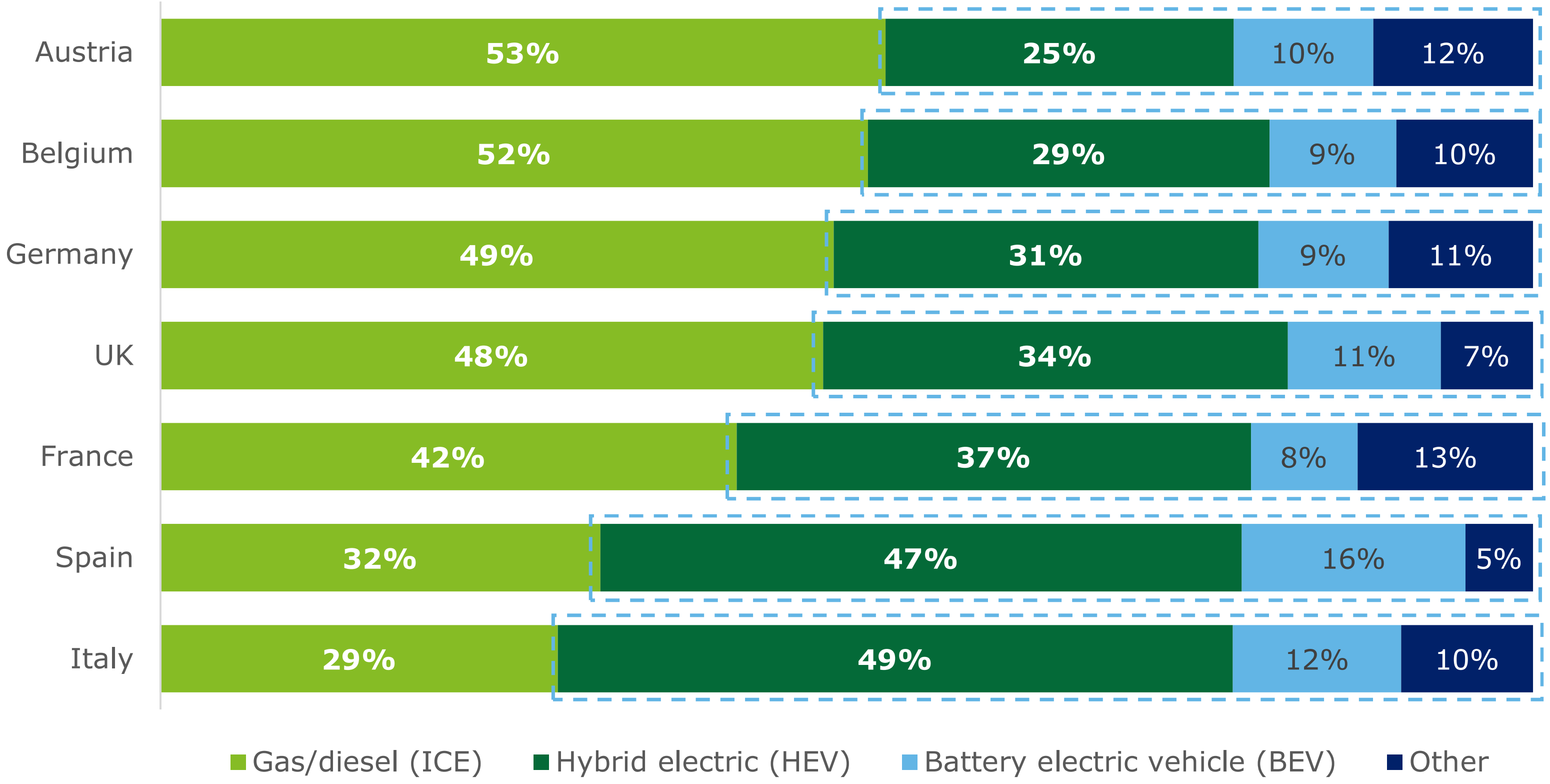
GLOBAL AUTOMOTIVE INSIGHTS

2020 Global Automotive Consumer Study

Europe – Press Release

Interest in alternative powertrain technology continues to expand as fewer people want traditional internal combustion engines (ICE) in their next vehicle

