

UNESCO

Biosphere Reserve (2002) [생물권보전지역]

World Natural Heritage (2007) [세계자연유산]

Global Geoparks Network (2010) [세계지질공원]

7 Wonders of Nature (2011) [세계7대자연경관]

"Eco-friendly Electric Vehicles
with No Exhaust Emissions"

Electric Vehicle Handbook

Jeju Special Self-Governing Province

[4면]

< Ways to Efficiently Drive Electric Vehicles to Improve Their Driving Ranges >

1. Keep the proper temperature (24°C) inside a car. Air conditioning and heating systems lead to large electricity consumption. It is better to use seat heaters than air heating systems that require large amount of electric power.
2. Drive at the fuel-efficient speed (60~70 km/h). When you overspeed, electricity consumption can be excessive. Driving ranges can also be shortened by your driving habits or steep roads.
3. Minimize things that you carry in a car. Lighten your vehicle.
4. Maintain the proper tire pressure. When you see the dashboard warning light on, immediately get an inspection.
5. Use the most direct route. Before driving, check the traffic information in advance.
6. At normal times use eco drive mode and while braking, use regenerative brake functions to convert energy to be stored.

[5면]

< Electric Vehicle Management >

1. Before beginning long distance driving, fully charge the battery and check charger locations.
2. While driving, check the remaining driving range on dashboard. Actual travelling distances can be different, based on factors such as your driving habits.
3. To prevent battery degradation, use indoor parking facilities in very cold weather and keep your car warm.
4. Use dedicated tires for electric vehicles to improve fuel efficiency.
5. Find locations of service centers in advance to prepare for car breakdowns or accidents.

[6면]

충전기 이용방법

<How to use the charger>

(결제) 유료 충전기

(Payment) Fee charger

01

Select Charge Method

AC-3	DC CHADEMO	DC COMBO
SM3	Ray, Soul, Leaf, IONIQ	Spark, i3, Bolt, IONIQ (2017)

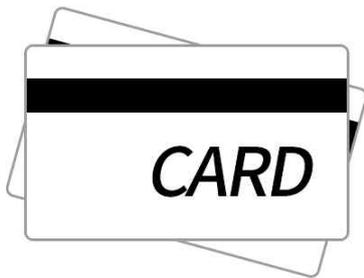
02

Select Way to Confirm Membership

Membership Number

Membership Card

03



Please place your membership card onto the slot.

Insert membership number and press enter.

1	2	3	Clear all
4	5	6	←
7	8	9	
Enter	0	Cancel	

Checking membership.

04

Setting Cost of Charge

Service unit price (Won)	<input type="text" value="100"/>	+ +	
Payment amount (Won)	<input type="text" value="1,100"/>	1,000 100	
Estimated amount of charge (kWh)	<input type="text" value="11.00"/>	- -	

After setting the fee, place your card onto the slot.

Click +- Buttons to set the fee.

05

Connect the connector
onto the vehicle and
press “Start Charge”.

Start Charge



Connect the connector until you hear a click.

06

Charging



20.0%

**Stop
Charge**

Charging Time (Minute: Second) **00:51**

Remaining Time (Minute: Second) **25:00**

Amount of Charge (kWh) **11.00**

Cost of Charge (Won) **1,100**

If you press “Stop Charge”, charging will stop.

If charge is stopped, payment and cancel payment will proceed.

07

Finish Charge

**Charge
Complete**

Charging Time (Minute: Second) **01:25**

Amount of Charge (kWh) **11.00**

Cost of Charge (Won) **1,100**

Check the charge information and press “Charge Complete”.

08

Please, place the coupler to its original spot and close the door.

Thank you.

09

Would you like to stop charging?

Yes

No

If you press "Stop Charge", charging will stop.

10

Finish Charge

Charge Complete

Charging Time (Minute: Second) 01:25

Amount of Charge (kWh) 11.00

Cost of Charge (Won) 1,100

Check the charge information and press "Charge Complete".

11

Proceed Payment

Amount of Charge (kWh)

10.00

Cost of Charge (Won)

1,000



The payment will be renewed since the cost of charge is less than the set cost.
Place the payment card onto the slot.

