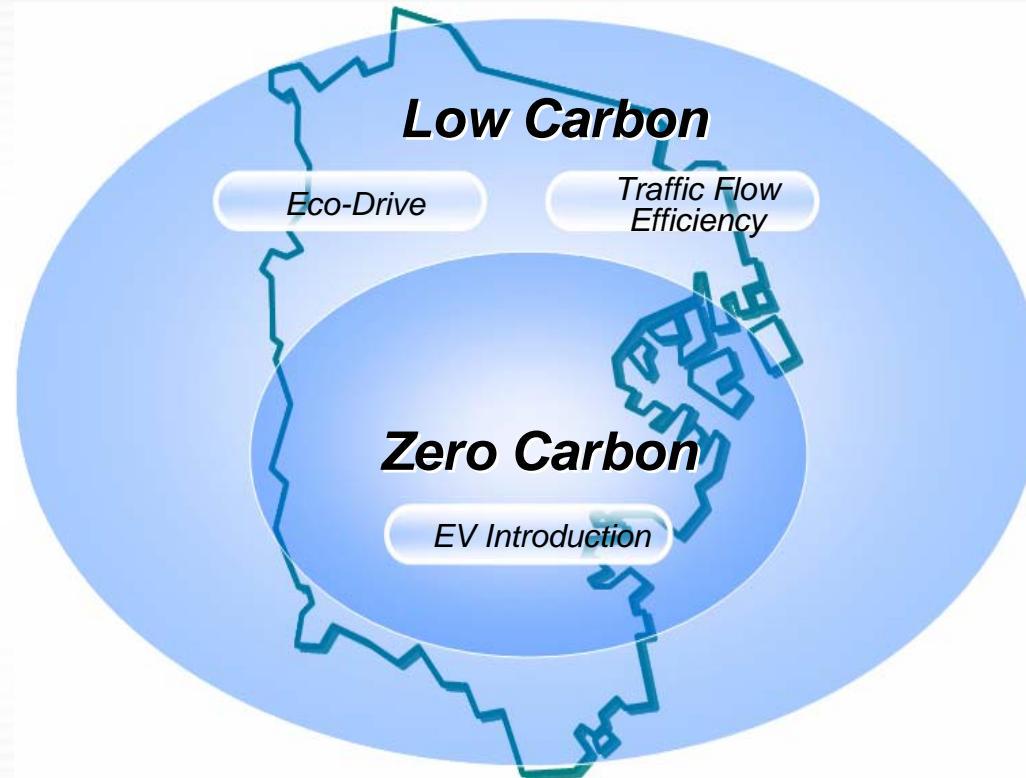
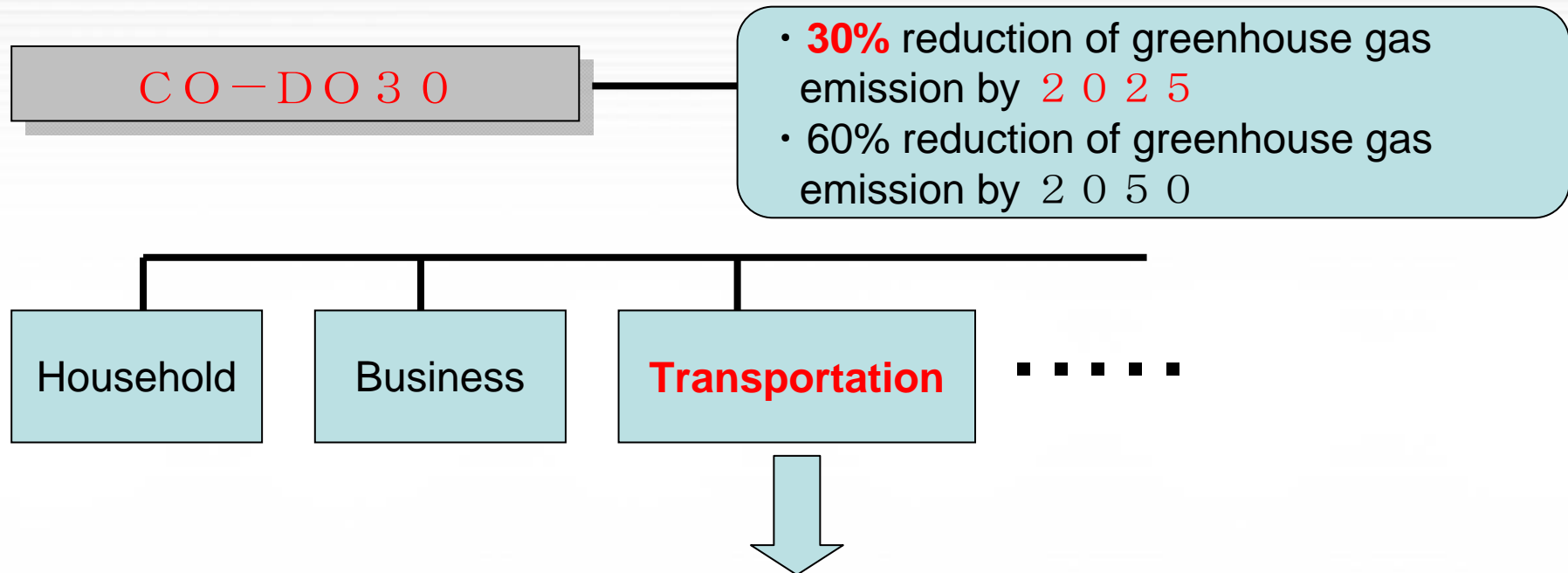


Low carbon model city concept
Yokohama Mobility “Project ZERO”



Haruyoshi Kumura
Fellow, Technology Intelligence
Nissan Motor Co., Ltd.

