

# Zero-Emission Cars: The Future is NOW!

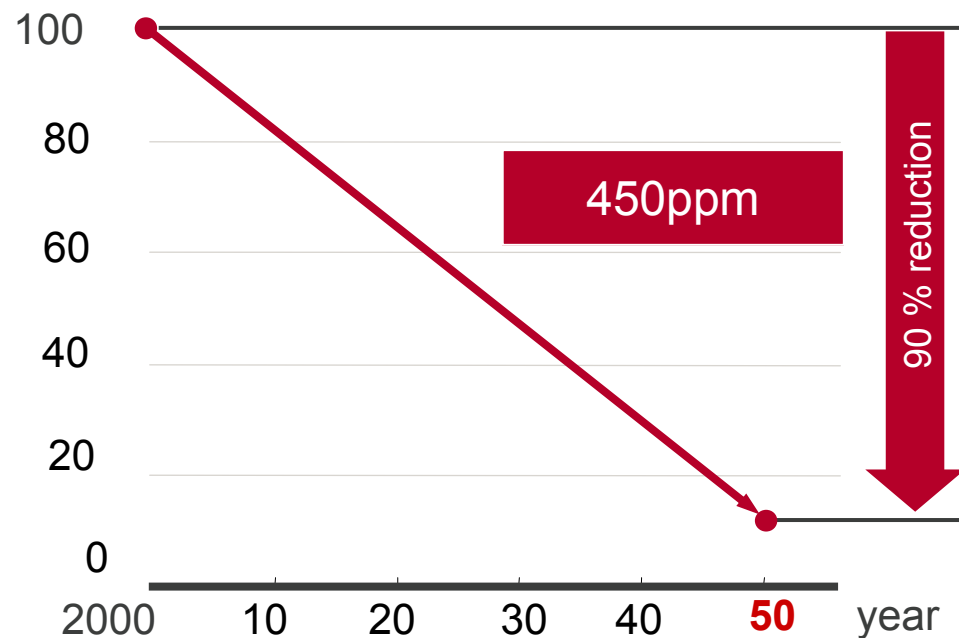
Toshiaki OTANI

Renault-Nissan Alliance Managing Director  
Senior Vice President, Nissan Motor Co., Ltd.