12

Proceed Cancellation

Cancelling Cost (Won)

1,100



The set cost must be cancelled since the cost of charge is less than the set cost.
Place the card onto the slot.

[7면]

충전기 이용방법

<How to use the charger>

(비결제) 무료 충전기

(No payment) Free Charger

한국전력공사 -> 한시적 무료운영 <- 제주특별자치도

Korean Electric Power Corporation -> Temporary Operated Free <- Jeju
Special Self-Governing Province

1. 충전방식을 선택해 주세요.

AC 3상(SM3), DC 차데모(레이, 쏘울, 리프, 아이오닉), DC 콤보(스파크, i3, 볼트, 아이오닉(2017))

1. Select Charge Method

AC-3 (SM3), DC CHADEMO (Ray, Soul, Leaf, IONIQ), DC COMBO (Spark, i3, Bolt, IONIQ (2017))

2. 충전 커넥터 연결 대기

차량에 커넥터를 연결하고, “확인 버튼”을 누르세요
확인

2. Waiting for connector to be connected

Connect the connector onto the vehicle and press “Okay”
“Okay”

3. 충전 시작: 충전을 시작하려면 충전시작 버튼을 누르세요

3. Start Charge: Press the “Start Charge” button to start charging.

4. 충전 커넥터 연결 확인 중

차량과의 통신으로 커넥터 연결을 확인 중 입니다.

정상연결이 확인이 되면 자동으로 충전이 시작됩니다.

4. Checking for connector

Checking for connection through communication with the vehicle.

Charge will start automatically, once the connection is approved.

5. COMBO, CHADEMO

충전 중

충전 중지

충전시간(분:초)

남은시간(분:초)

충전전력(kWh)

충전요금(원)

충전 중지 버튼을 누르면 충전이 중지됩니다.

5. COMBO, CHADEMO

Charging

Stop Charge

Charging Time (Minute: Second)

Remaining Time (Minute: Second)

Amount of Charge (kWh)

Cost of Charge (Won)

Charge will stop if you press “Stop Charge” button.

AC급속

충전 중

충전 중지

충전시간(분:초)

충전전력(kWh)

충전요금(원)

충전 중지 버튼을 누르면 충전이 중지됩니다.

AC Quick Charge

Charging

Stop Charge

Charging Time (Minute: Second)

Amount of Charge (kWh)

Cost of Charge (Won)

Charge will stop if you press “Stop Charge” button.

6. 충전 종료

충전 완료

충전시간(분:초)

충전전력(kWh)

충전요금(원)

충전 정보를 확인하고 “충전완료” 버튼을 누르세요.

6. Finish Charge

Charge Complete

Charging Time (Minute: Second)

Amount of Charge (kWh)

Cost of Charge (Won)

Check the charge information and press “Charge Complete”.

충전을 중지 하시겠습니까?

확인, 취소

Would you like to stop charging?

Yes, No

7. 커플러를 보관함에 원위치 시키고 도어를 닫아주세요.

감사합니다.

충전을 중지하는 중입니다.

7. Please, place the coupler to its original spot and close the door.

Thank you.

Please, wait for charge to stop.

[8면]

< Electric Vehicle Charging Etiquette >

1. Ask the owner of the car charging currently to unplug their car when it is finished.
2. Leave your phone number when you are charging but not there.
3. Leave a note to let other users know when you expect to be done charging.
4. After using, for next users, put the charger and cables back where they were.
5. Don't charge when it is not necessary. Leave chargers available for other users.
6. Before charging, check if there are other vehicles waiting.
7. Don't park in front of chargers if you are not charging. The space is only for charging.

[9면]

< Precautions in the Use of High-speed Electric Vehicle Chargers >

Before using

1. Turn the ignition off before charging.
2. Securely put the transmission in "Park".
3. When the emergency stop button is on, turn it right to off.
4. Check the fast charging inlet in your car. Depending on the models, it is located in a different place.
5. Check the fast charging type (CHAdeMO, DC Combo, AC Fast Charge) of your car. It is different among car models.