Consumer powertrain preferences for their next vehicle



Alternative Powertrain YoY

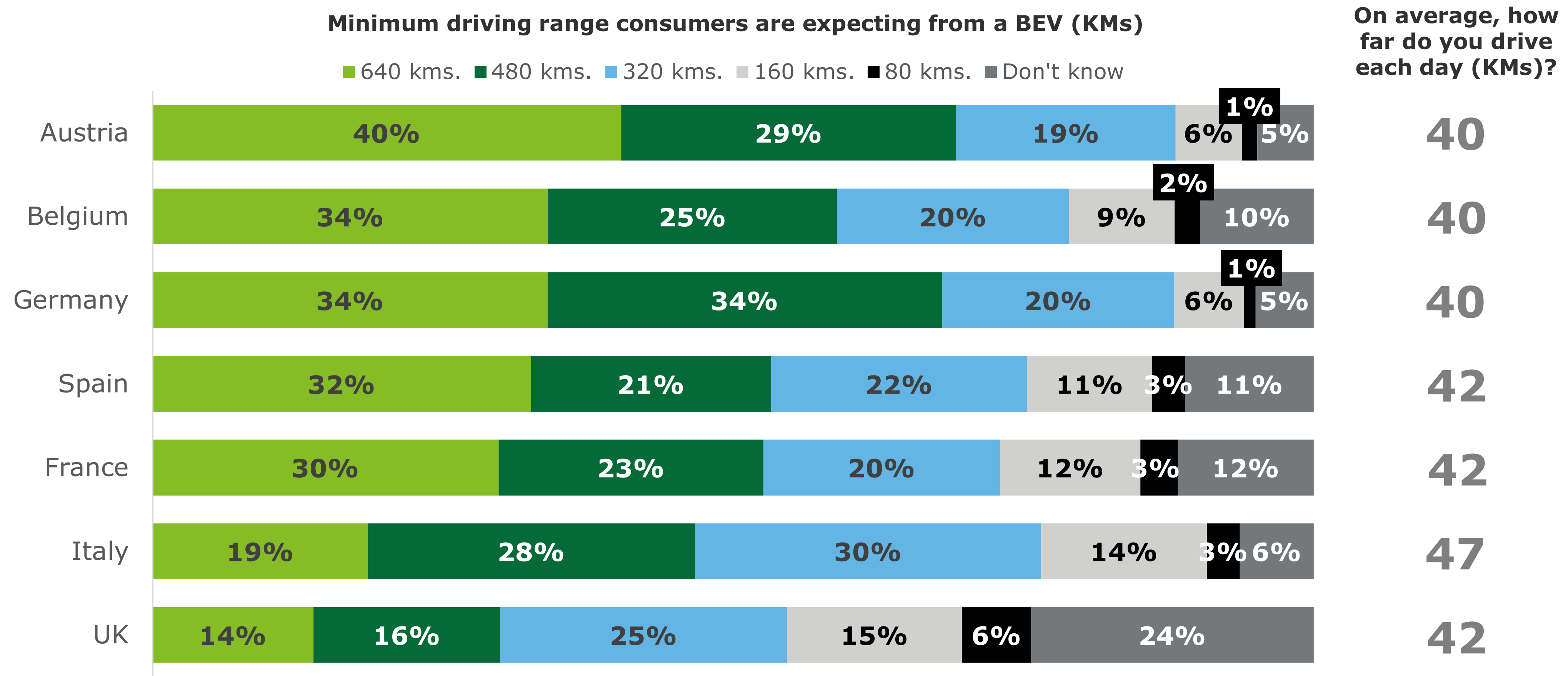
2020	2019
47%	38%
48%	38%
51%	37%
52%	37%
58%	46%
68%	NA
71%	58%

Note: "Other" category includes ethanol, CNG, and hydrogen fuel cell; Spain was not part of 2019 study

Q52: What type of engine would you prefer in your next vehicle?

Sample size: Austria=954; Belgium=964; France=1,003; Germany=2,139; Italy=1,043; Spain=1,073; UK=924