YMPZ Outline



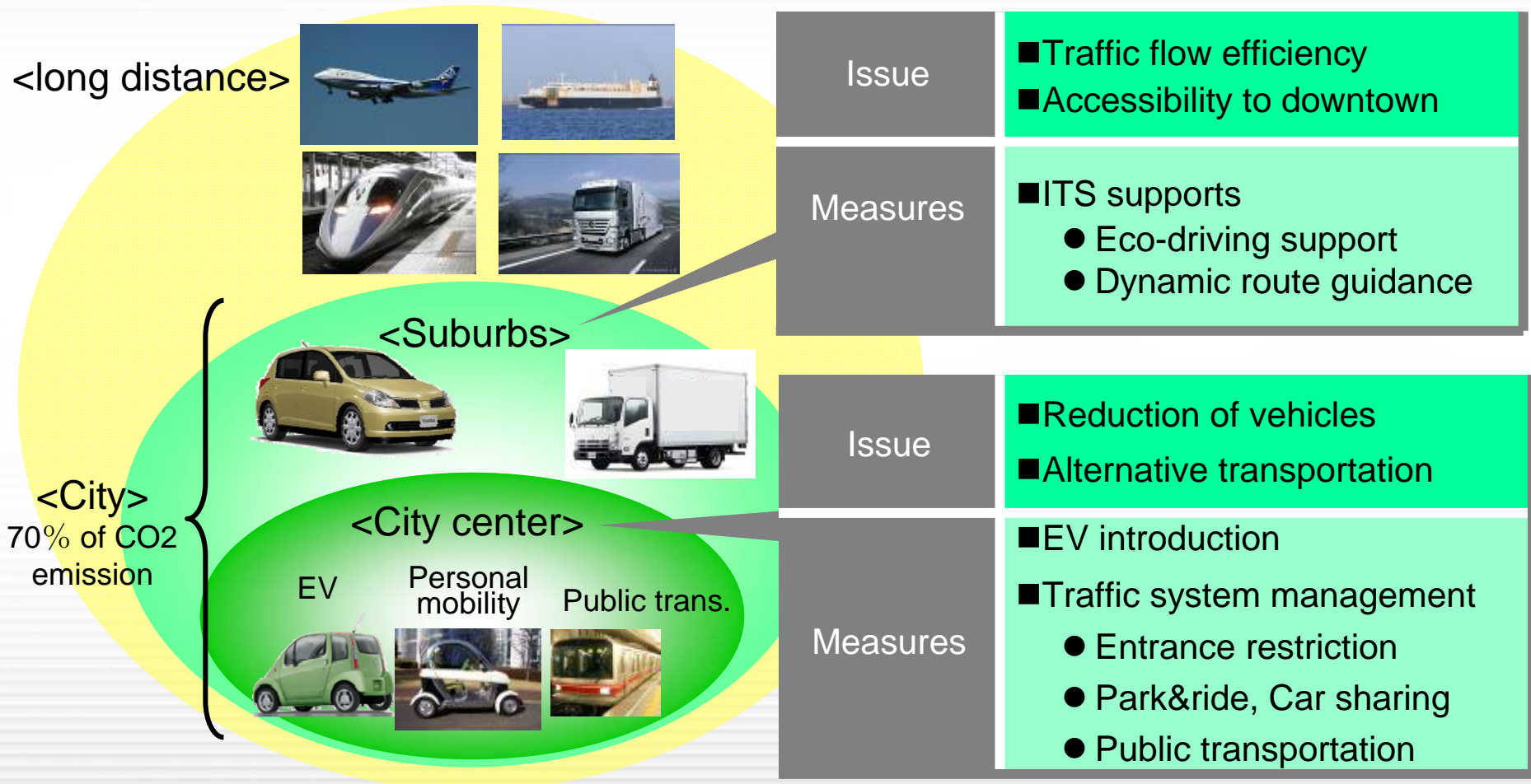
Yokohama-city and Nissan co-creation project

