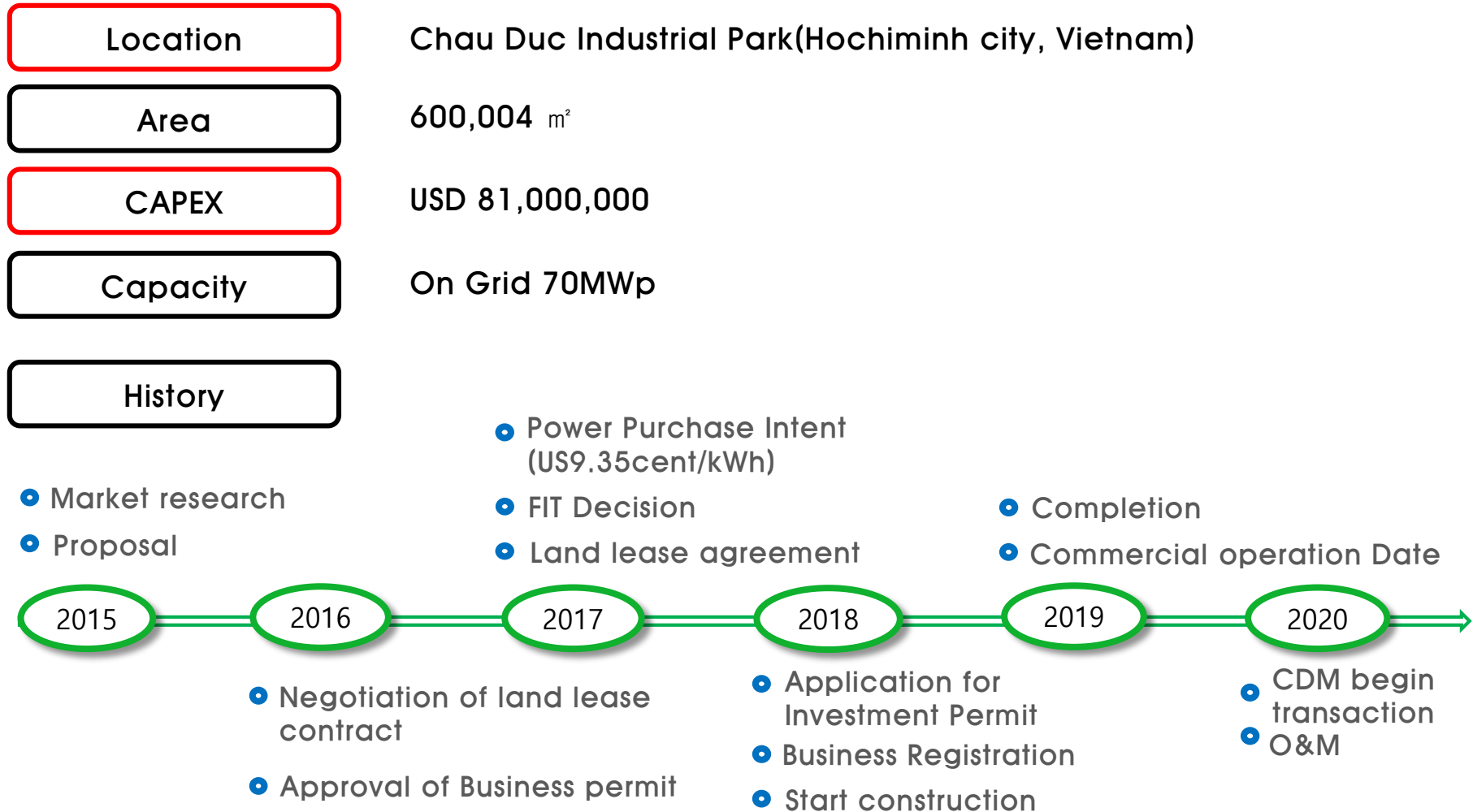
The others

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

2.2 Domestic and Foreign Cases

PART 2. Halla E&C Business

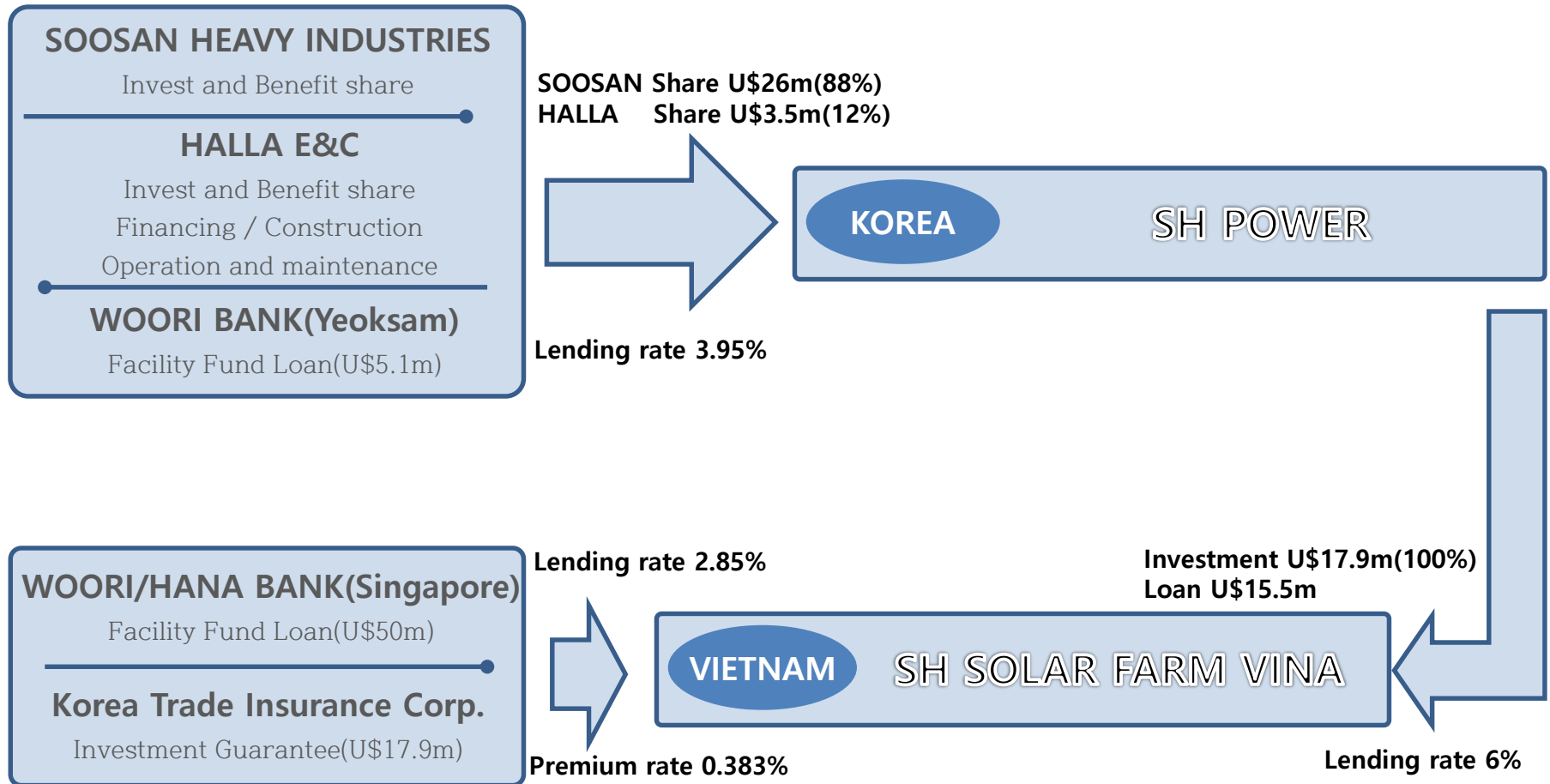
1. Summary



2.2 Domestic and Foreign Cases

PART 2. Halla E&C Business

2. Structure



2.2 Domestic and Foreign Cases

PART 2. Halla E&C Business

3. Profitability

(unit : Thousand, USD)

Account	Item	Amount for 20y	Amount for Annual
Total Income	Operating	193,018	9,651
	CDM	52,547	2,627
Total Expenditure	Maintenance	40,364	2,018
	Interest	12,734	637
	Repayment	71,000	3,550
	tax	9,266	463
Profit available for dividend		102,202	5,110
Return on Investment 11.7%		Return of Equity 17.5%	

2.2 Domestic and Foreign Cases

PART 2. Halla E&C Business

1. Summary

Location

ROKAF 20th Fighter Wing(Seosan, Korea)

