



2022 Japan Consumer Survey on Next-Generation Automobiles

Deloitte Tohmatsu Group

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Consumers' ideal specifications of PHEV/EV are not an 'empty wish'. It is quite likely that Next-Gen automobile markets will grow in Japan soon.

Summary of the Results

1

Attitude toward car ownership

- 50% of the domestic residents do not own a car while 70% of rural residents assume cars as their daily necessity. Whoever own cars as of now do not terminate car ownership.
- Mobility needs are satisfied with public transportations and privately-owned cars.
- Shared services of cars need to become more accessible, available and easily processed.

2

Purchase Behavior

- Cost is the most important factor for purchasing a car (Purchase cost, fuel efficiency, and maintenance costs)
- Japanese minicars are the most popular car segment. Small car segment prevails while SUVs follow.
- ICE and HEV are the most popular choices as of now. PHEV/EV are becoming popular too.
- Pay 2 to 2.5M JPY in cash is the typical purchase behavior. Deferred payment and auto loan are the minor methods.

3

Consumer profiles & Powertrain selections

- ICE is more preferred by rural residents while PHEV/EV are slightly more popular among urban dwellers.
- The higher income, the more PHEV/EV. The income level and acceptance level of PHEV/EV are proportional.
- EV is least accepted among rental house tenants; Installation of electric chargers are a factor.
- The environmentally friendliness and cheaper TCO of PHEV/EV are viewed favorably.

4

Implications for next-gen automobile market in Japan

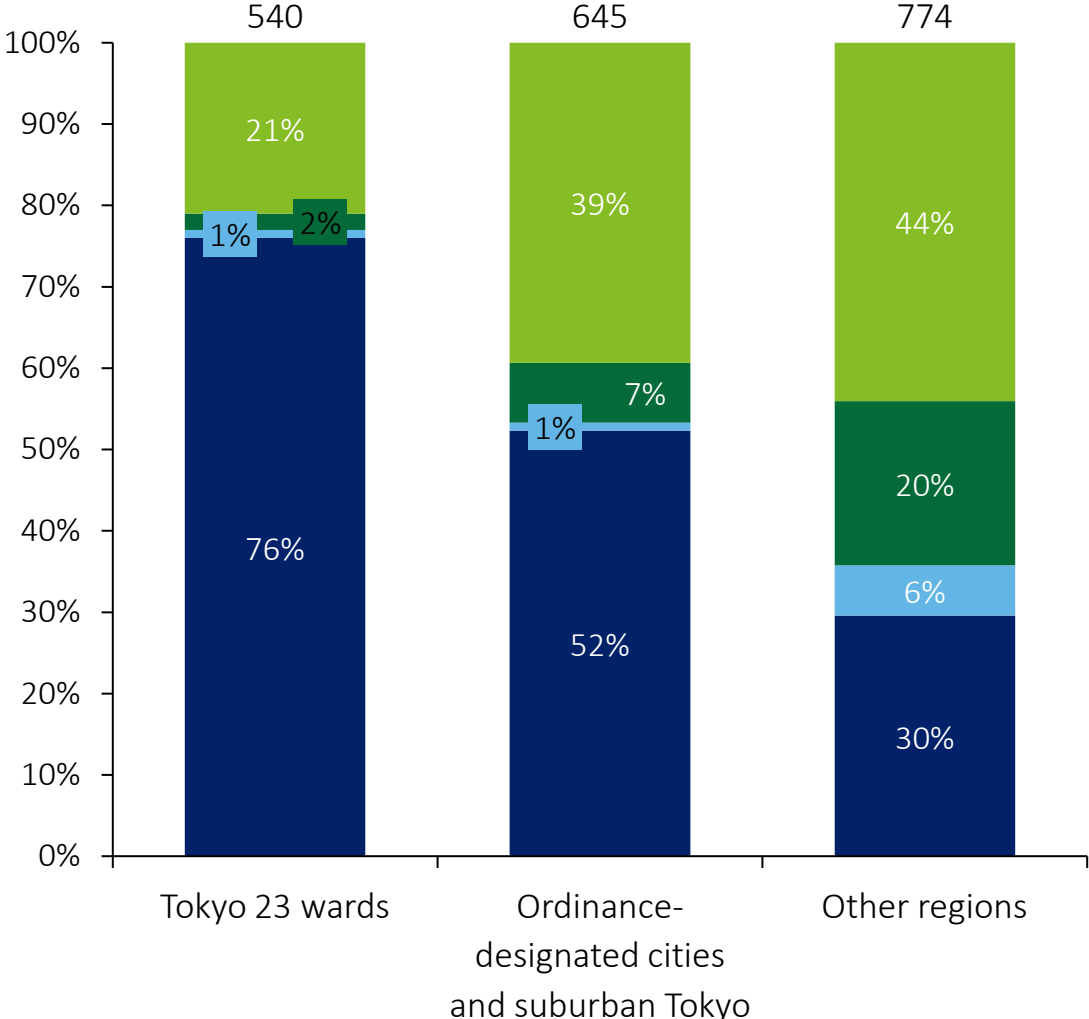
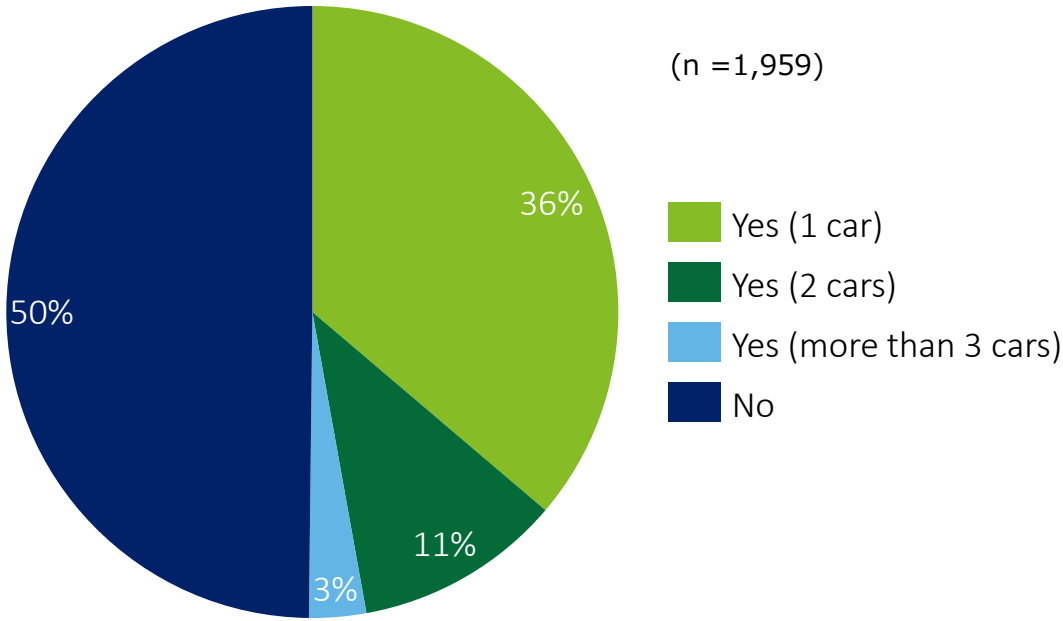
- More than 40% of consumers want to buy PHEVs and EVs in the future.
- PHEV/EV purchase are lagged behind due to (1) Expensive purchase price and (2) Unprevailing charging spots
- Ideals conditions to buy PHEV/EV; (1) Up to 2.5M JPY to buy (2) ≥30% of resale value 5 years later (3) Japanese minicar, Compact car segments (4) ≥500km mileage at a charge (5) Home electric charger (6) Less than 10 mins for quick-charging on the go

1 Attitude toward 'Car ownership'

50% of the domestic residents do not own a car, while 70% of rural residents own cars; car ownership is more pronounced in rural areas.

Car Ownership

Q: Does your family own car(s)?

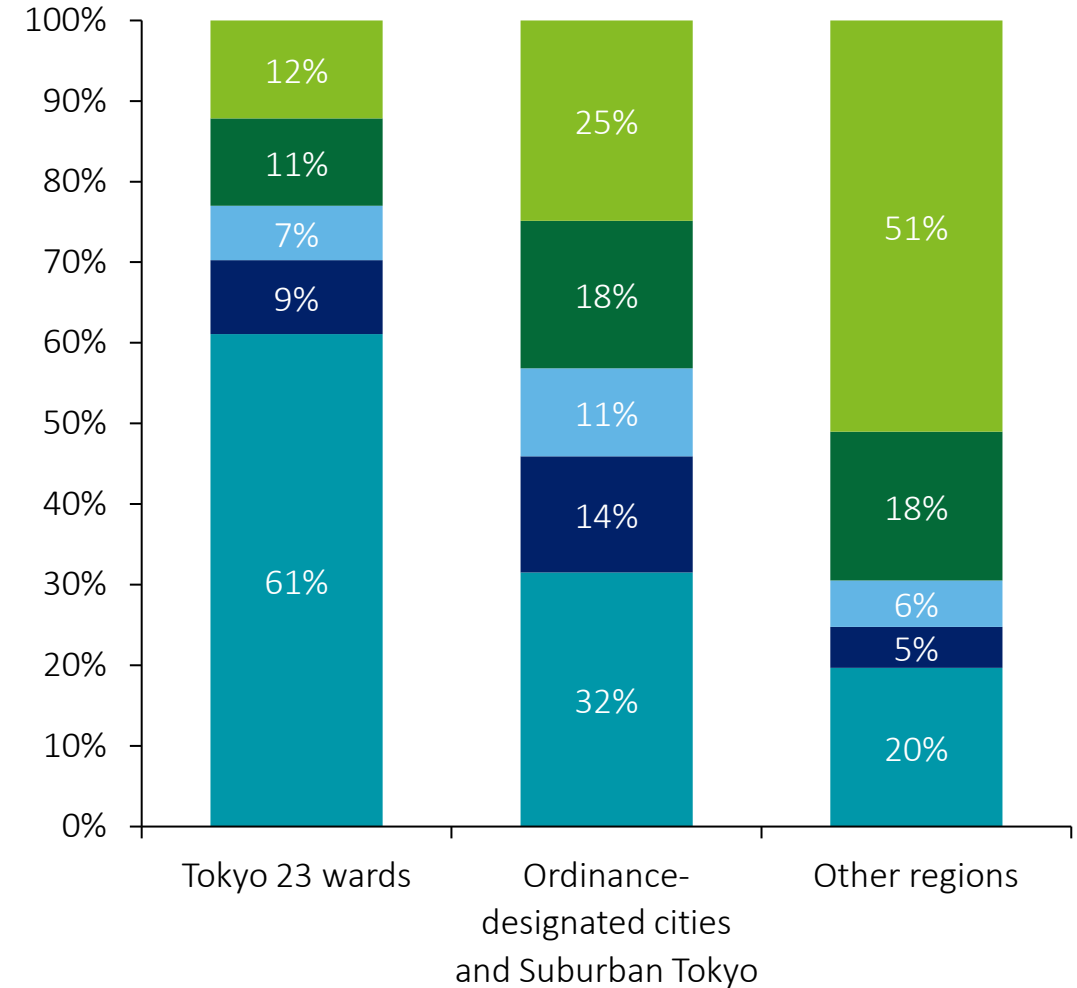
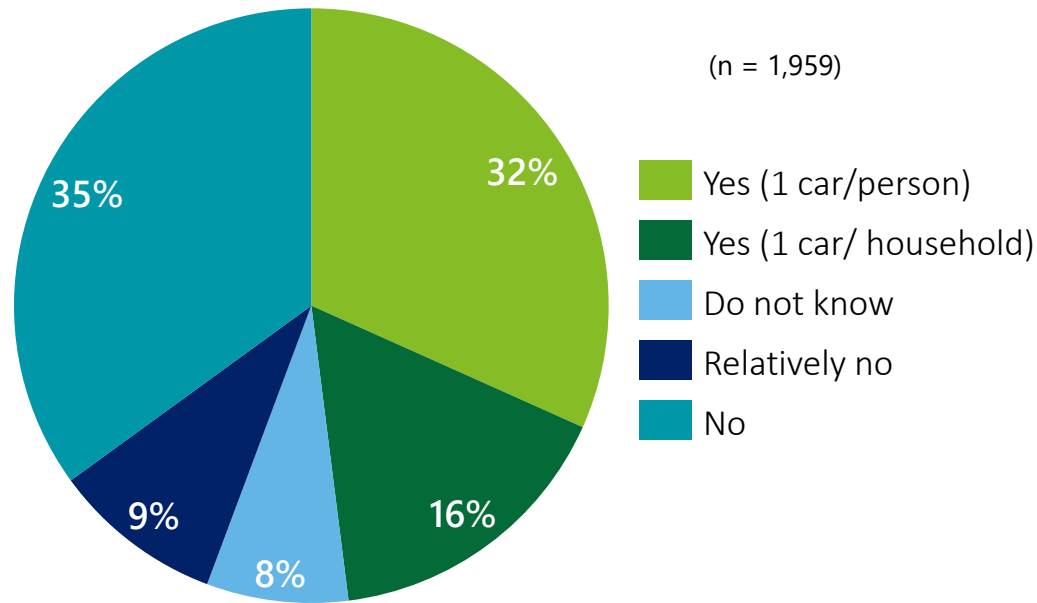