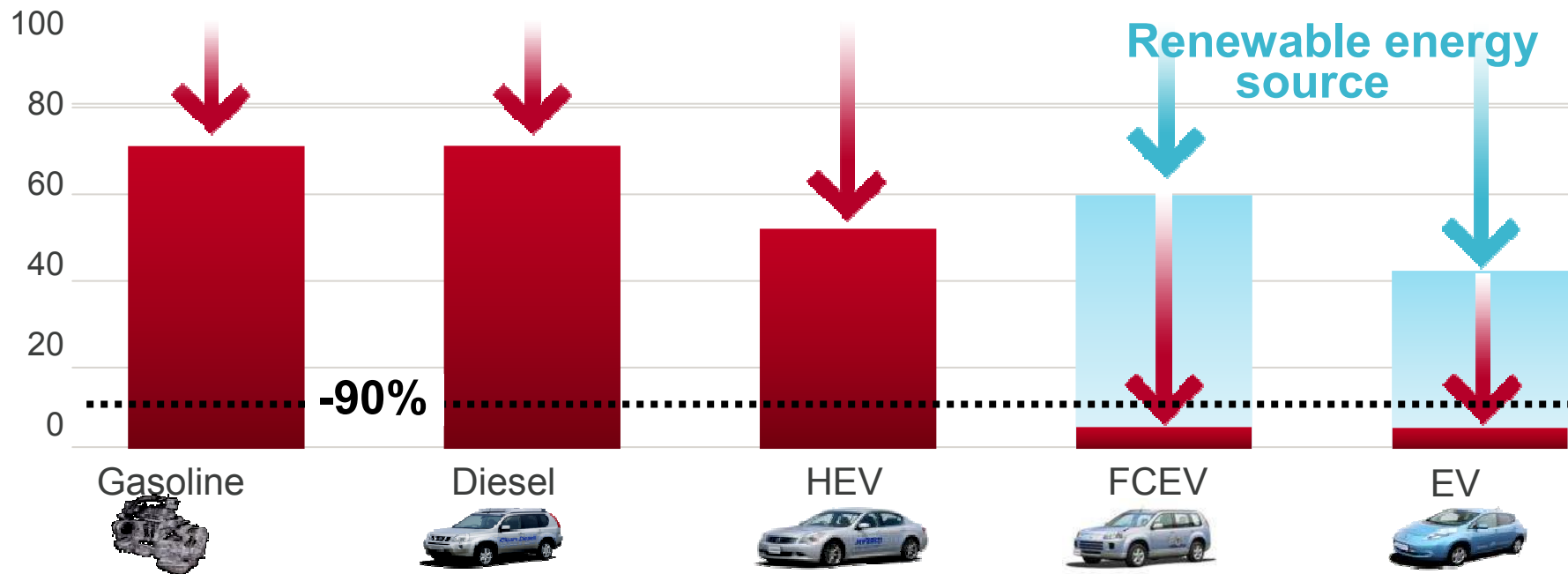


# Electric cars reduce carbon footprint right now

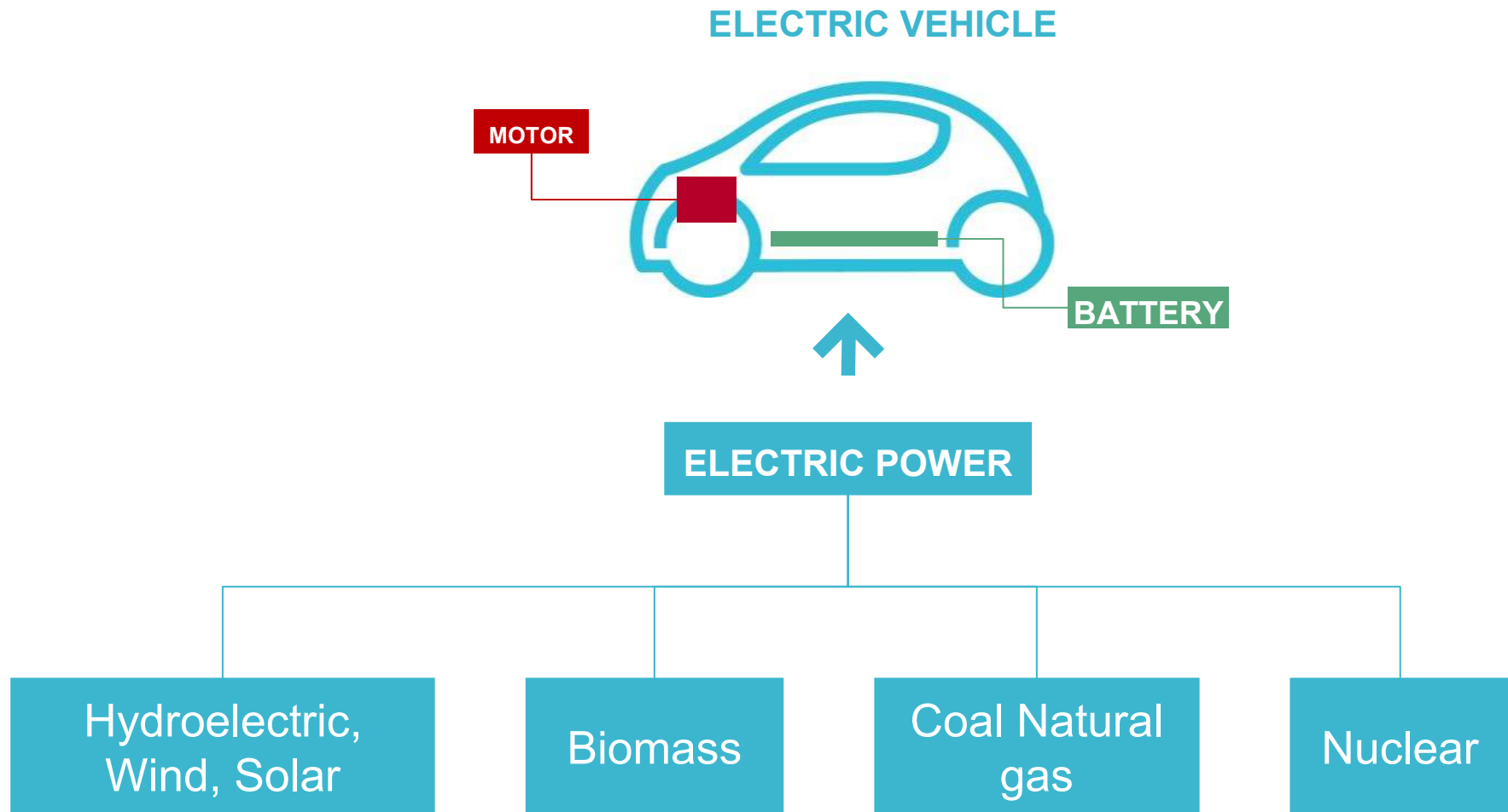
- “Zero emission vehicles” and “Clean energy generation” are both necessary to achieve the goal
- 450ppm of CO<sub>2</sub> (IPCC report) corresponds to 90% reduction of new vehicle’s CO<sub>2</sub> emission by 2050