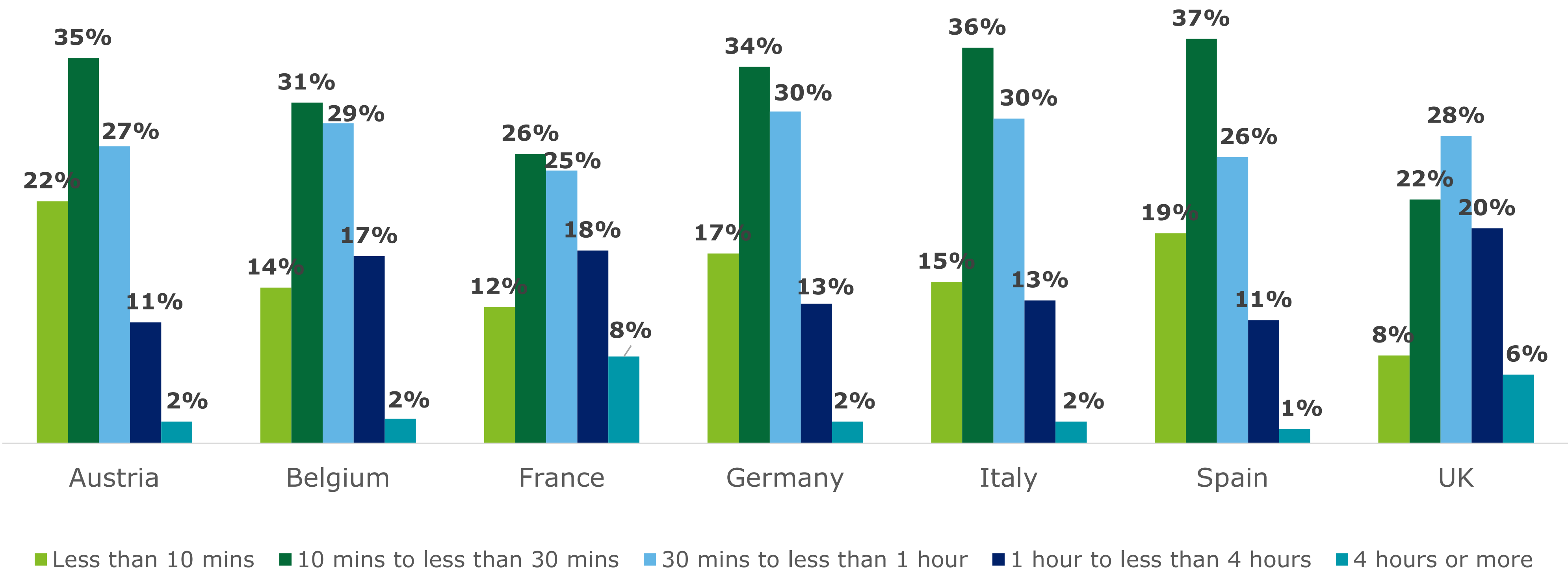
Expectations regarding the acceptable range of a BEV are quite significant, even though daily transportation requirements are modest by comparison



Q27: What is the minimum driving range that an all battery-powered electric vehicle (BEV) needs to have?
Sample size: Austria=1,279; Belgium=1,286; France=1,266; Germany=3,002; Italy=1,274; Spain=1,268; UK=1,264

A significant proportion of consumers in most European countries are not willing to wait more than 30 minutes to fully charge a BEV

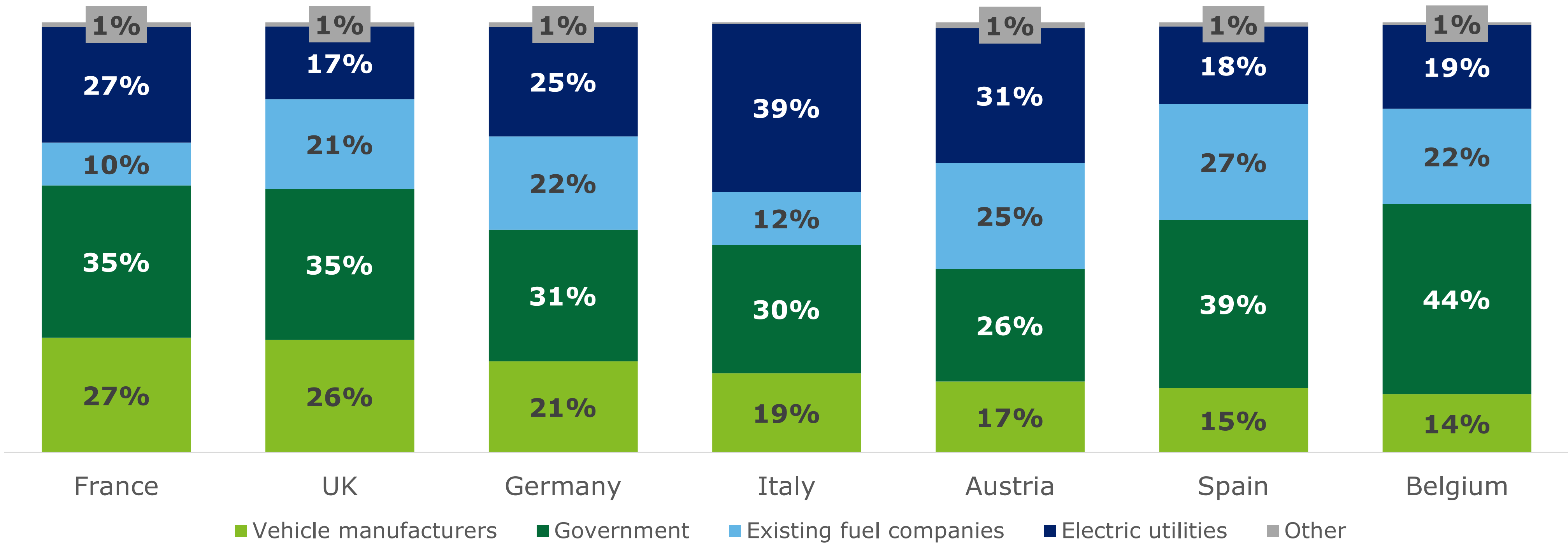
Amount of time consumers are willing to wait to fully recharge a BEV