Respondent: People up to the age of 20 ~ 69 who hold driver's licenses nationwide

Most rural residents assume a car as a daily necessity while only a half do so nationwide.

Needs for cars

Q: Do you need car(s)?

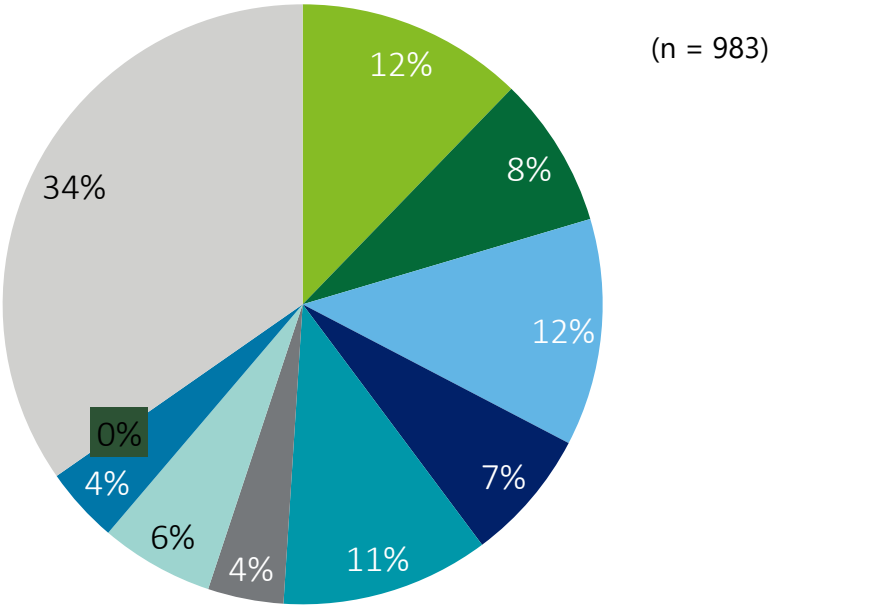


Respondent: People up to the age of 20 ~ 69 who hold driver's licenses nationwide

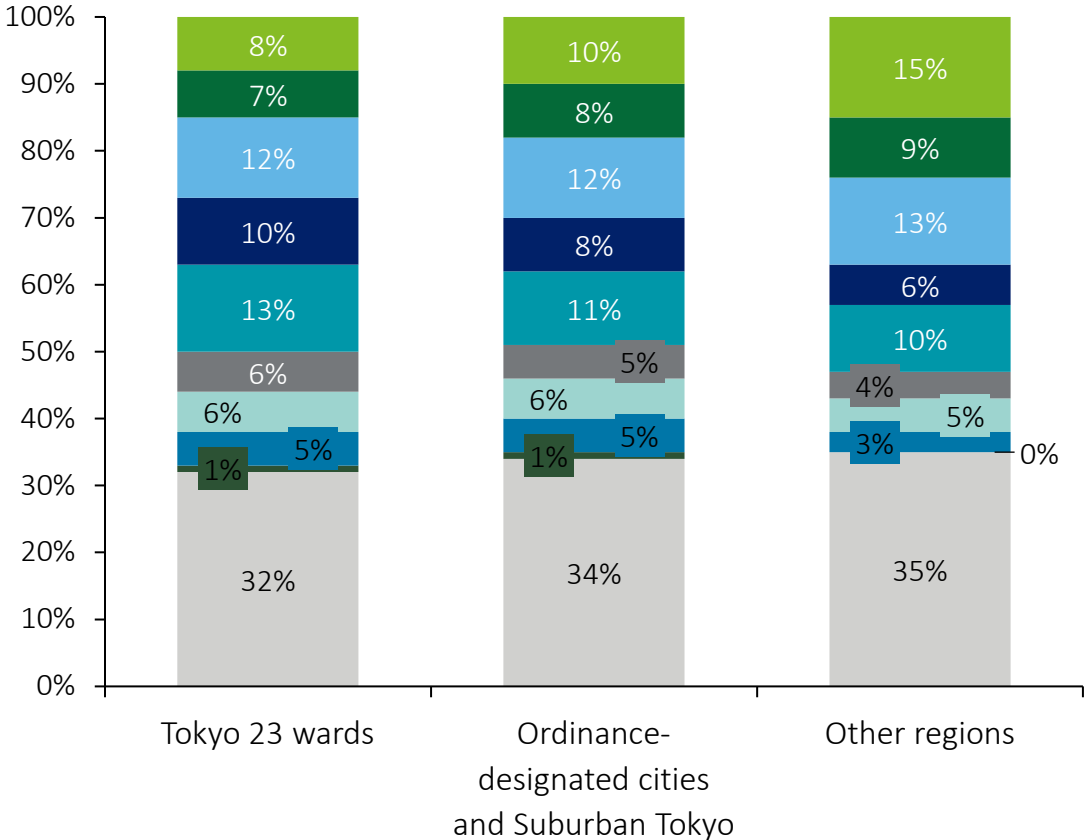
Rural residents lack means of transportation and own cars out of daily necessity, while urban residents own cars for other reasons.

Reasons to own car(s)

Q: What is the No.1 reason to own car(s)?



- Necessary for daily life
- No alternate transportations
- Cheaper than rental/sharing cars
- Status of car ownership
- Necessary for weekend leisure
- No favorite rental/sharing cars available
- Anxious of sharing cars with strangers
- Enjoy customizing cars
- Other reasons
- Nothing fit to my thought

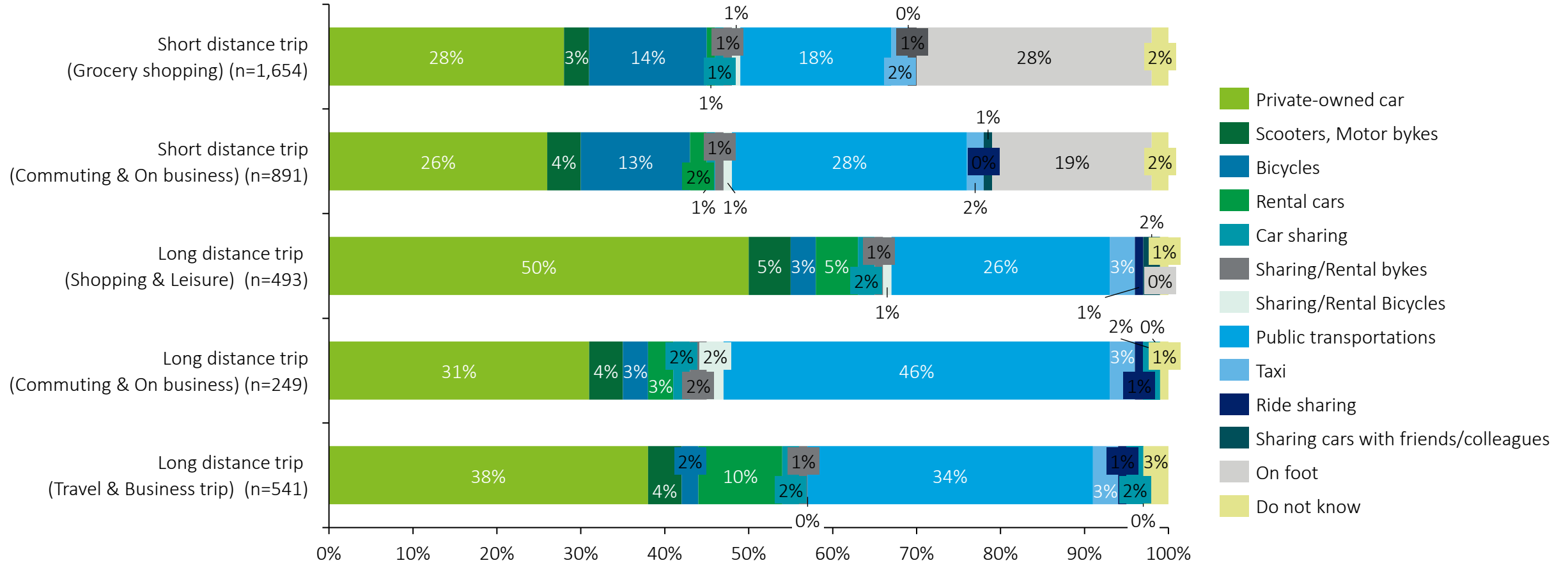


Respondent: People who currently own at least one car in their household

Public transportation and private-owned cars fulfill mobility needs; Car Sharing & Car Rental Services are minor choices for many people in Japan.

Mobility needs & methods

Q: What are your travel patterns and methods?

