





#### [Jeju Special Self-Governing Province]



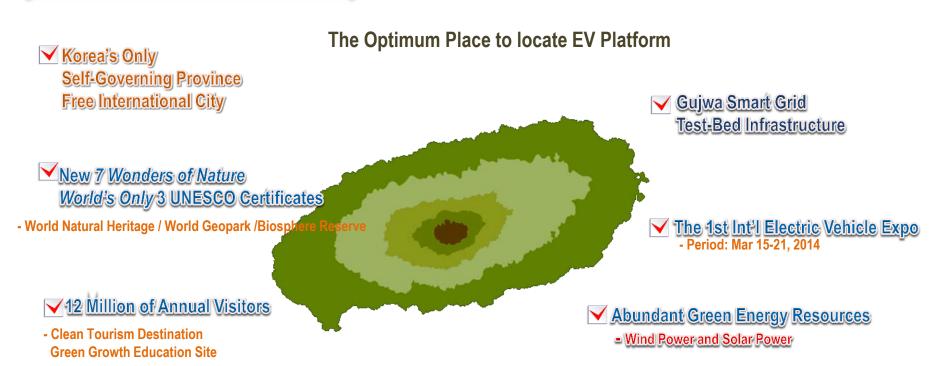


- **V** Population : 604,000
- Visitors : 10,850,000 (As of late December 2013)
- Temperature : Avg.15.7 °C (Highest 34.9/Lowest 14.7)

🖌 Area : 1,849 km²

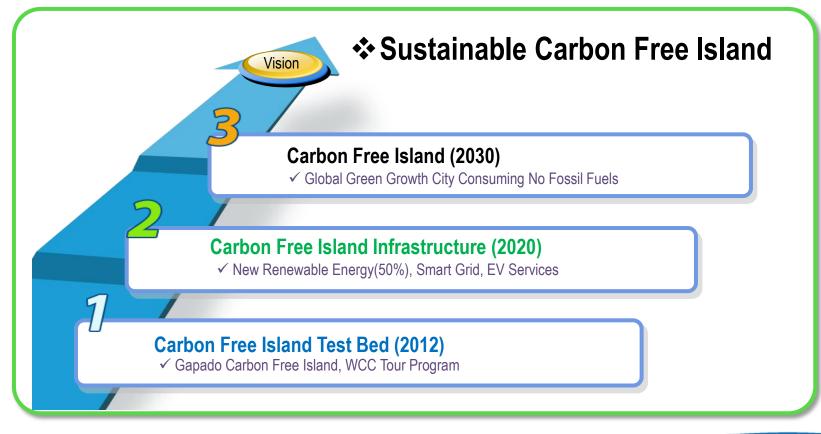
Altitude : 1,950m (Mt.Halla) Road Altitude : Highest 1,100m







#### Vision : Global Green Growth City with Clean Environment and Cutting-Edge Technology





Smart Grid

#### **Constructing Smart Grid City in Entire Jeju Region**

- Construct and Operate Smart Grid Test-bed by 2013
- Expansion of Smart Grid by 2017
- Construct Smart Grid City in Entire Jeju Region by 2020



EV



**Distribution of Electric Vehicles upto 100%** 

▶ Public Sector by 2017  $\Rightarrow$  10% switch (Accumulated to 29,000)

Public Transportation by  $2020 \Rightarrow 30\%$  switch (Accumulated to 94,000)



Private Vehicles by 2030  $\Rightarrow$  100% switch (Accumulated to 371,000)







## Switch of Electric Power to Renewable Energy

Develop a Total of 1GW Offshore Wind Power by 2019

Develop a Total of 2GW Offshore Wind Power by 2030

■ Onshore Wind Power 350MW, Sunlight 100MW





#### **Gapado Carbon Free Island**

#### World First Carbon Free Island Test-Bed

- Location : Southwestern of Jeju (5km from Mosulpo Harbor)
- Area : 0.87km² (4<sup>th</sup> largest among Jeju annexed islands)
- Population : 281 (135 households)
- Project Overview :
  - Period : Nov 2011~Oct 2013(2 years)
  - Electric Power : 100% Replacement to New Renewable Energy (Wind Power+Sunlight+Storage)
  - Vehicle : Replaced to EV, Phased Replacement for Agricultural Machines and Fishing Vessels
  - Resident Life : Applied Smart Grid, Constructed Smart Home with Smart Meters in Entire Household
  - Creating Green Island : Line, Forestation Project, Landscape Improvement, etc.