While using

1. Charging is automatically completed when you reach 80 percent of the battery's capacity. (It can differ among car models.)
 2. If there is an error, you can start again.
 3. When chargers are damaged by your carelessness, you can be subject to legal responsibilities.
 4. Internal combustion engine cars should not be parked in front of chargers.
 5. Use proper connectors for the fast charging inlet in your car. (If not, you will have an error.)
-

[10면]

< Precautions in the Use of Low-speed Electric Vehicle Chargers >

Before using

1. Check the standard charging inlet in your car. Depending on the models, it is located in a different place.
2. Turn the ignition off before charging.
3. Securely put the transmission in "Park"
4. When the emergency stop button is on, turn it right to off.

While using

1. Charging is automatically completed when it finishes.
2. If there is an error, you can start again.
3. You can expect 3 to 6 hours for charging, but it depends on how much charge the battery has before charging.
4. When chargers are damaged by your carelessness, you can be subject to legal responsibilities.

[11면]

<Useful Information for Electric Vehicles>

1. EV Call Centers

- Jeju EV Call Center (Jeju Special Self-Governing Province): 1899-8852
- Korea Automobile Environmental Association (Ministry of Environment): 1661-9408
- KEVCS (private): 1522-1782
- Jeju Electric Vehicle Service (private): 064-723-0853
- POSCO ICT (private): 1600-4047
- KEPCO (call center): 1899-2100

2. Websites for EV Charging Station Locations

- Korea Environment Corporation: <http://www.ev.or.kr>
- KEVCS: <http://www.kevcs.co.kr>
- ChargEV: <http://www.chargev.co.kr>
- EV Where: <http://www.evwhere.co.kr>
 - * Reliability of private sites cannot be guaranteed.
- KEPCO: <https://evc.kepco.co.kr:4445/main.do>

3. EV Charging Stations Map Application

Google Play search [검색] Jeju EV charging station [제주전기차충전소]

=> Click the app icon.



제주특별자치도(Jeju Special Self-Governing Province)

High-speed charger locator app (for android)

(Apps that run on iPhone are now under development.)

[12면]

<Useful Information for Electric Vehicles>

4. Low Emission Sticker Issuance

You can receive a 'low emission sticker' for your car when you register a car or visit a license registration office with your license registration, low emission certificate (issued by car dealerships), and ID card.

Jeju City: **064-728-8412** [Vehicle Management Division]

Seogwipo City: **064-760-3121** [Traffic Administration Division]

- ※ You can receive a low emission sticker at any City Hall, regardless of the address on your license registration.
- ※ Electric vehicles with low emission stickers can use public parking lots without charge in Jeju until 2018.

5. Q&A about Locations and Costs

Q: Electricity charges for home chargers

A: Go to KEPCO website (<http://cyber.kepco.co.kr>) > Check & Pay > Electric Rates Table > Rate Options Service > Electric Vehicle Charging Tariff

- ※ total exemption from basic rate of electricity and 50% reduction of power rates for charging for all the chargers installed in Jeju until the end of 2019

[Charger Locations and Charging Costs]

● Public high-speed chargers installed by Ministry of Environment

- Meter-rate system (on average 173.8 won per kilowatt-hour): Charging rates vary over time (e.g. hour-to-hour, day-to-day, season-to-season).

※ Korea Environment Corporation website (<http://ev.or.kr>) and Jeju EV Call Center (1899-8852)

- High-speed chargers in Jeju: Beginning in January 2018, they will be no longer free and will charge fees.

- KEPCO (high-speed, low-speed): It plans to charge fees beginning in June 2017.

● Private charging stations

- KEVCS (high-speed, low-speed): flat sum system and meter-rate system

※ KEVCS website (<http://www.kevcs.co.kr>), HAPPY CHARGER Call Center (1522-1782)

- ChargeEV (high-speed, low-speed) : meter-rate system

※ ChargeEV website (<http://www.chargeev.co.kr>), ChargeEV Call Center (1600-4047)

Electric Vehicle Users [전기차 이용자]

Q&A

Q: How can I find where to charge?

A: **<Web>** Go to www.ev.or.kr and click on "Finding a Charging Station", then you will be able to find the location of private charging stations and Korea Environment Corporation's quick charging stations.

<App> If you download the Jeju Electric Vehicle Charging Station Information application, you can find the locations of charging stations on a map. Also by using the "Setting" on the top right corner, you can sort by company or type to find a charging station.