Low carbon model city concept

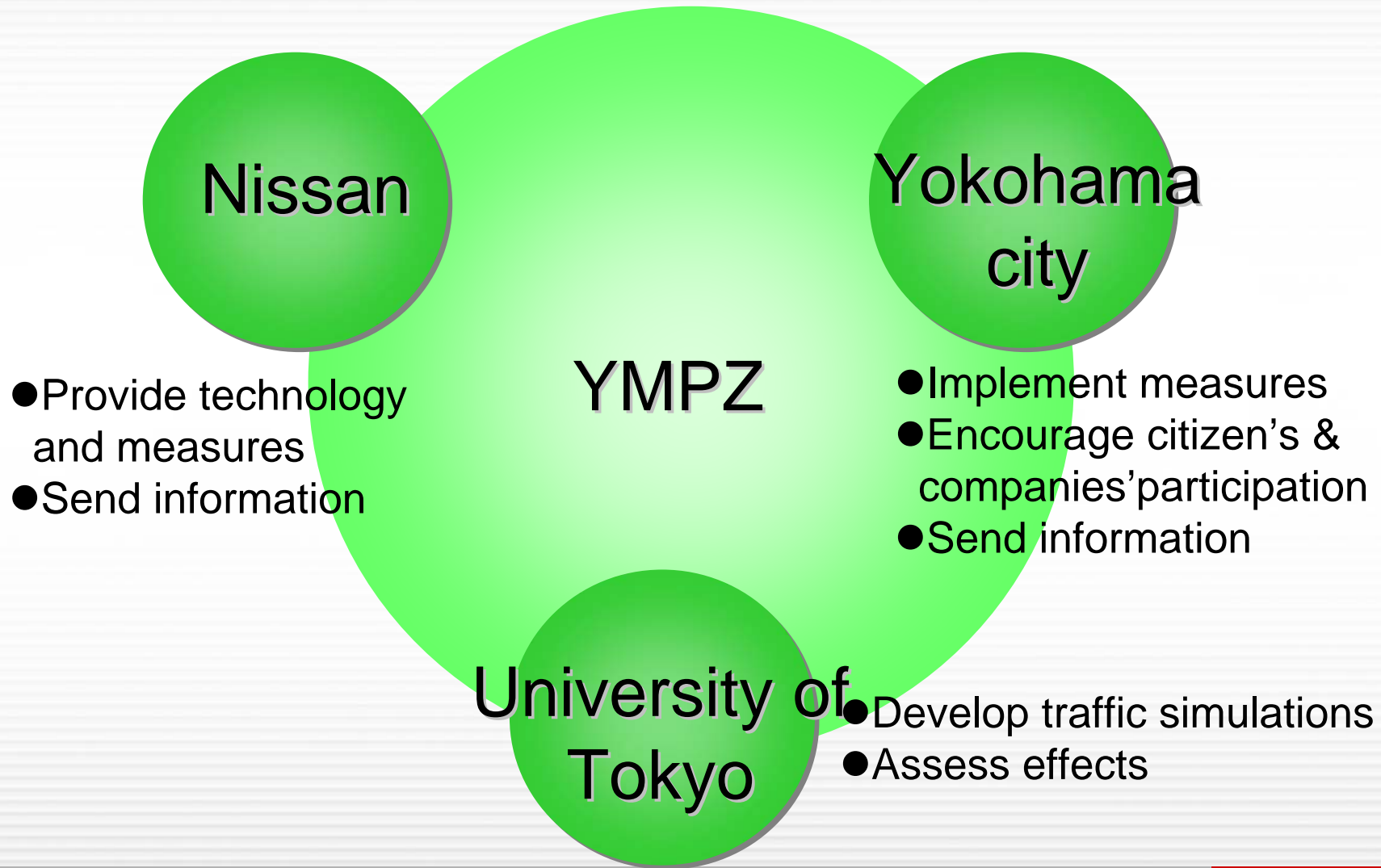
Yokohama Mobility “Project ZERO”

YMPZ Concept (City traffic management by EV+ITS)