#### Gujwa Smart Grid Test Bed

- Area : Gujwa-eup, Jeju (Northeastern Region of Jeju)
- Scale : 5 sections / 2 substations / 4 distribution lines / 3,000 houses
- Period : Dec 2009 ~ May 2013 (42 months)
  Basic Stage: Dec 2009 ~ May 2011 : Constructing Infrastructure
  Extended Stage : Jun 2011 ~ May 2013 : Operating Test-Bed
- Participation : 12 Consortiums 168 Corporations
- Budget : KRW 246.5 billion

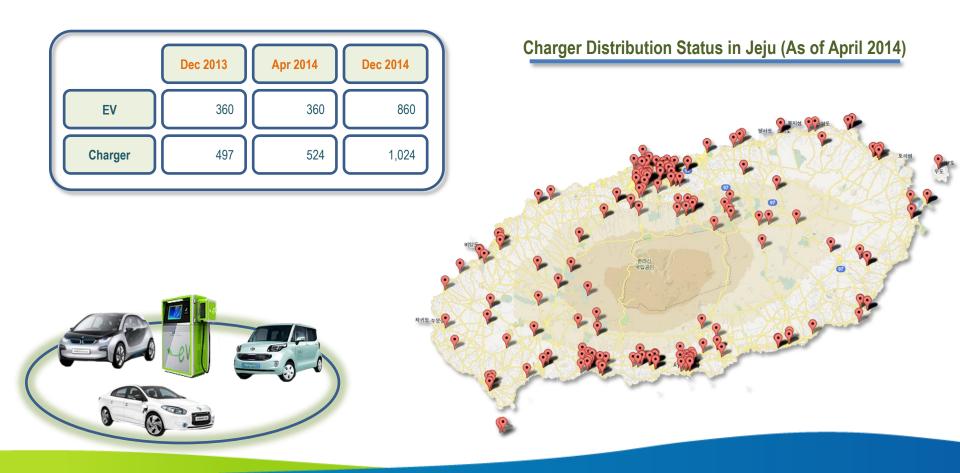
Government 73.9 B(30%) KEPCO 23.9 B(10%) Private 148.7 B(60%)]





#### EV & Charging Infrastructure Status in Jeju





#### Jeju Electric Vehicle Service



#### The First Private EV Charging Infra Consortium in Korea



#### Jeju Electric Vehicle Service Consortium



#### Jeju Electric Vehicle Service

#### EV & Charging Infra Management and Mobile Service in EV Infra Operation Center





#### **IEVE2014**



Theme: EV powered by wind

- Period : Mar 15(Sat) ~ 21(Fri), 2014 [ 7 days ]
- Venue : Jeju International Convention Center (ICC Jeju)

#### Scale :

Exhibition : 8,591 km² / 220 booths
 Participant : About 40 EV Manufacturers and Related Industries
 Visitors : 47,000 man-days





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#### IEVE Brand as Global "EV MICE "

#### [Exhibition]



#### [Conference]

EV Industry and Technology Development

EV and ICT Convergence

Promoting ESS-RE-EV Industry

Wireless Charging EV R&D and Demo Project

Electric Bus with Energy Demand Management Type Battery

Diffusing EV Charging Infra and Standard Application









## Carbon Free Island Jeju by 2030 Global EV Platform in Jeju

## THANK YOU

## Where is the Place : Jeju Island





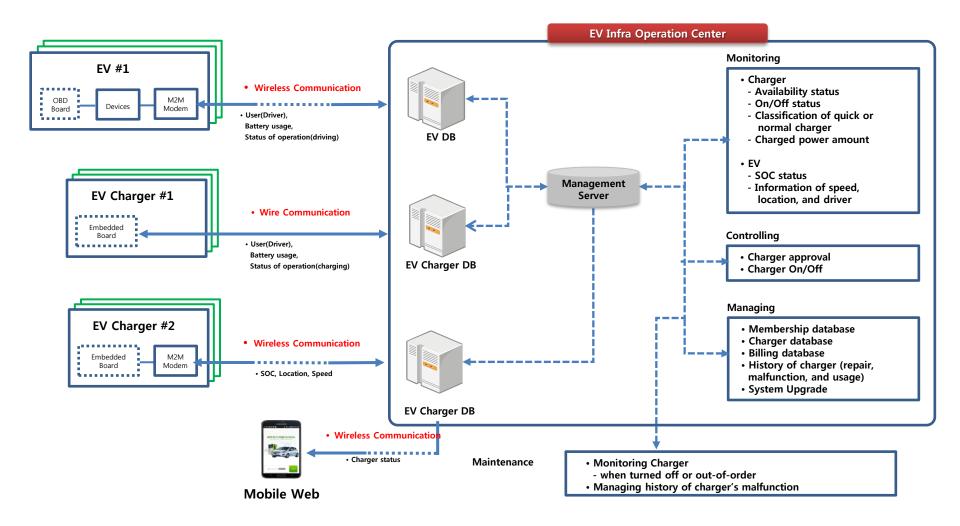
圈

#### 대한민국의 현실 : 꽉 들어찬 고립 된 섬









#### Future 2000 by Cartoonist Lee, Jung Woo in 1965



#### Future 2000 by Cartoonist Lee, Jung Woo in 1965