# Electric cars reduce carbon footprint

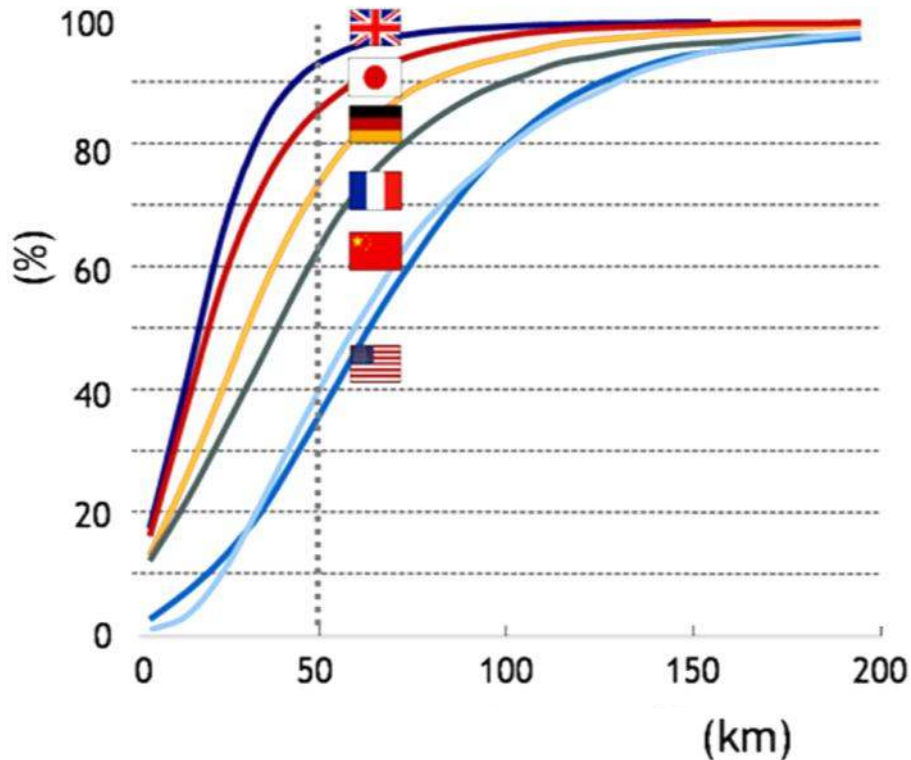


# Electric cars are “energy agnostic”



# Electric cars suit nearly all daily driving needs

- 100 km covers more than 80% in global
- 50 km covers more than 80% in UK and Japan