Area

200,568 m²

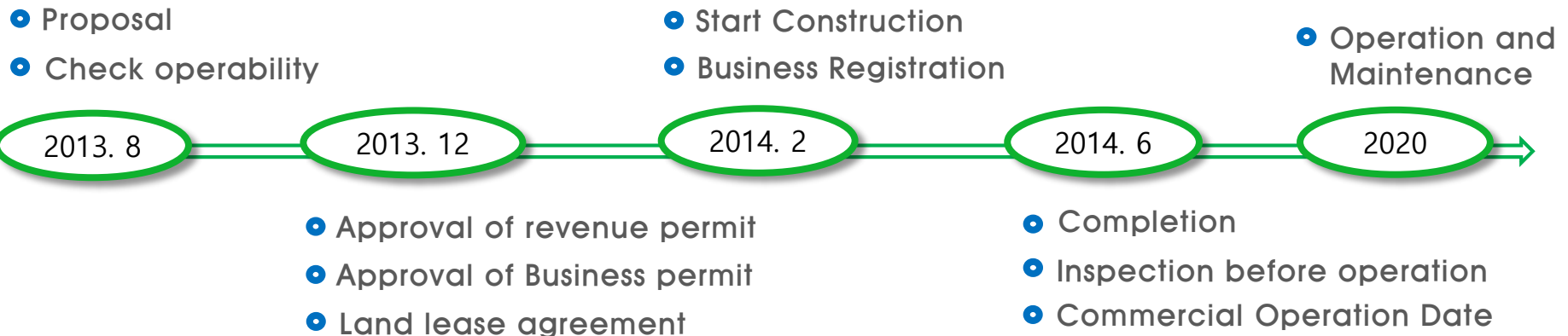
CAPEX

USD 28,000,000

Capacity

On Grid 14.2MWp

History



2.2 Domestic and Foreign Cases

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

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Part 3.

Halla E&C Competitiveness

Co-operation with the Government	3.1
The Pioneer	3.2
Challenge spirit	3.3
Creativity	3.4

3.1 Co-operation with the Government



PV for water supply facility (Daegu Solar)



2nd Daegu Solar



3rd 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)



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 -

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

- Inside -



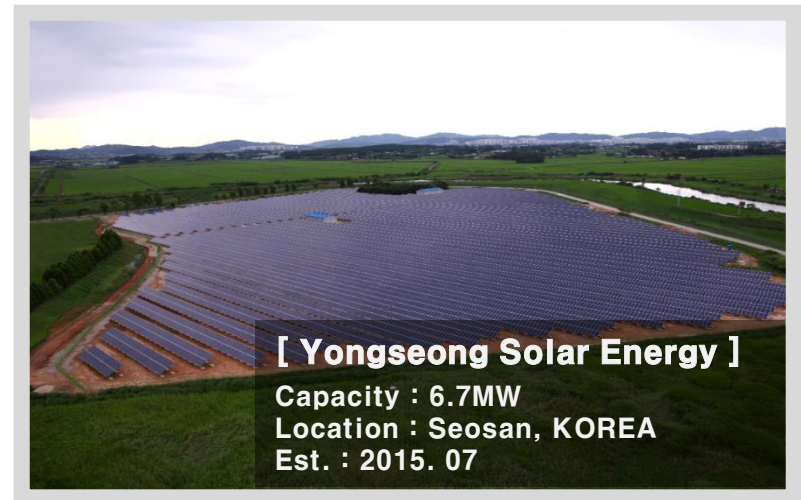
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Part 4.