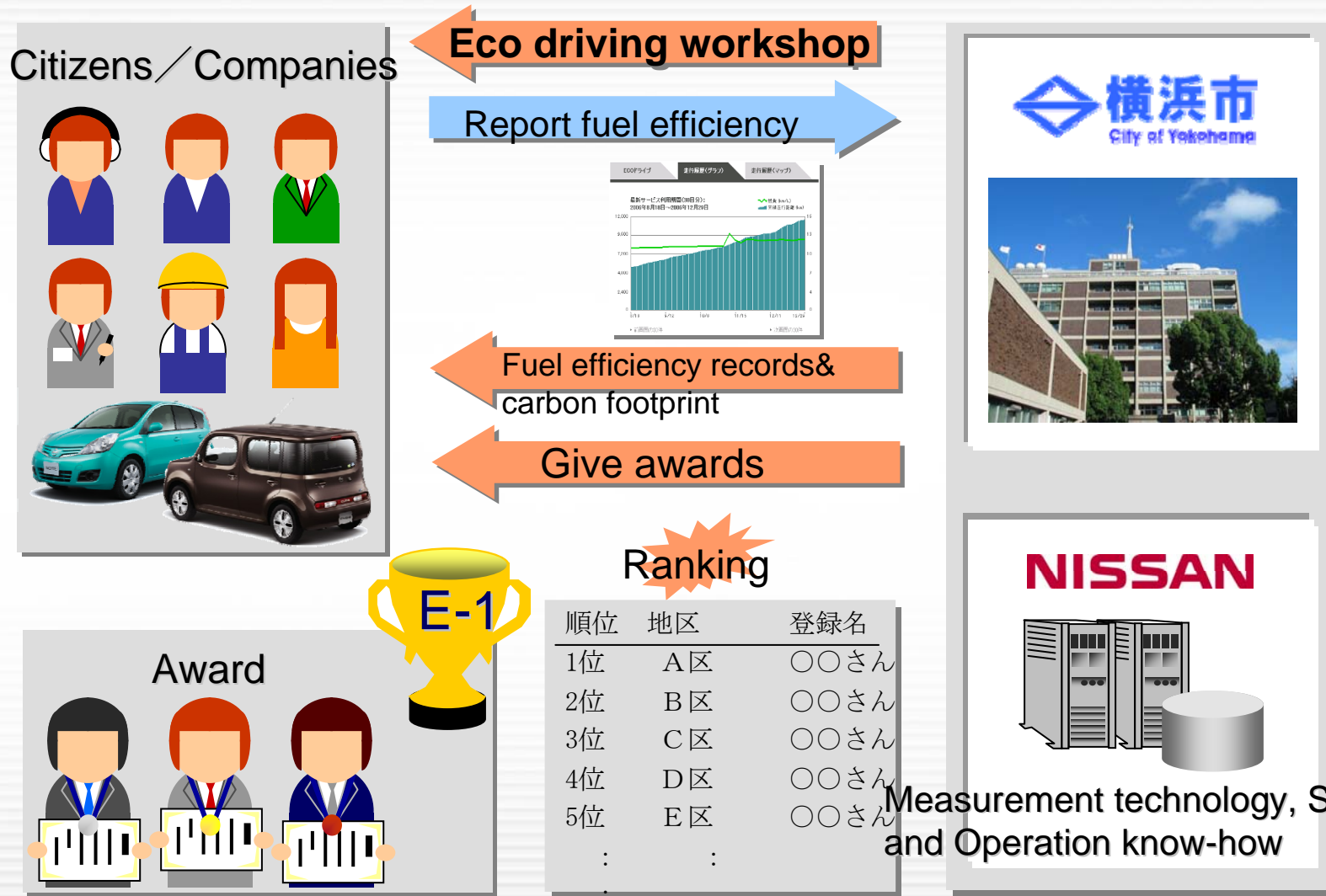
- CO2 reduction supported by ITS in suburban areas
- Zero emission by introduction of EV and traffic management in city center