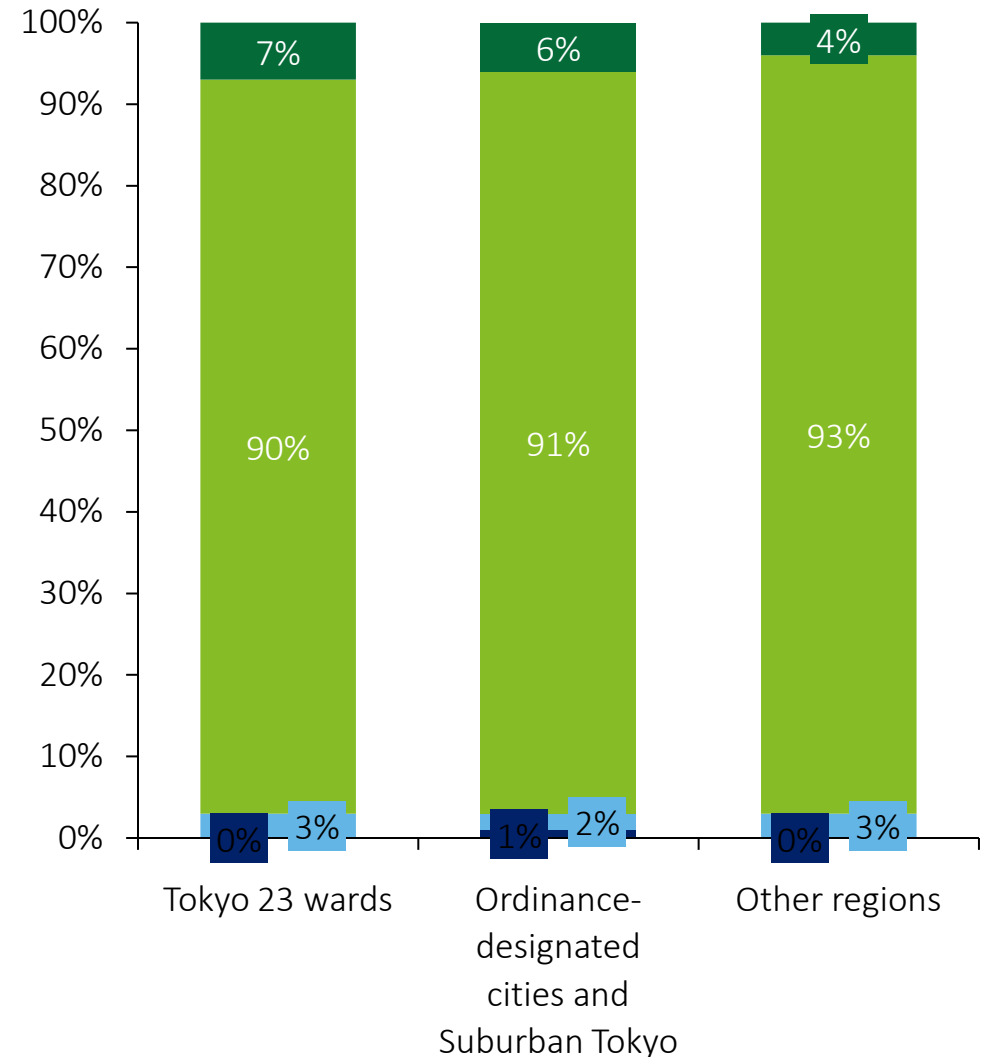
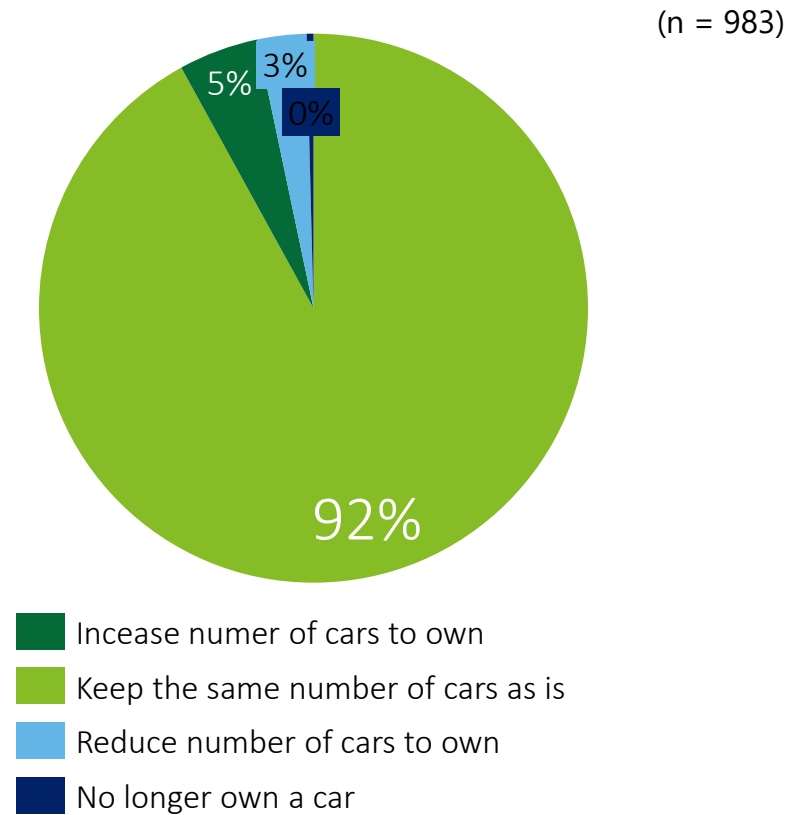


Respondents: Those who answered their travel patterns and means of travel (* the number of respondents differs depending on their travel patterns)

Car owners intend to keep the number of cars owned as is.

3 Years' plan of Car ownership

Q: What is your next 3 years' plan to own car(s)?



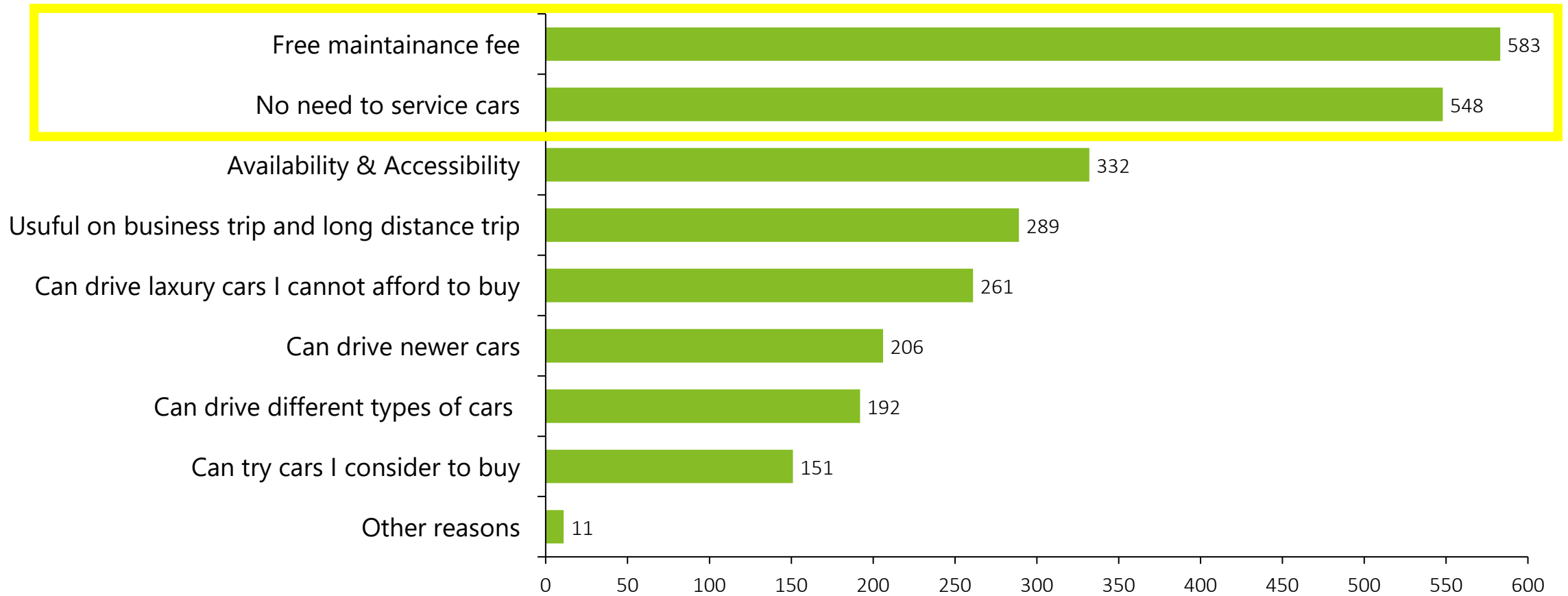
Respondent: People who currently own at least one car in their household

Free cost & maintainance fees are recognized as the benefit of car sharing and car rentals

Benefits of car sharing and car rentals

Q: What are the benefits of the shared-car services? (MA up to 5 choices)

(n = 980)



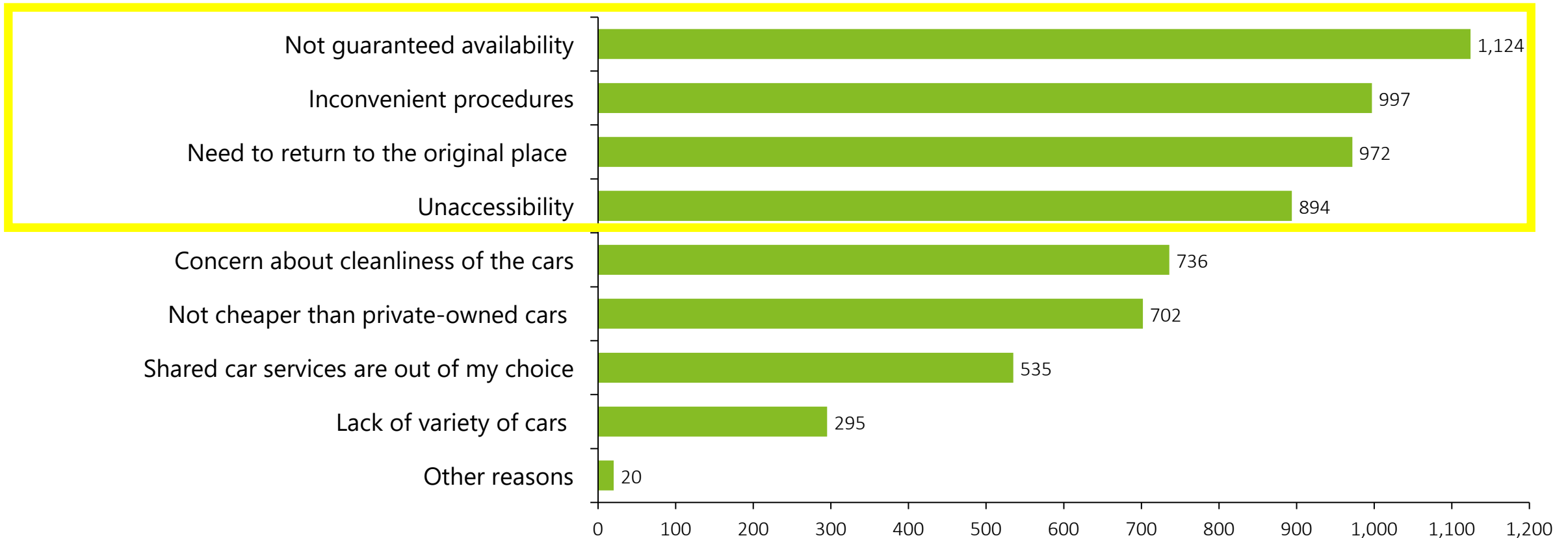
Respondents: Among consumers up to the age of 20 ~ 69 who hold a driver's license nationwide, those who answered that car-sharing services are beneficial