Halla E&C Photovoltaic Power Plants

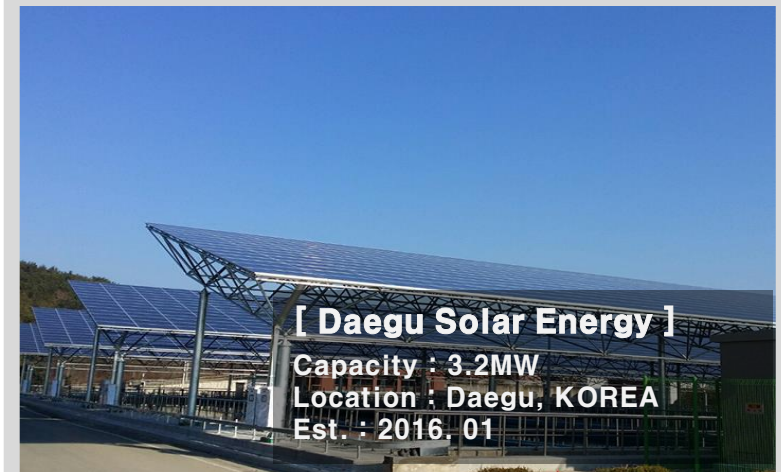
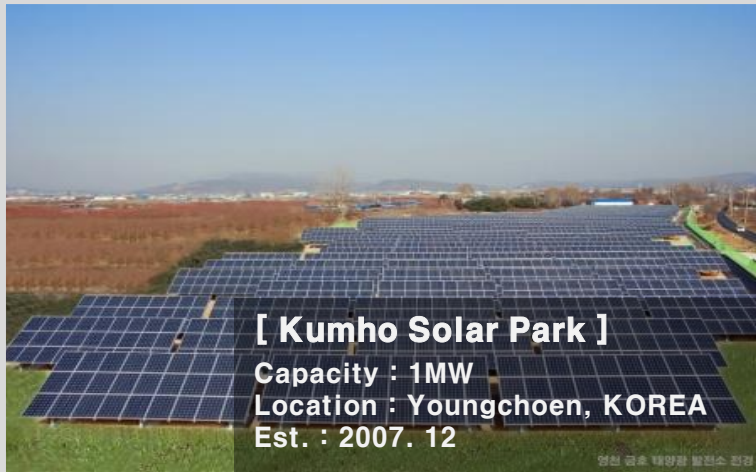
4. Photovoltaic Power Plants

PART 4. Halla E&C Photovoltaic Power Plants



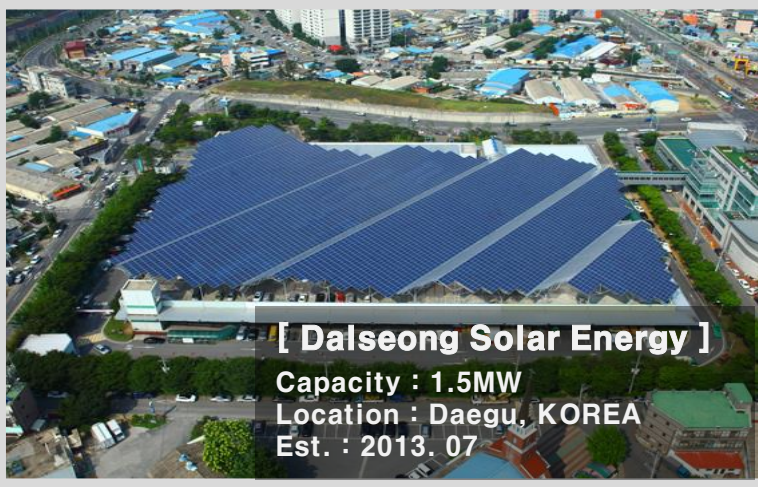
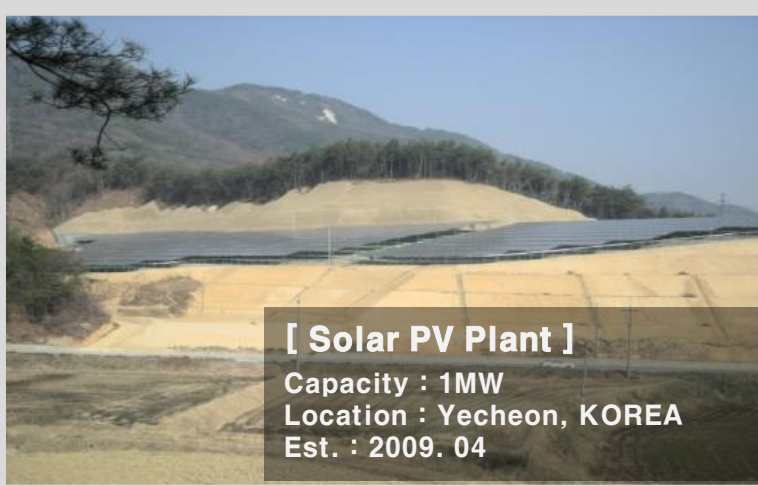
4. Photovoltaic Power Plants

PART 4. Halla E&C Photovoltaic Power Plants



4. Photovoltaic Power Plants

PART 4. Halla E&C Photovoltaic Power Plants



Contact Us

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