Core Members and Roles

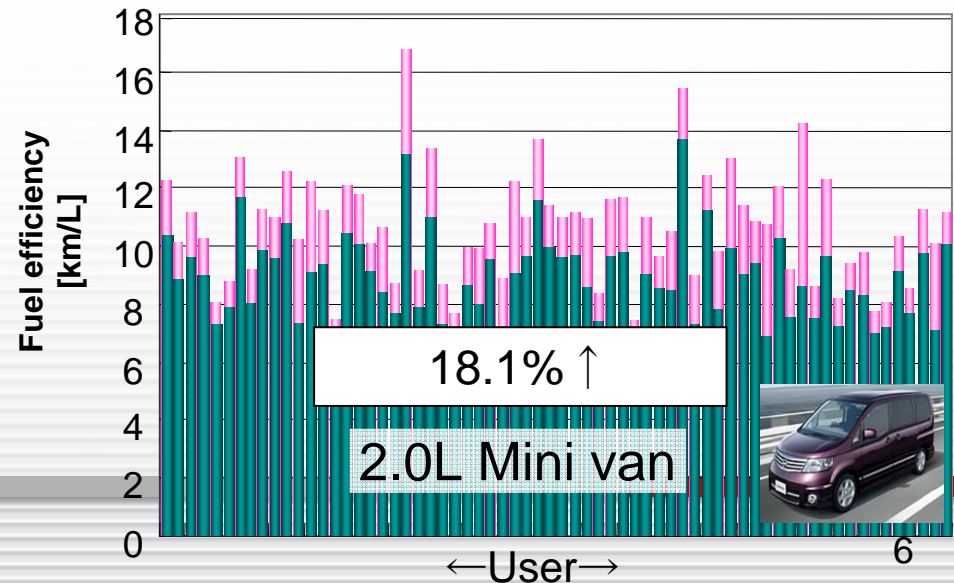
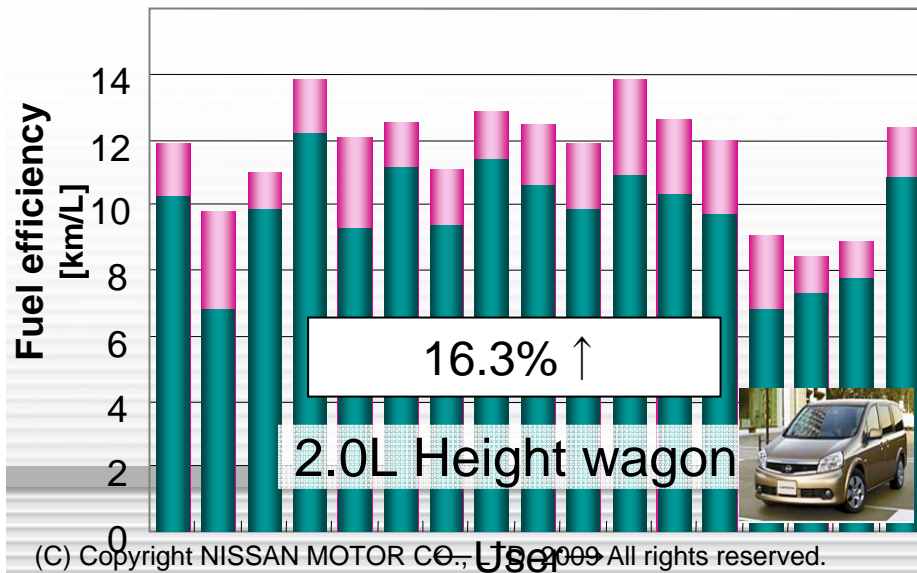
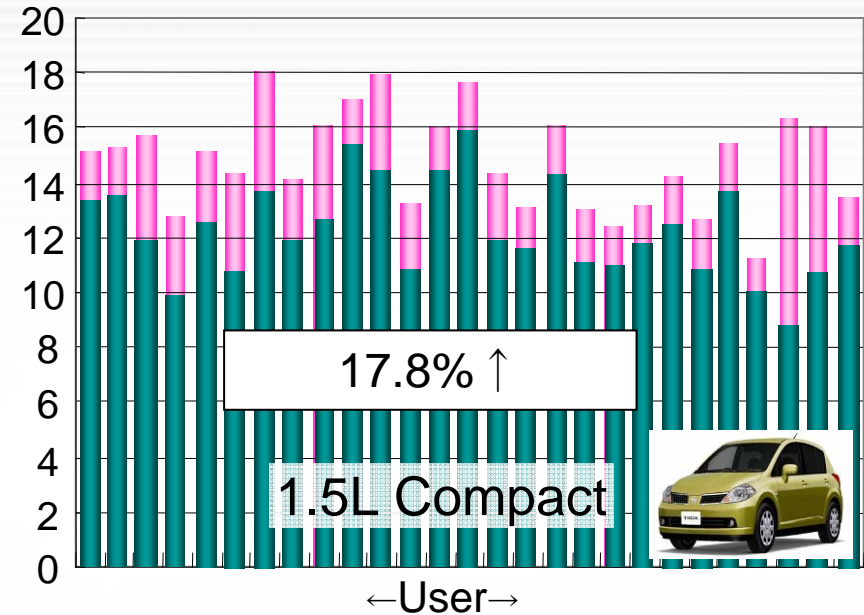
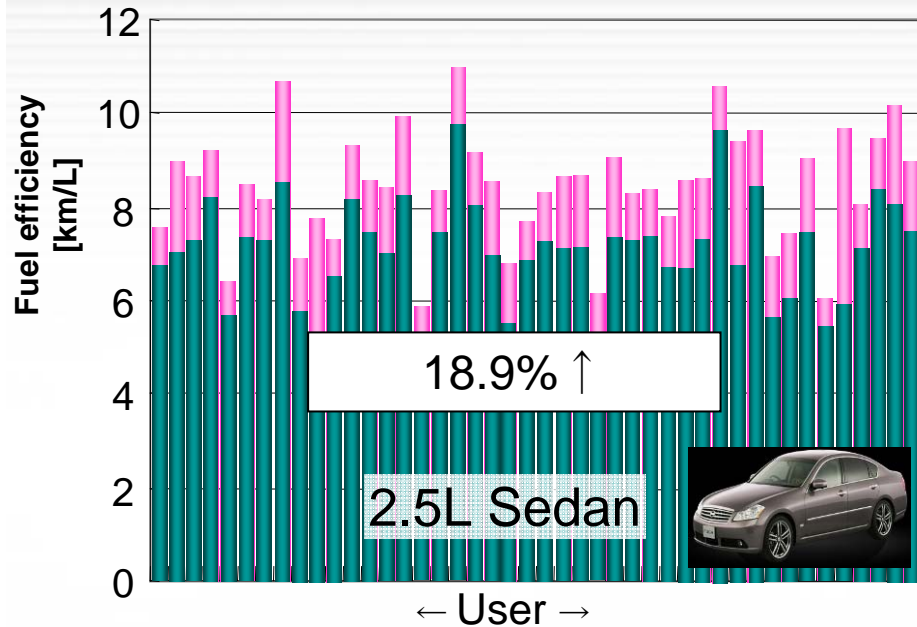