Lack of availability & inconvenient procedures are recognized as disadvantages of the shared car services

Disadvantages of "shared services" for cars

Q: What are the disadvantages of the shared-car services? (MA up to 5 choices)

(n = 1,959)



Respondents: Among consumers up to the age of 20 ~ 69 who hold a driver's license nationwide, those who answered that car-sharing services have disadvantages

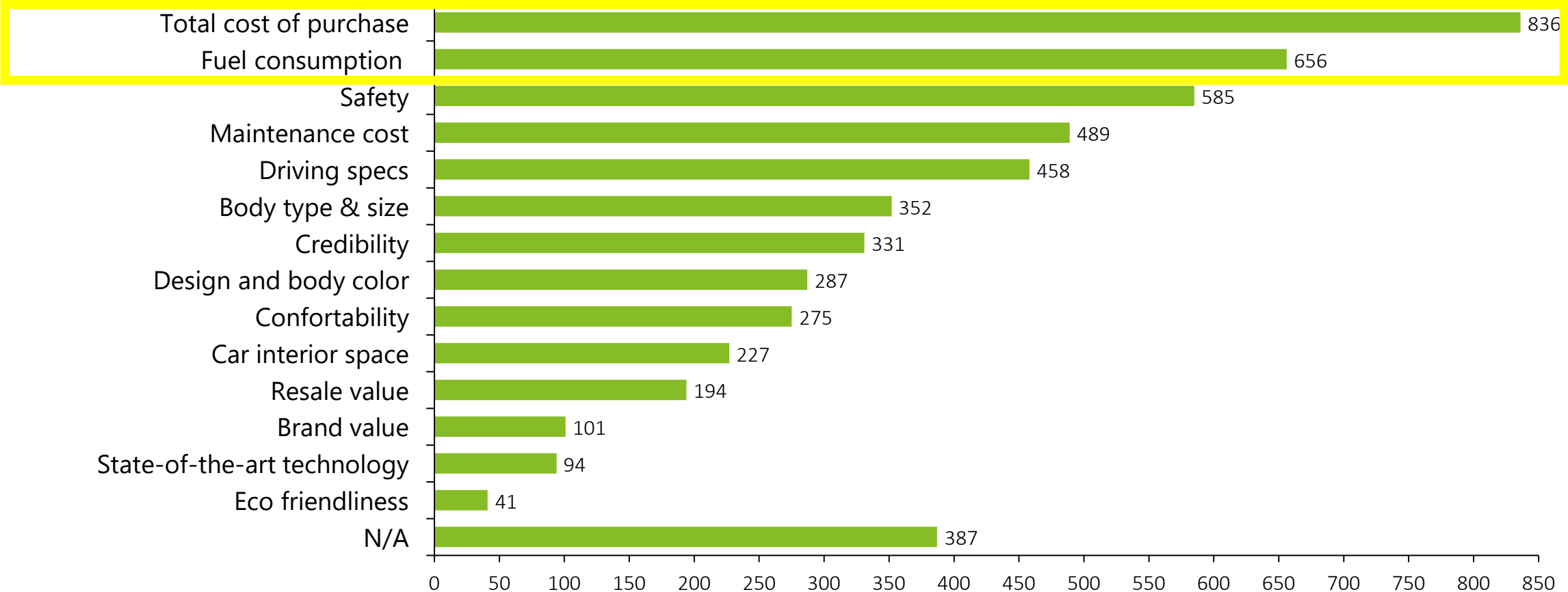
2 Purchase behavior

Purchase price is the most important factor. In addition, TCO, such as fuel consumption and maintenance fees also weighed heavily.

Important factors of purchasing a car

Q: What are the important factors of buying a car? (MA up to 5 choices)

(n = 1,062)

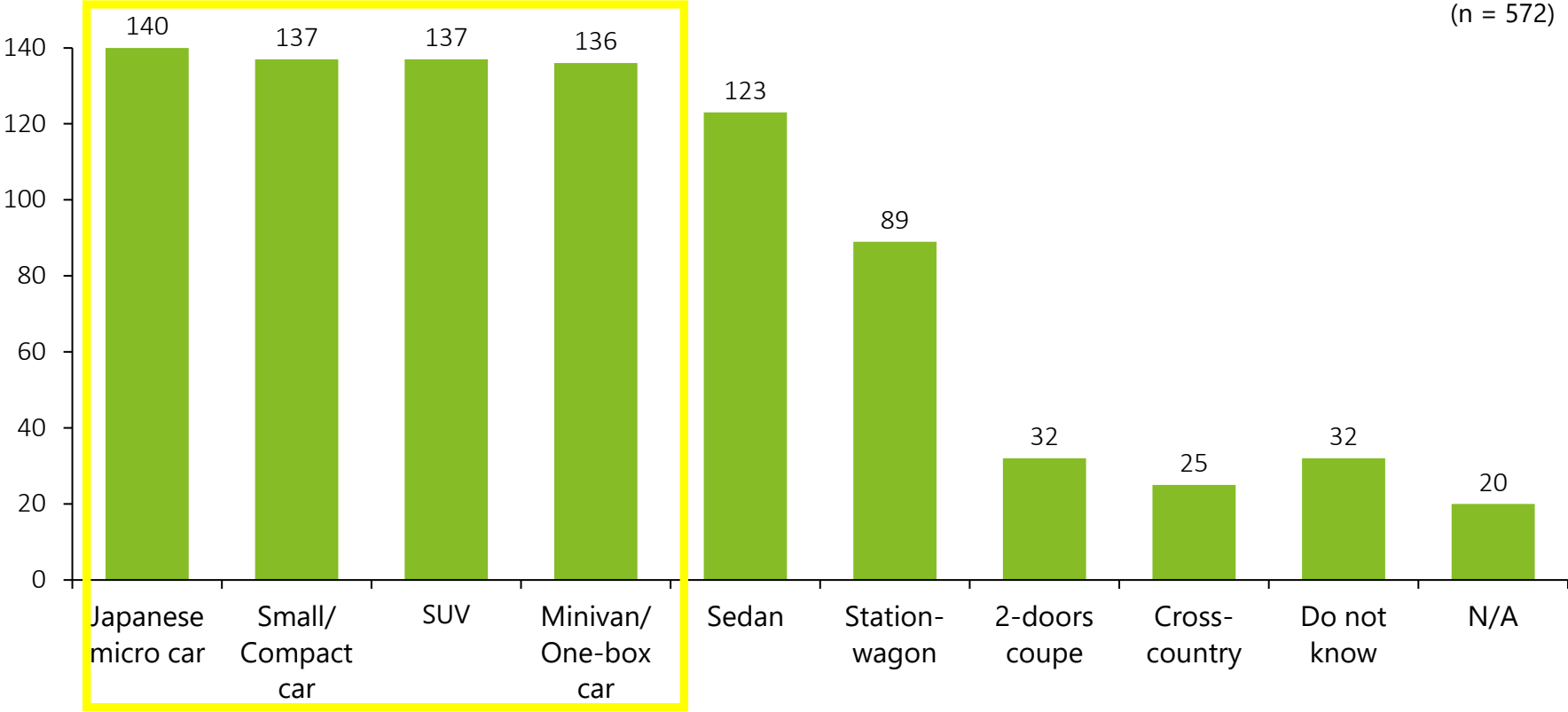


Respondent: Among consumers up to the age of 20 ~ 69 who hold a driver's license nationwide, those who plan to purchase a car in the future

Japanese micro-car is the most popular. Small car(≒ A seg) and SUVs/minivans follow. Japanese consumers prefer small cars.

Body type of a car to buy

Q: Which body type(s) of cars do you consider to buy within the next 3 years? (MA up to 3 choices)



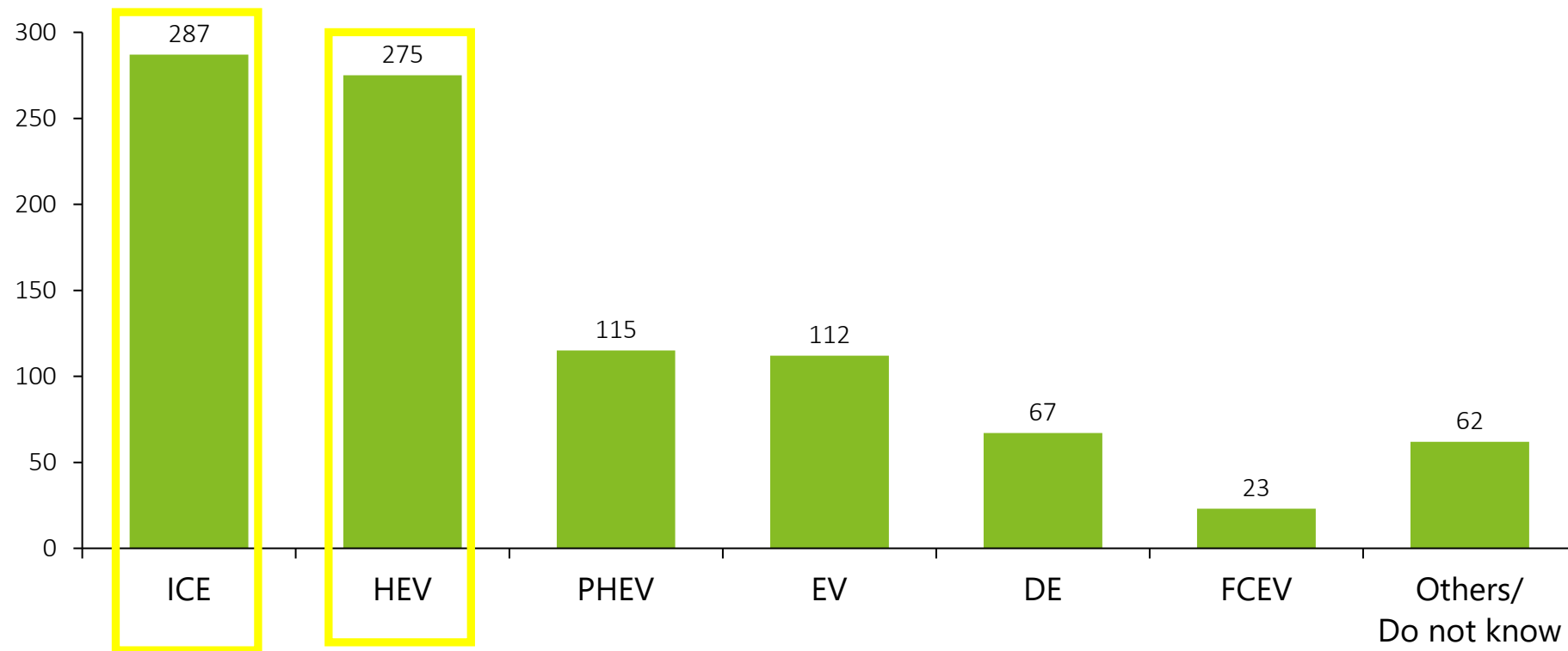
Respondent: Among consumers up to the age of 20 ~ 69 who hold a driver's license nationwide, those who plan to purchase a car within the next 3 years

ICE and HEV are the choices as of now, while PHEV and EV are becoming popular.