Q: How to issue a charging card?

A: **<Environmental Corporation Card_173.8 won>** You can register for a membership card, once you sign up and login to www.ev.or.kr. The card will take 3-4 days to receive by mail; meanwhile, you can use the charger by typing in your card number while it's being delivered. After you issue a card, you can register your payment card so that you don't have to tag the payment card separately when using the charger and also can be used for other private charging stations. (When using Korea Environment Corporation cards at private charging stations, it is 430 won per 1kwh. If you do not register a payment card, tag your payment card when using your Korea Environment Corporation card.)

<Happecharger Card _ Average of 313.1 won> Go to www.happecharger.com and sign up. For individual membership just sign up. For business membership, call the head office (064-742-5578) since it must be processed through a correspondent. The card will take 3-4 days to receive by mail; meanwhile, you can use the charger by typing in your card number while it's being delivered. You can also use Happecharger cards for the Korea Environment Corporation's quick chargers. (When using Happecharger cards for the Environmental Corporation's quick chargers, it is 173.8 won per 1kwh)

<Chargev Card _ prepaid 313.1 won, postpaid 306.8 won> Go to www.chargev.co.kr and sign up. Chevrolet owners may be a recipient of free issuing of Chargev cards, so check with the customer service before signing

up. If you are not a Chevrolet owner or a recipient of free issuing, you can sign up for individual membership. After you sign up for membership, you can select for prepaid or postpaid. The Chargev card can also be used for Korea Environment Corporation's quick chargers. (When using Chargev cards for the Korea Environment Corporation's quick chargers, it is 313.1 won per 1kwh)

* The cards of each private company are not interchangeable. (For example, Happecharger cards cannot be used for Chargev chargers.)

[14면]

Electric Vehicle Users [전기차 이용자]

Q&A

Q: What is the method of quick charge, according to each type of electric vehicle?

A: Hyundai IONIQ (2016), KIA Ray, KIA Soul, and Nissan Leaf are DC CHADEMO method; Hyundai IONIQ (2017), Chevrolet Bolt EV, Chevrolet Spark, and BMW i3 are DC combo method; Renault Samsung SM3 is AC-3 method.

Q: While using the quick charger, is it possible to use another charger at the same time?

A: Due to safety matters, the quick charger cannot be used with another charger at the same time. Only one charger can be used per vehicle.

Q: How much is the cost of electricity for home charging?

A: Electric vehicle charger follows the exclusive rate of electric vehicle, there is no progressive tax.

From January 1, 2017, to December 31, 2019, the total amount of basic fee is exempted and 50% off on electricity rate. (Refer to P. 12, electricity rate for home charger)

Q: Is there a reduction on parking rate at public parking lot?

A: The parking rate for electric vehicle at public parking lot is free until the end of 2018. There could be cases where "Low Emission Vehicle Sticker" is checked, so please have it issued ahead.

[15면]

Q: How do I get “Low Emission Vehicle Sticker”?

A: You can get “Low Emission Vehicle Sticker” by visit the car registration office with original copy of car registration, low emission vehicle certificate, and ID card of the owner.

Q: What do I do, when the vehicle is completely discharged?

A: If the car doesn't start because it is completely discharged, it is because the 12V battery is discharged. You must revive the 12V battery, first, and then charge the vehicle. The vehicle cannot be charged when 12V battery is completely discharged. Also, SOS service may be provided depending on the manufacturer of the vehicle, so first check with the manufacturer and then use the towing services according to the insurance company.

Q: The driving range changes every time the vehicle is charged, is there something wrong with the vehicle?

A: The driving range can frequently change according to the driving pattern of the driver. The driving range can especially change according to the weather and the temperature due to the characteristic of the battery, however, this is a normal condition and there is no problem with the vehicle.

[16면]

"Jeju EV Call Center"

for electric vehicle users

1899-8852

If you have any question about electric vehicle chargers,
call 1899-8852 (Jeju EV Call Center).

- ◎ 24-hour 365-day service operation
- ◎ Comprehensive response to problems relating to electric vehicles and chargers
- ◎ Information about electric vehicle chargers
- ◎ General consultation on electric vehicles

Jeju Special Self-Governing Province

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