# Electric cars come in many shapes and styles

- Nissan LEAF debuted in December 2010



# Electric cars come in many shapes and styles

- Renault Kangoo ZE and Fluence ZE debuted in late 2011



# Electric cars come in many shapes and styles

- Renault TWIZY debuted in April 2012





# Electric cars come in many shapes and styles

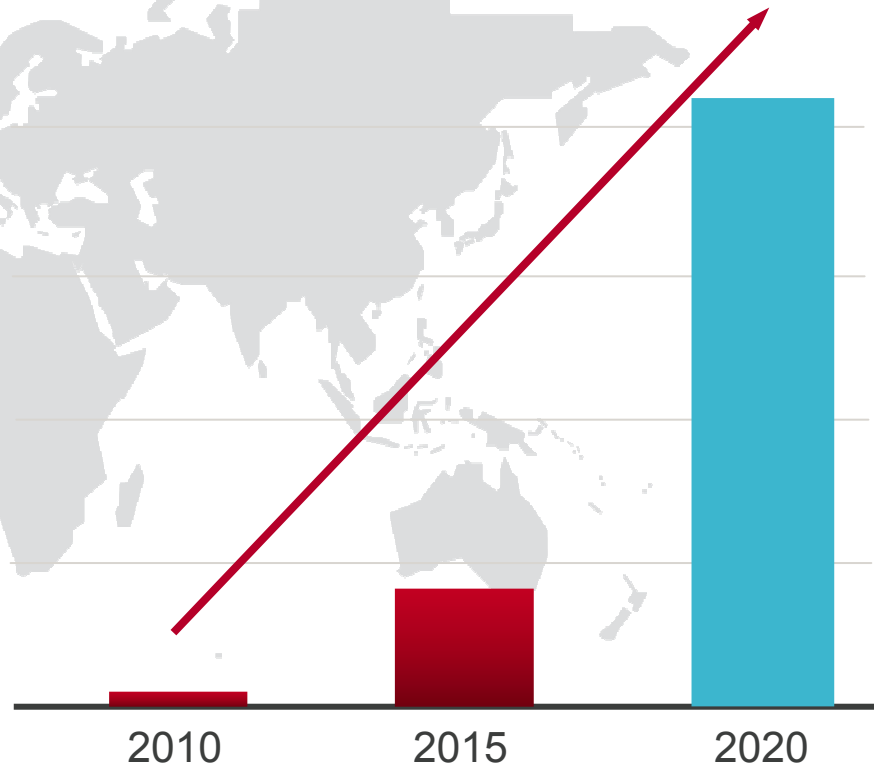
- Renault ZOE: Coming soon!



# Electric cars come in many shapes and styles

- Renault-Nissan Alliance projects the EV market will account for 10% of TIV by 2020, and is aiming to secure 20% of that market.

**1.5**  
**MILLION**  
**Alliance EVs**  
**SALES**



# Electric cars are real - safe, practical and fun!



# Electric cars are easy to use

- Nearly all owners charge primarily at home, at night
- More public charge spots would increase consumer “peace of mind”

STANDARD CHARGE  
4 to 8 Hours

QUICK CHARGE (AC/DC)  
30 minutes

QUICKDROP SYSTEM  
(Renault only)  
3 minutes

Residential    Public places



< Wall-Box >



# EVs are easier when charging is ubiquitous

Japan: Single-family house



US: Single-family house



Europe: Multifamily building



Europe: Single-family house

# Increase of public charging

- Japan: More than 4,100  
(as of May 2012)
- US : More than 10,000  
(as of May 2012)
- Europe: More than 20,000  
(in 2011)



# EVs are easier when charging is ubiquitous

## ■ On the way and at the destination

City hall



Shopping malls



Motor way sevice area



Gas stations

# Green Pioneer: Japan



■ More quick-charge spots greatly increases use of EVs

  **2**  **6**

 **19%**  **41%**  

NAGOYA

TOKYO

 Service station

Tomei HYW  
(Tokyo~nagoya)





# Green Pioneer: USA



From California's sunny desert to the rainy Pacific Northwest, eco-conscious drivers will find plenty of places to recharge.



# Green Pioneer of the Future: China



# Supporting community

- After 2011 earthquake and tsunami, EVs helped first responders when gasoline was in short supply.