Selection of the Powertrains

Q: Which powertrains are you going to buy within the next 3 years? (MA)

(n = 572)



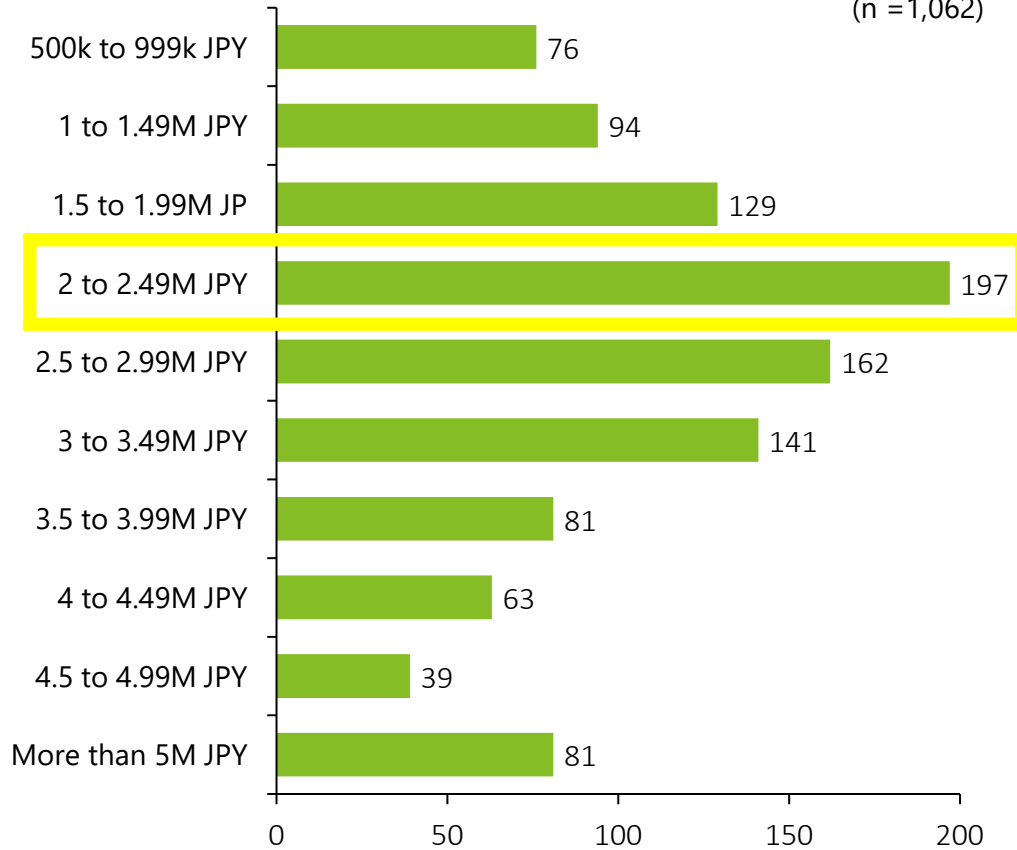
Respondent: Among consumers up to the age of 20 ~ 69 who hold a driver's license nationwide, those who plan to purchase a car within the next 3 years

'2 to 2.5M JPY in cash' is the typical budget payment method. Monthly payment and interest rates are less concerning than the total purchase amount.

Budget and payment method

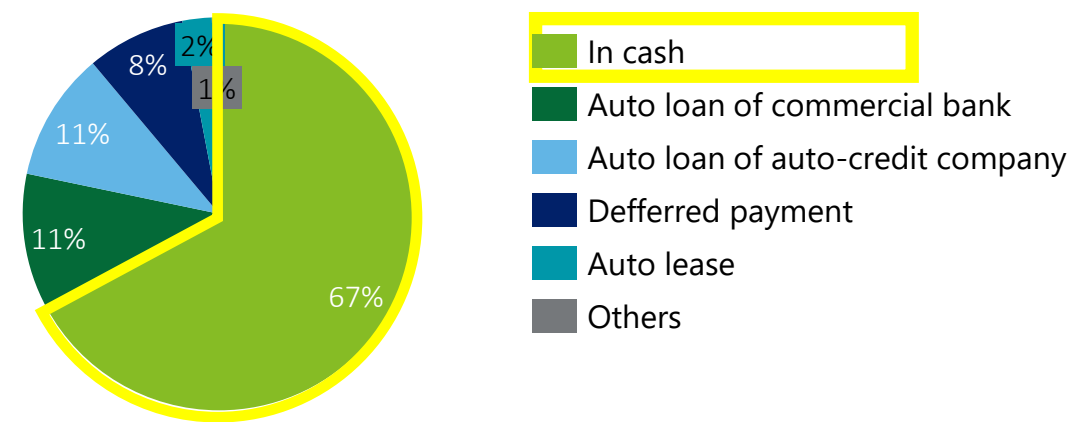
Q: What is the expected purchase price? (SA)

(n = 1,062)



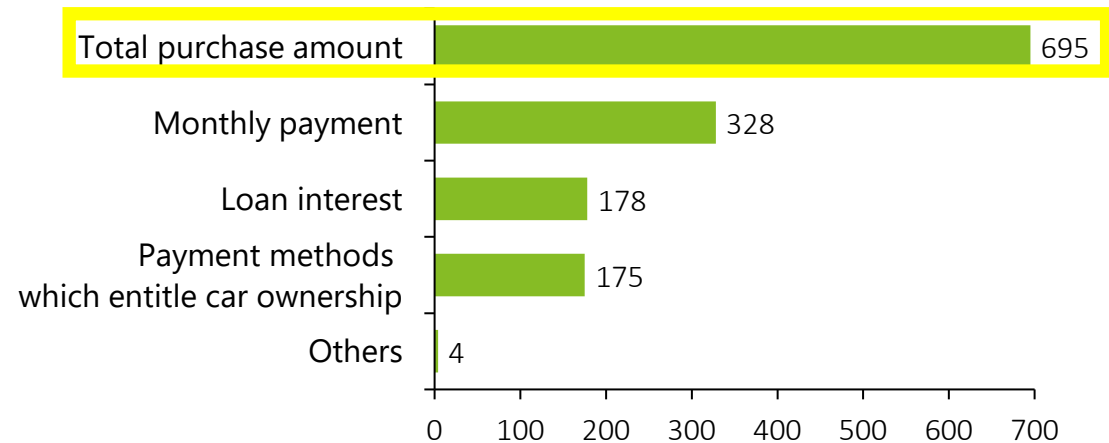
Q: What is the expected payment method? (SA)

(n = 1,062)



Q: What do you value in your payments? (MA)

(n = 1,062)

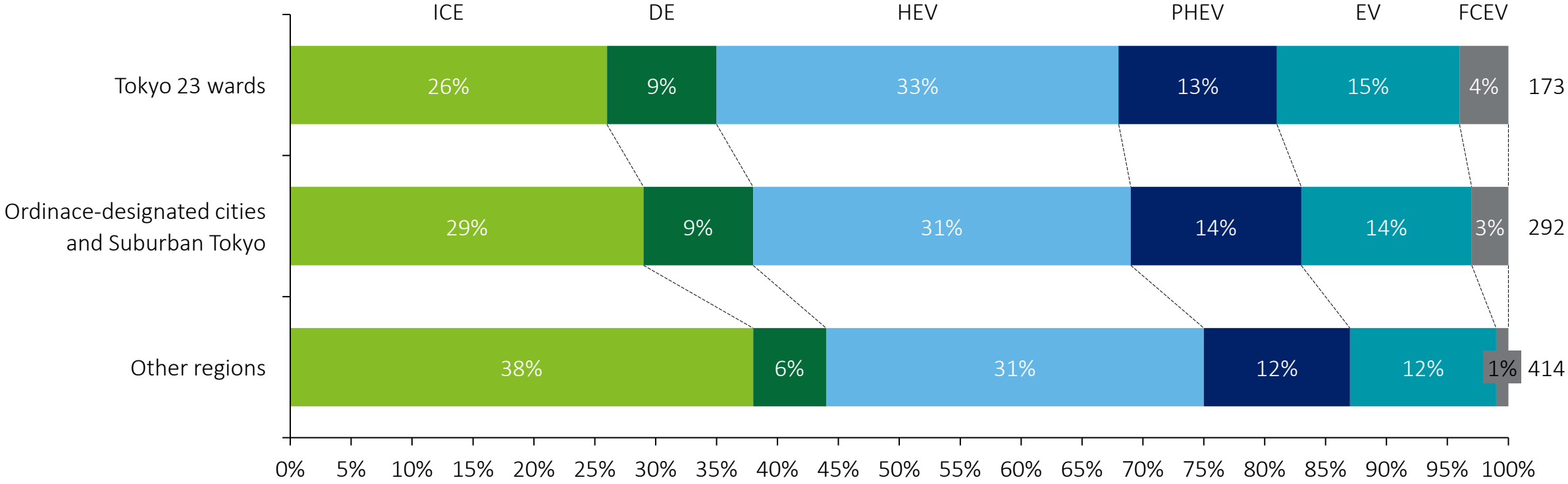


Respondent: Among consumers up to the age of 20 ~ 69 who hold a driver's license nationwide, those who plan to purchase a car in the future

3 Consumer profiles and powertrain selections

ICE is more popular in rural areas while PHEV/EV are slightly more accepted in urban areas.