Measures (1) Eco-Drive Support(E1 Grand prix)

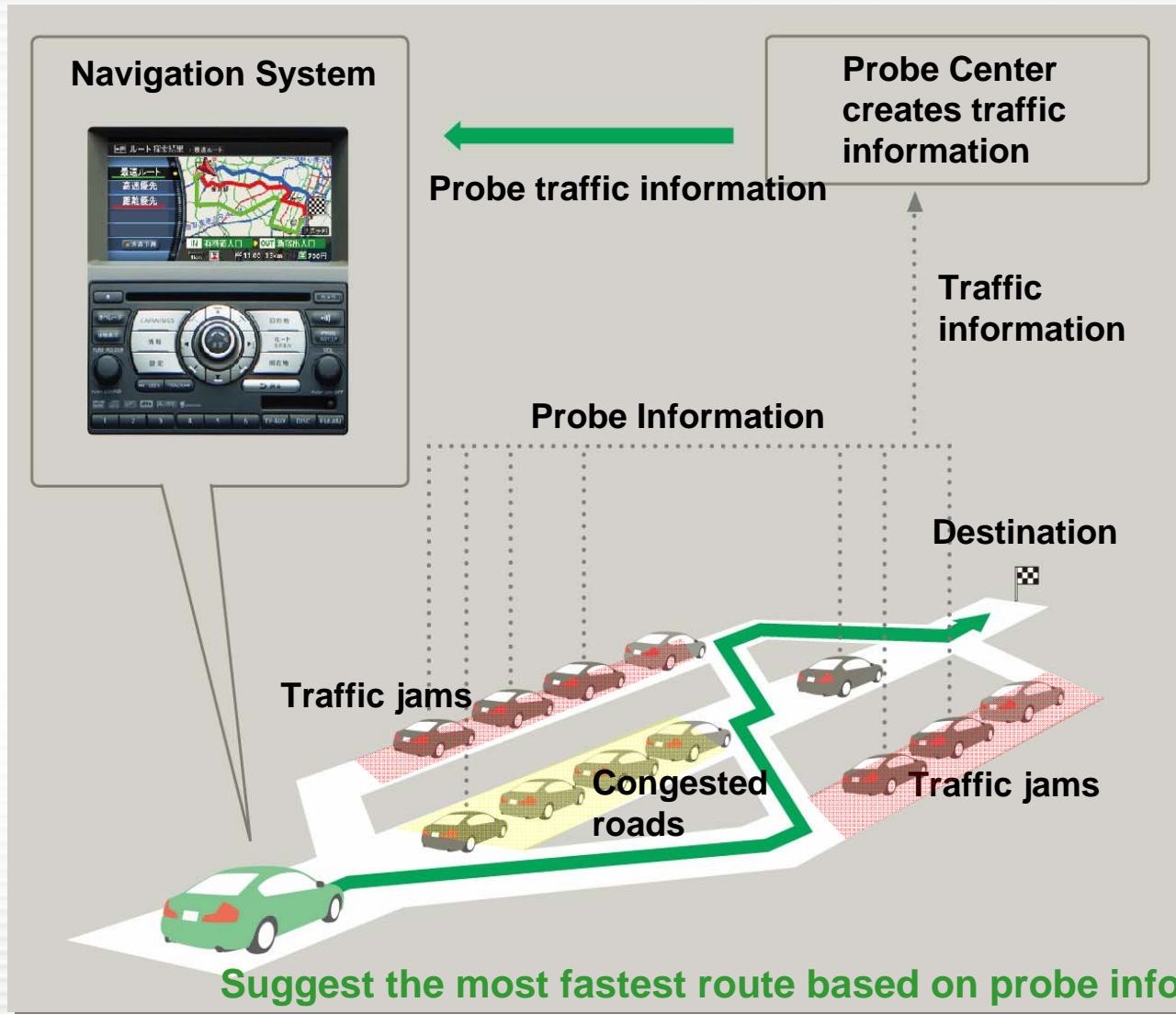


Eco-Drive Support effects

■ About 18% improvement of actual fuel efficiency with the use of EDS



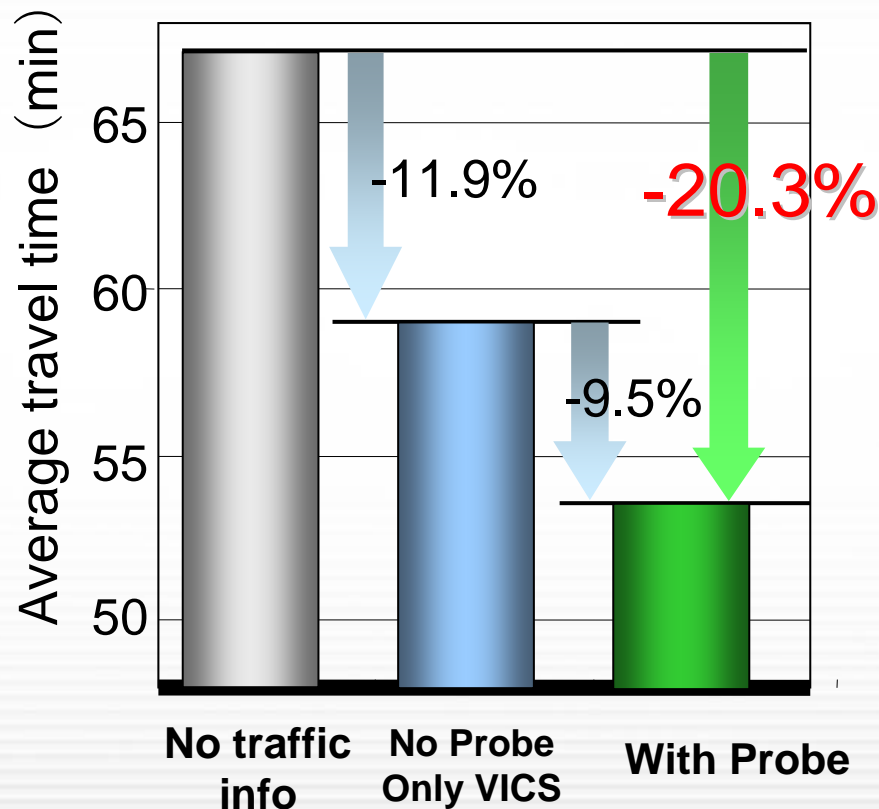
Measures (2) The Dynamic Route Guidance



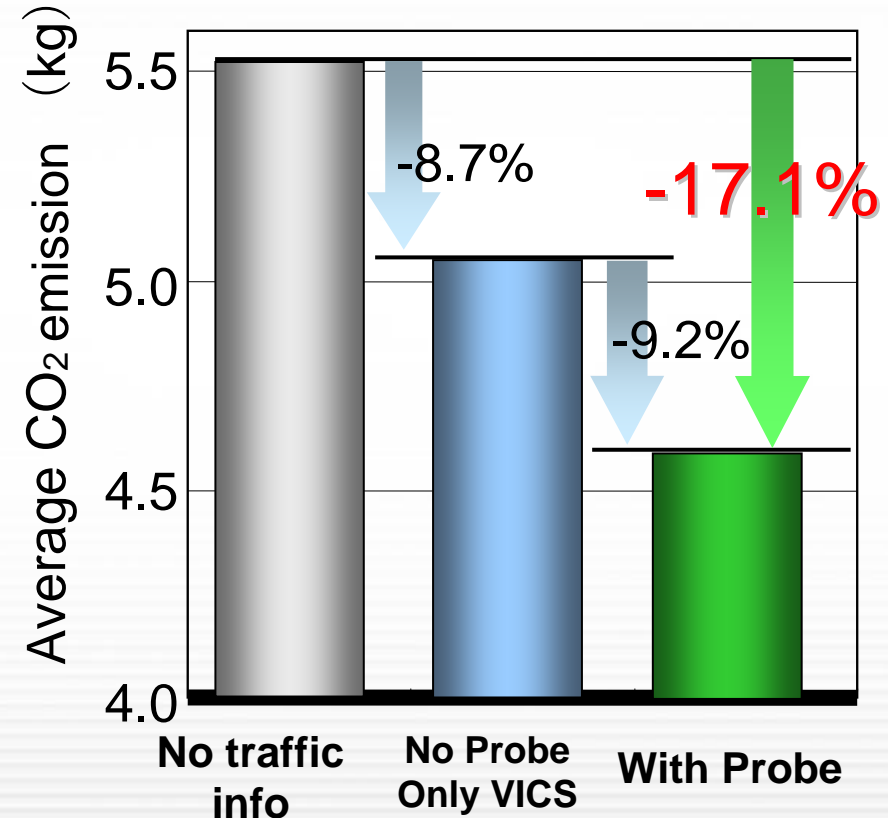
DRGS effects

- Achieve about 20% time reduction and 17% CO₂ reduction compared with navigation system offering no traffic info