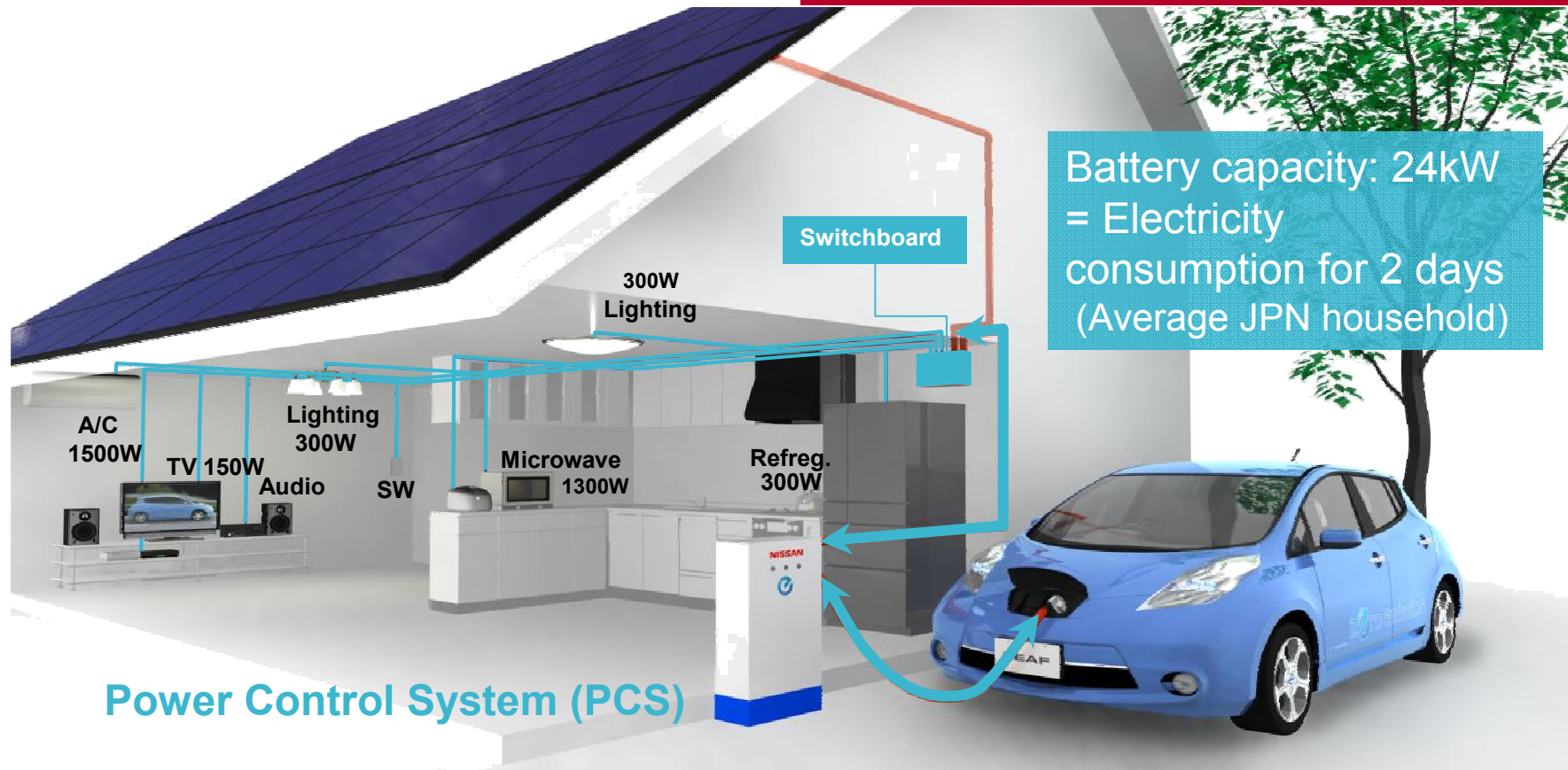


lines for gas

# Beyond Green: New energy management

- EV is more than just a car

Available in Japan this summer!