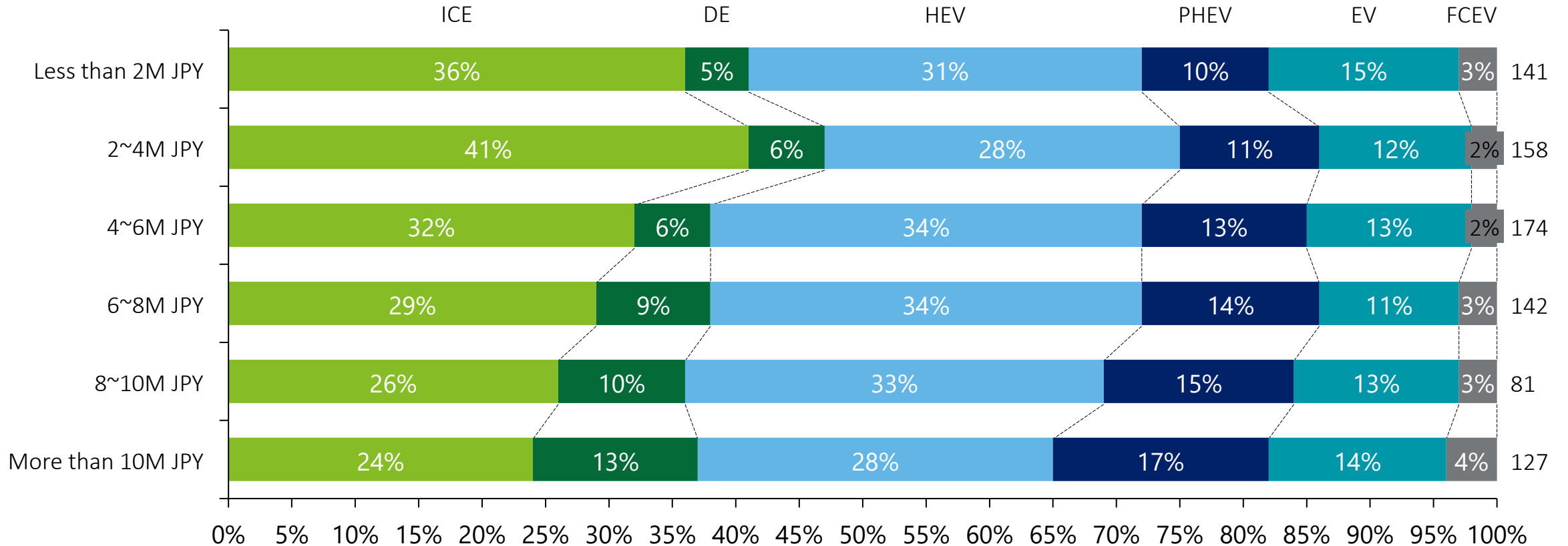
Powertrain choices and resident areas



Respondent: Among those who plan to purchase a private car in the future, those who answered their own attributes (area of residence)

Higher incomes, more PHEV/EVs. Subsidies are widely available for purchase of EVs but the prices would be still not affordable for lower income earners.

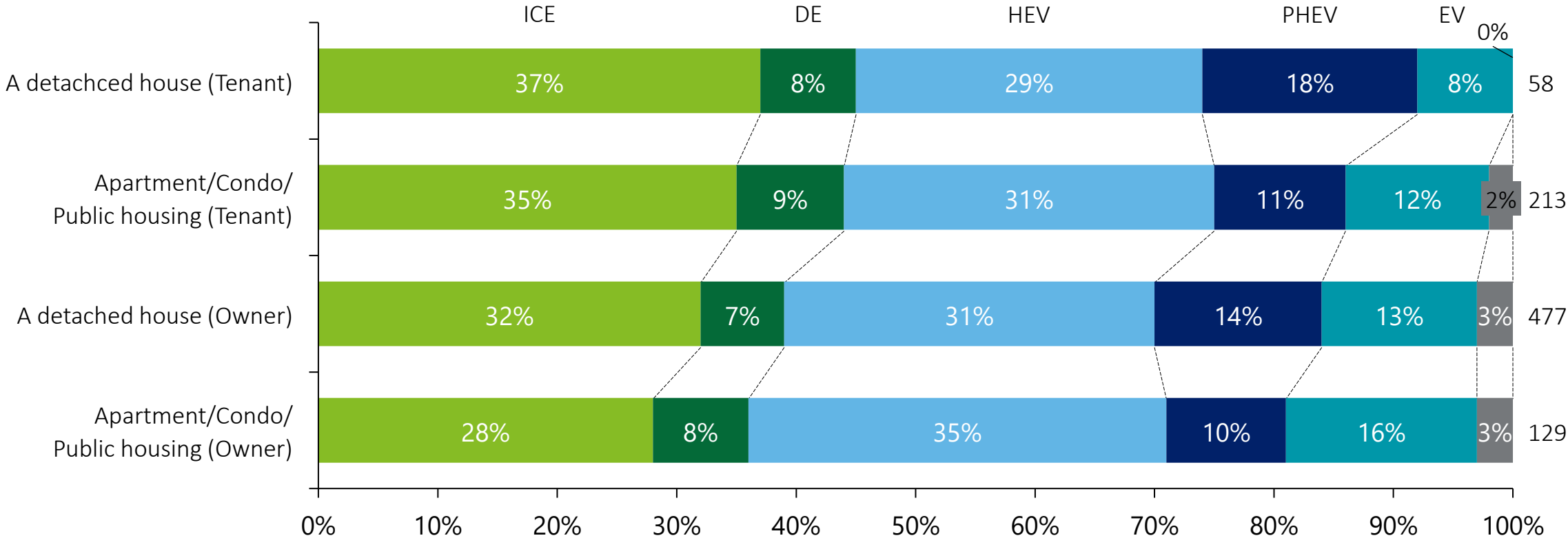
Powertrain choices and income levels



Respondents: Those who are planning to buy a private car in the future and who answered their own attributes (annual income)

Ratio of EV purchasers is relatively low among rental-house tenants. Difficulty to install the electric charger at home would be an obstacle for them to buy EV.

Powertrain choices and resident status



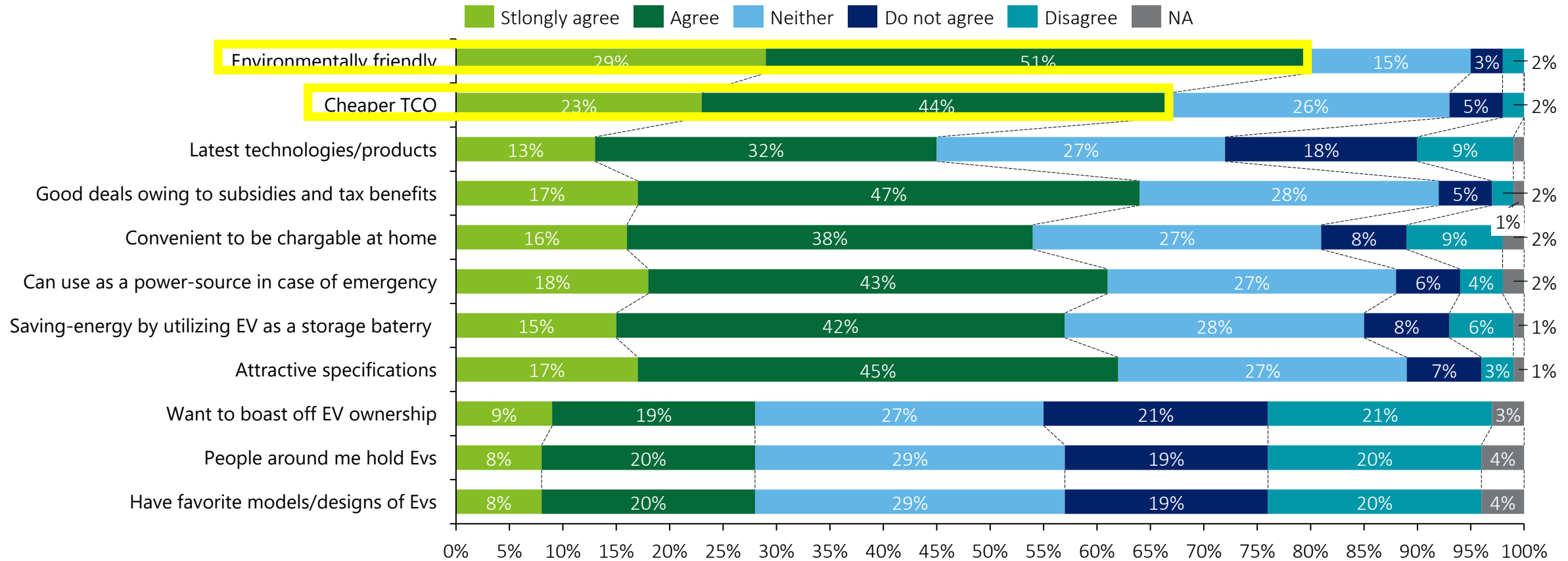
Respondent: Among those who plan to purchase a private car in the future, those who answered their own attributes (type of residence)

Environmentally friendliness and cheaper TCO of PHEV/EV are highly appreciated.

Reasons to select PHEV/EV

Q: Why did you /are you going to buy PHEV/EV? Rate each opinions toward PHEV/EV.

(n = 636)



Respondent: Among 20 ~ 69 year-old consumers nationwide who hold a driver's license, those who answered that they would like to purchase PHEVs/EVs someday (including those whose timing is undecided)

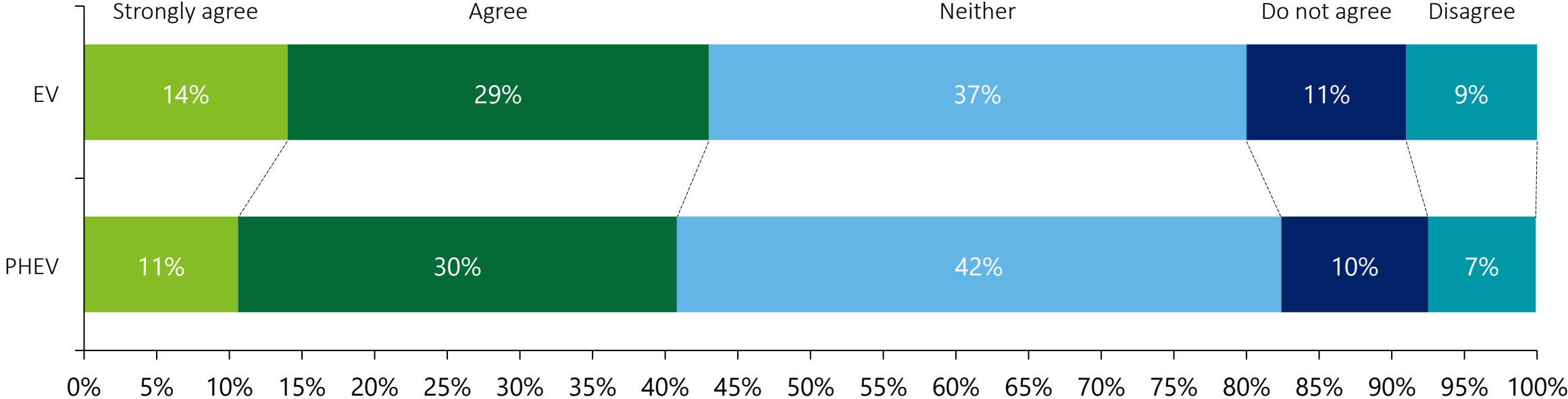
4 Implications for next-gen automobile market in Japan

40% want to buy PHEVs and EVs someday, which shows potential growth of the market.