Travel time reduction effect



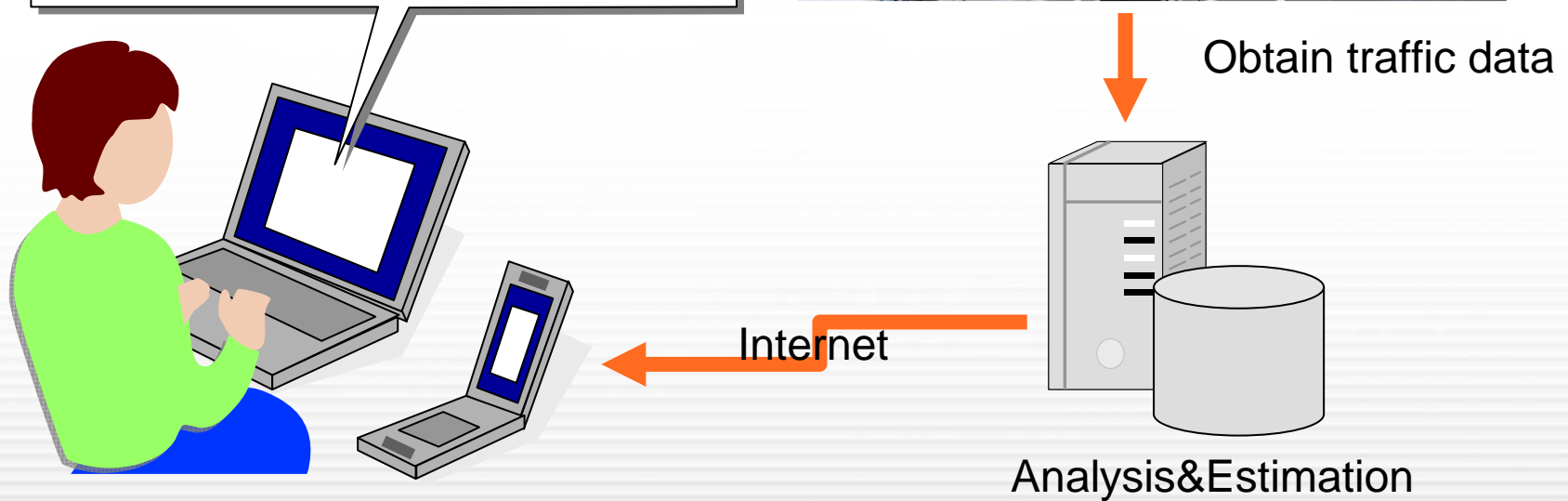
CO₂ reduction effect



※The latest actual driving test (In Yokohama city, Aug 2007)

DRGS—Web

出発 : 横浜		目的地 : 川崎		
	経路1	経路2	経路3	
出発	横浜 10:00	横浜 10:15	横浜 10:30	
	経由地 10:20	経由地 10:30	経由地 10:50	
到着	川崎 10:50	川崎 11:00	川崎 11:10	
所要時間	00:50	00:45	00:40	
交通費	¥0	¥230	¥0	
CO ₂ 排出量	6.3kg	5.5kg	5.2kg	