Power Control System (PCS)

# Public-Private Partnerships: Now more than ever!



Toronto



Sao Paulo



Quebec



Singapore



Portugal



Cataluña



Ireland / ESB



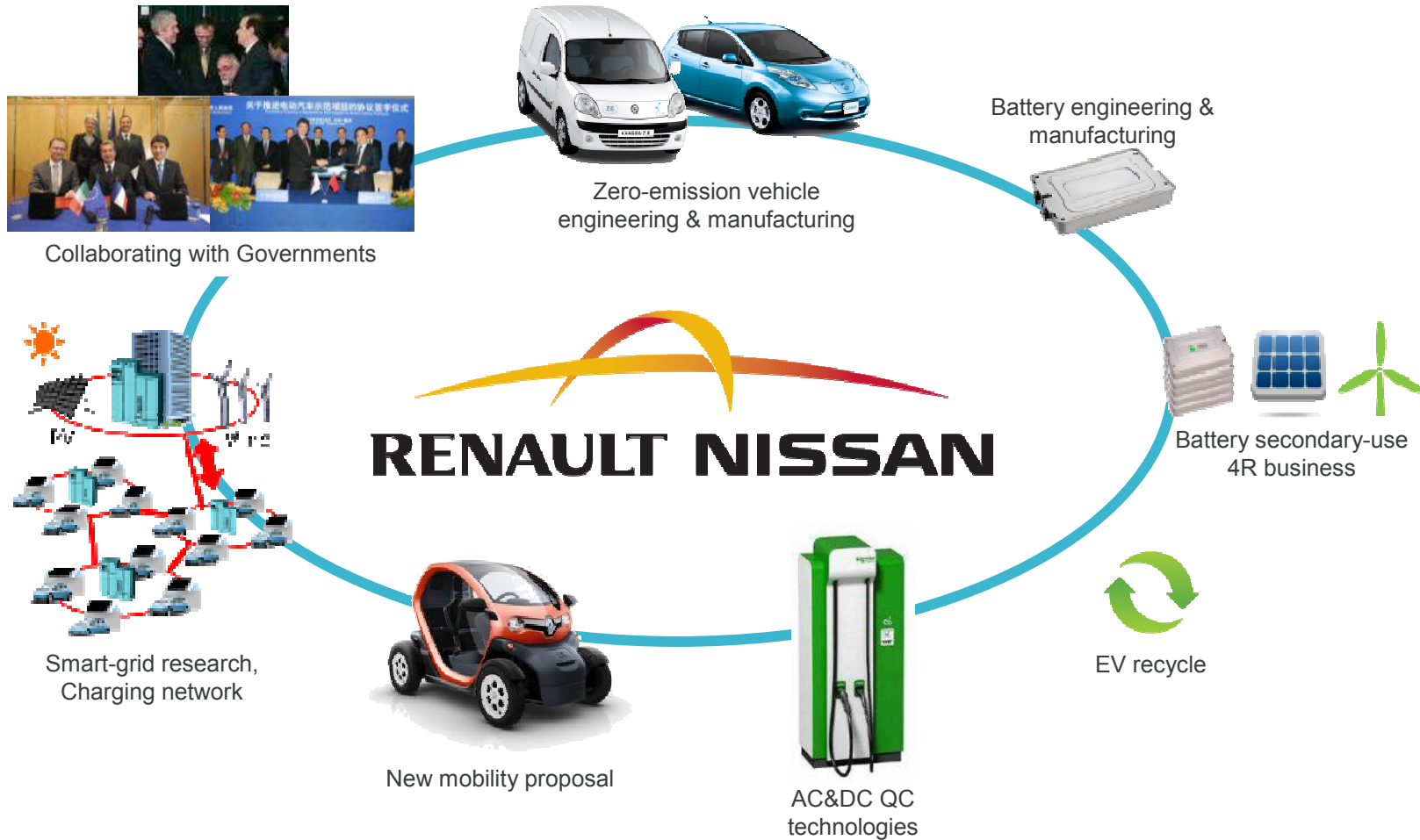
Amsterdam

*“A new era is beginning in the global automotive industry. At Nissan and Renault, we are working together to lead the way to mass-market zero-emission mobility.”*



Carlos Ghosn, CEO of Nissan and Renault

# Zero-emission cars drive a sustainable society!



# Electric cars are not the future. They are NOW!







**END**