Intention to buy PHEV/EV in the future

Q: Are you interested in an EV/PHEV and do you want to buy it someday?

(n = 1,062)



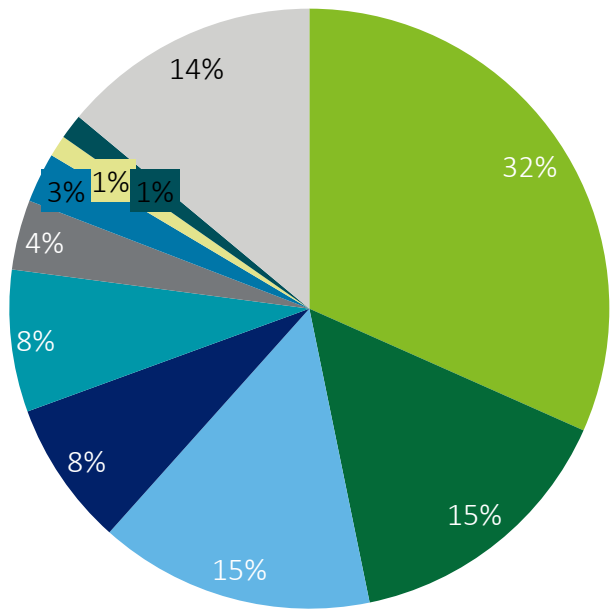
Respondent: Those who plan to buy a private car in the future

Expensive purchase prices and underdeveloped charging infrastructure are the main concerns to buy PHEV/EV in Japan.

Concerns

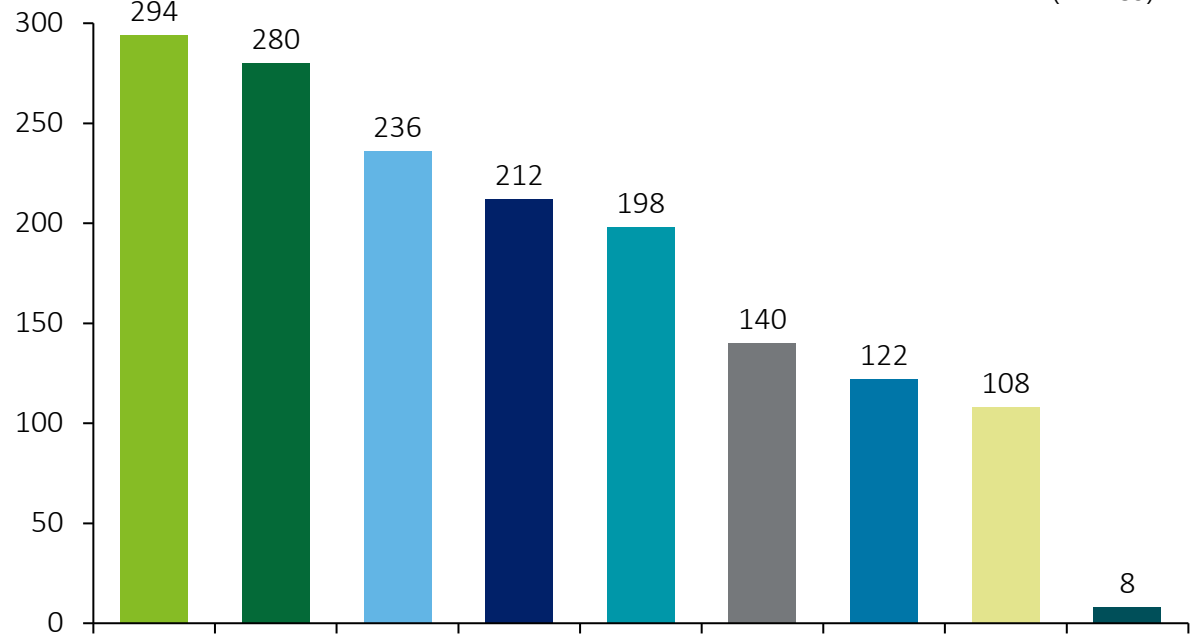
Q: Why are PHEV/EV/FCEV not included in your purchase list? (MA)

Reason for not buying PHEV/EV (%)



- Purchase price
- Not enough charging points
- No best body type and size
- Safety
- Others
- Anxiety in purchase process
- Mileage
- Time to charge
- Low resale value
- NA

Reasons for not buying PHEV/EV (n) (n = 459)

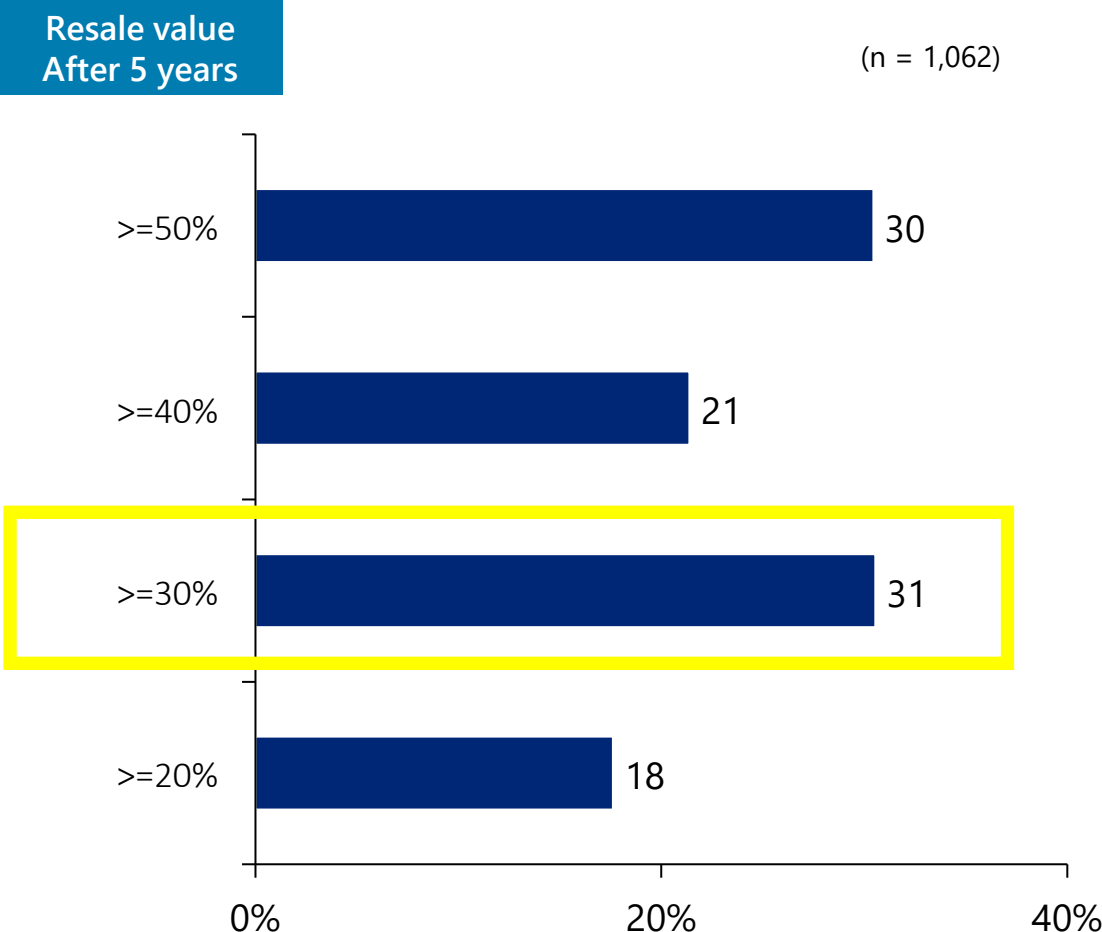
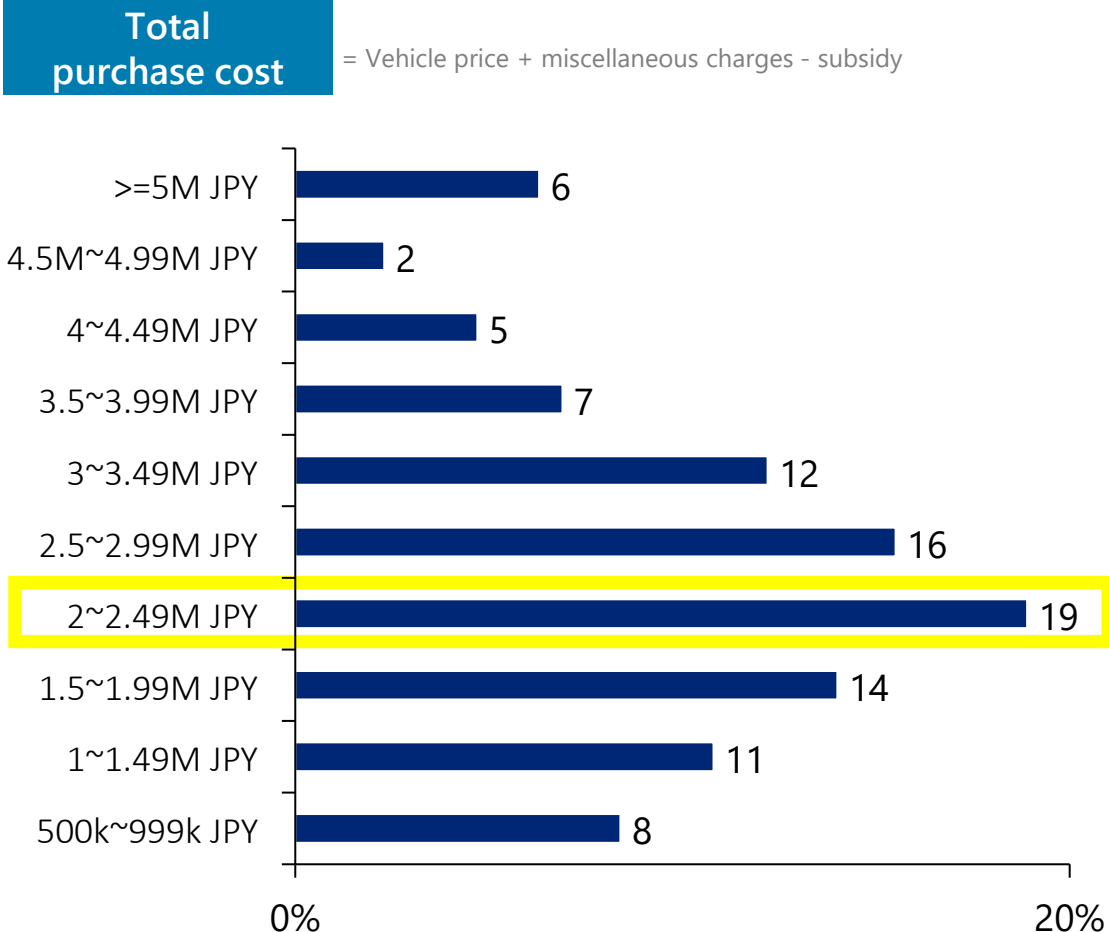


Respondents: Those who are planning to purchase their own cars in the future and exclude PHEVs and EVs from the candidates

The ideal PHEV/EV is less than 2.5M JPY and its resale value is maintained at over 30% after 5 years of purchase.