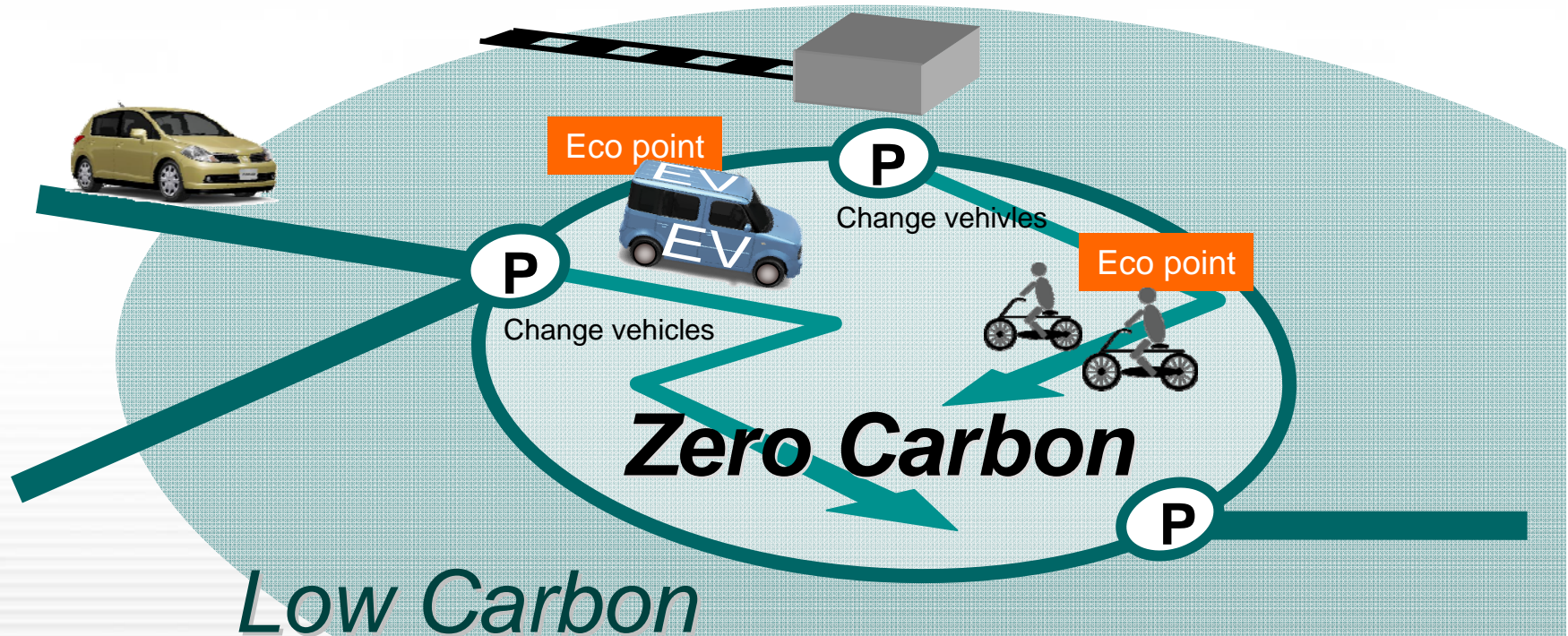


Measures (3) EV introduction and support



Traffic management in city center when introducing EV

- Review mobility in urban areas
 - Car sharing and cooperation with public transportation
 - Study how to make EV sharing service popular
- Assess comprehensively changes in travel behavior in each measure and effects of CO2 reduction.



Opportunities in cooperating with the public sector and local government (1)

- When the number of citizen's participation affects the effectiveness of measures, current local governments' systems will be highly effective.

Ex1) Make the most of information transmission root:

Municipal government → ward office → Citizens

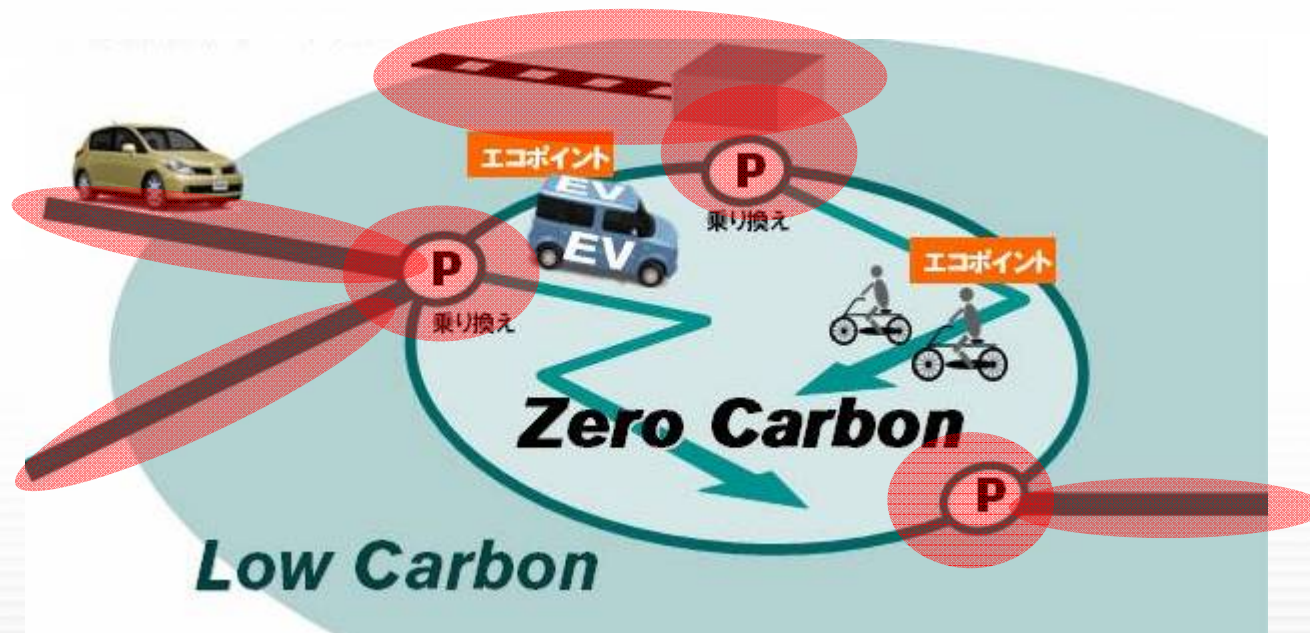
Ex2) Take advantage of current city councils and town meetings



Opportunities in cooperating with the public sector and local government (2)

■ Effective management of infrastructure

- ✓ In urban areas, local governments often manage the transportation infrastructure, such as public transportation, parking and road management. Therefore, it would be possible to manage infrastructure which is adapted to measures.



Infrastructure managed by local governments

Challenges and actions for private companies and local governments

- Look at the same direction
 - ✓ Have a same goal and process
- Have several measures linked efficiently
 - ✓ Need cross functional management
- Many company's participation
 - ✓ Require CSR spirit for companies

Thank you for your attention.