Ideal PHEV/EV (1/3)

Q: What are the ideal specifications of PHEVs and Evs which makes you consider purchasing it?

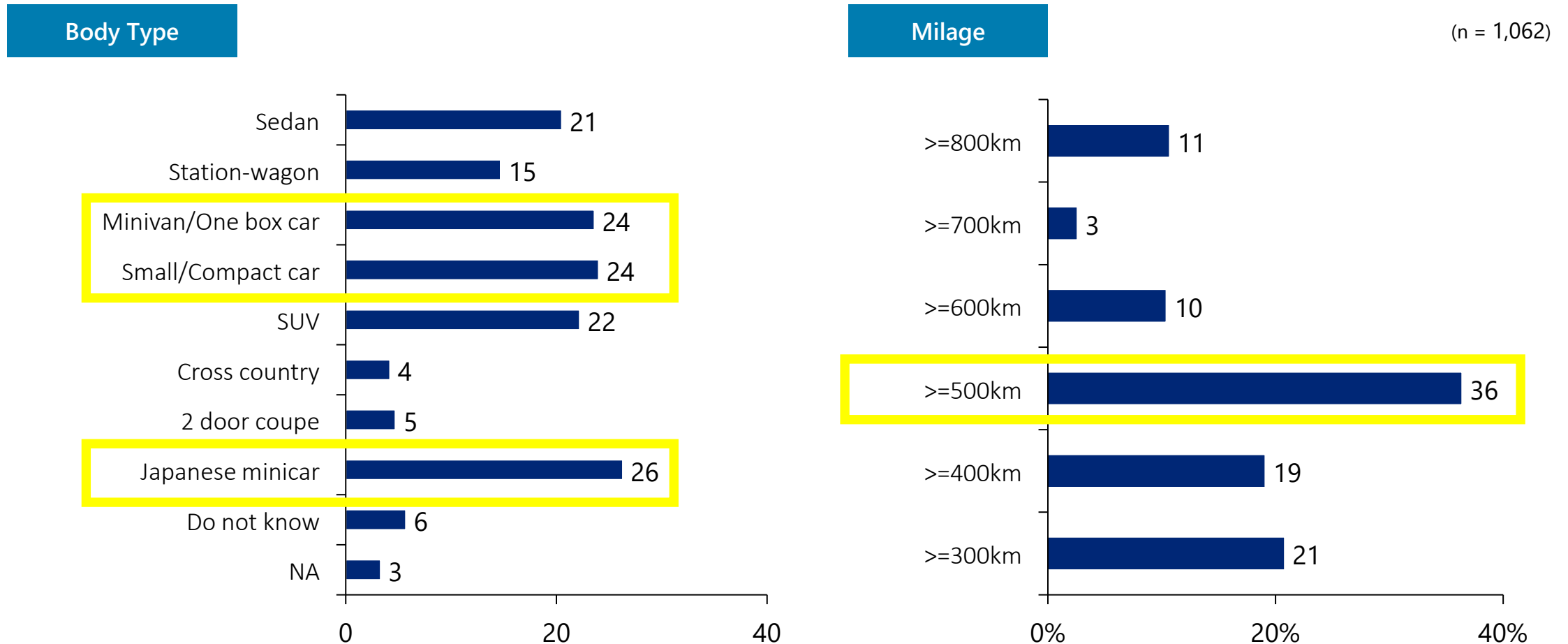


Respondent: Those who plan to buy a private car in the future

Body type of a car to buy is Japanese minicar/compact car, while ideal milage per charge is 500 km or more.

Ideal PHEV/EV (2/3)

Q: What are the ideal specifications of PHEVs and EVs that makes you consider purchasing it?



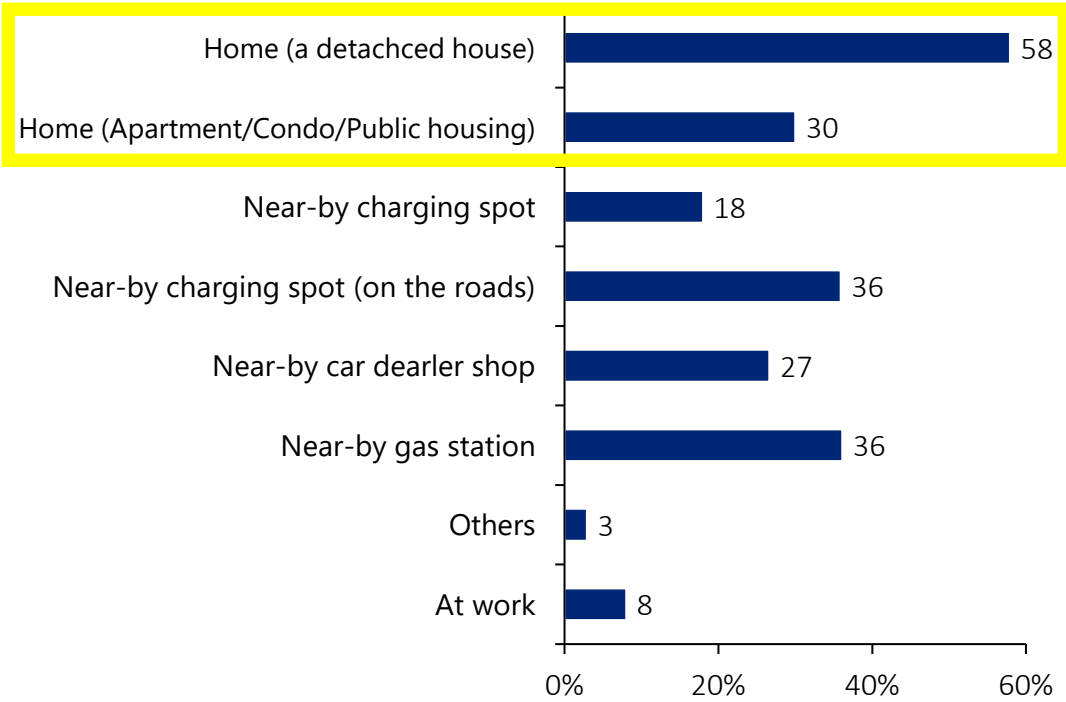
Respondent: Those who plan to buy a private car in the future

The ideal charging spot is at home and 10 minutes or less for quick-charging on the go.

Ideal PHEV/EV (3/3)

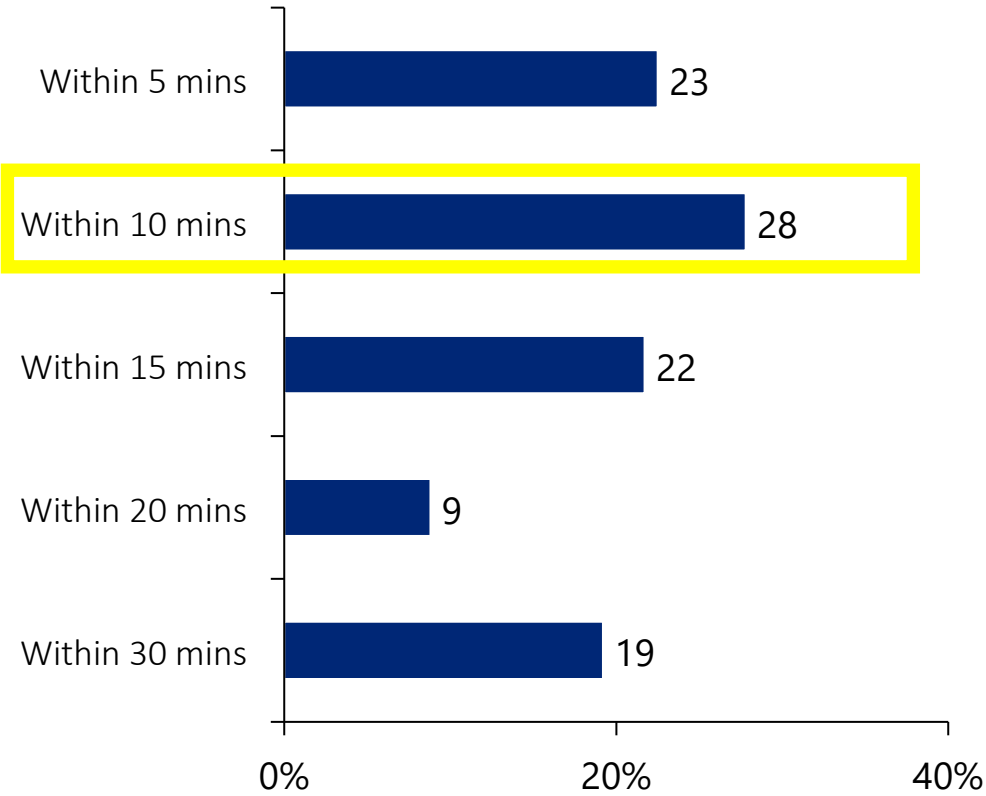
Q: In what kind of charging environment do you consider purchasing PHEV or EV?

Charging spot



Charging time on the go

(n = 1,062)



Respondent: Those who plan to buy a private car in the future

Survey Outline

[Survey outline]

1,959 respondents living in Japan

Outline of the survey

Items	Contents																										
Period	April 28, 2022 - May 6, 2022																										
survey technique	Web survey																										
Respondents	20 -69 years old men and women living in Tokyo, ordinance-designated cities and other regions																										
Breakdown of surveys	<p>1,959 samples (*The survey results are weighted back.)</p> <ul style="list-style-type: none">➤ Regions: 23 Wards of Tokyo (540 samples), Suburban Tokyo and ordinance-designated cities (645 samples), Other regions (774 samples)➤ Ratio of males to females 54%: 46%➤ Occupation: <table border="1"><caption>Occupation Breakdown</caption><thead><tr><th>Occupation</th><th>Percentage</th></tr></thead><tbody><tr><td>Public servants</td><td>4%</td></tr><tr><td>Business owners and executives</td><td>2%</td></tr><tr><td>Clerical workers</td><td>24%</td></tr><tr><td>Engineers</td><td>13%</td></tr><tr><td>Other office workers</td><td>13%</td></tr><tr><td>Self-employed professionals</td><td>5%</td></tr><tr><td>Liberal</td><td>3%</td></tr><tr><td>Dependants</td><td>11%</td></tr><tr><td>Part-timers</td><td>13%</td></tr><tr><td>Students</td><td>1%</td></tr><tr><td>Others</td><td>1%</td></tr><tr><td>Unemployed</td><td>10%</td></tr></tbody></table>	Occupation	Percentage	Public servants	4%	Business owners and executives	2%	Clerical workers	24%	Engineers	13%	Other office workers	13%	Self-employed professionals	5%	Liberal	3%	Dependants	11%	Part-timers	13%	Students	1%	Others	1%	Unemployed	10%
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