Note: Sum of percentages for a country may not add up to 100% as "Don't know" percentage is not shown above.
Q28: How long should it take to fully recharge an all battery-powered electric vehicle (BEV)?
Sample size: Austria=1,279; Belgium=1,286; France=1,266; Germany=3,002; Italy=1,274; Spain=1,268; UK=1,264

There are a variety of opinions when it comes to who consumers think should be responsible for building EV charging networks, potentially opening the door to public-private partnerships

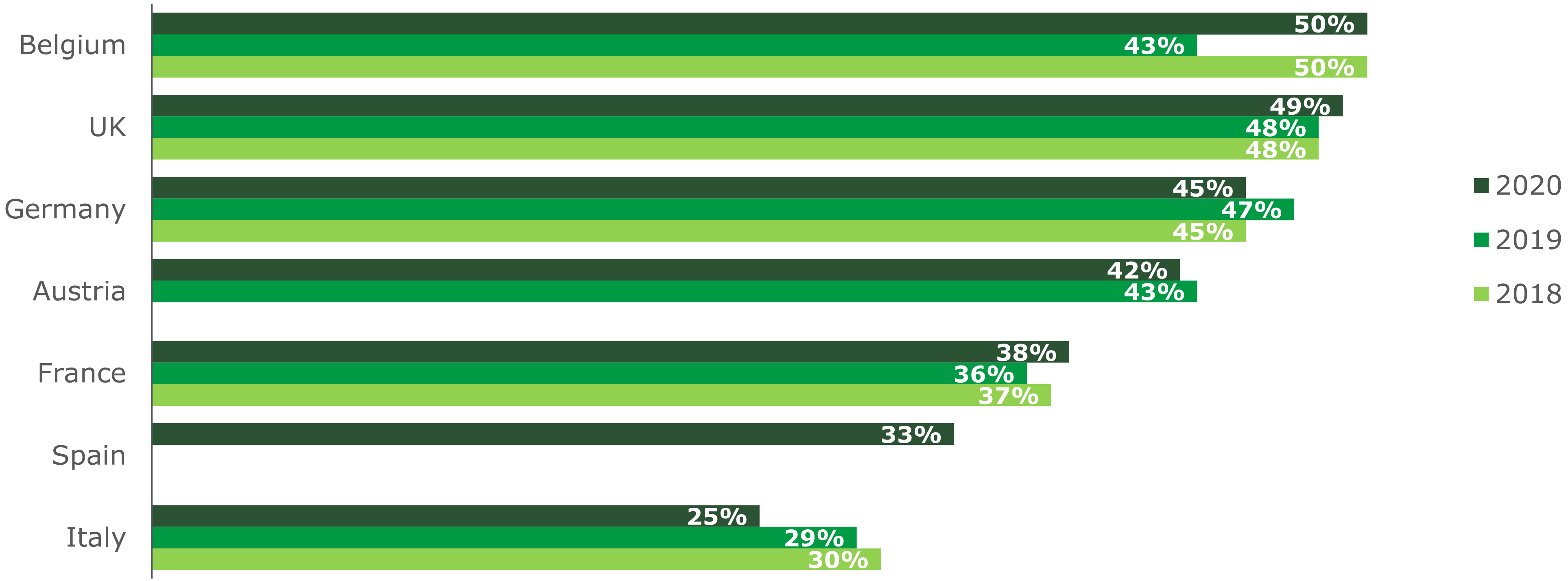
Consumer opinions on who they think is responsible for building publicly accessible EV charging stations and other infrastructure



Q31: In your opinion, who should be primarily responsible for building publicly-accessible electric vehicle charging stations and other EV infrastructure?
Sample size: Austria=1,279; Belgium=1,286; France=1,266; Germany=3,002; Italy=1,274; Spain=1,268; UK=1,264

Although European consumer perception regarding the safety of self-driving vehicles varies significantly by country, overall sentiment remains relatively flat on a year-over-year basis

Percentage of consumers who agree that autonomous vehicles will not be safe

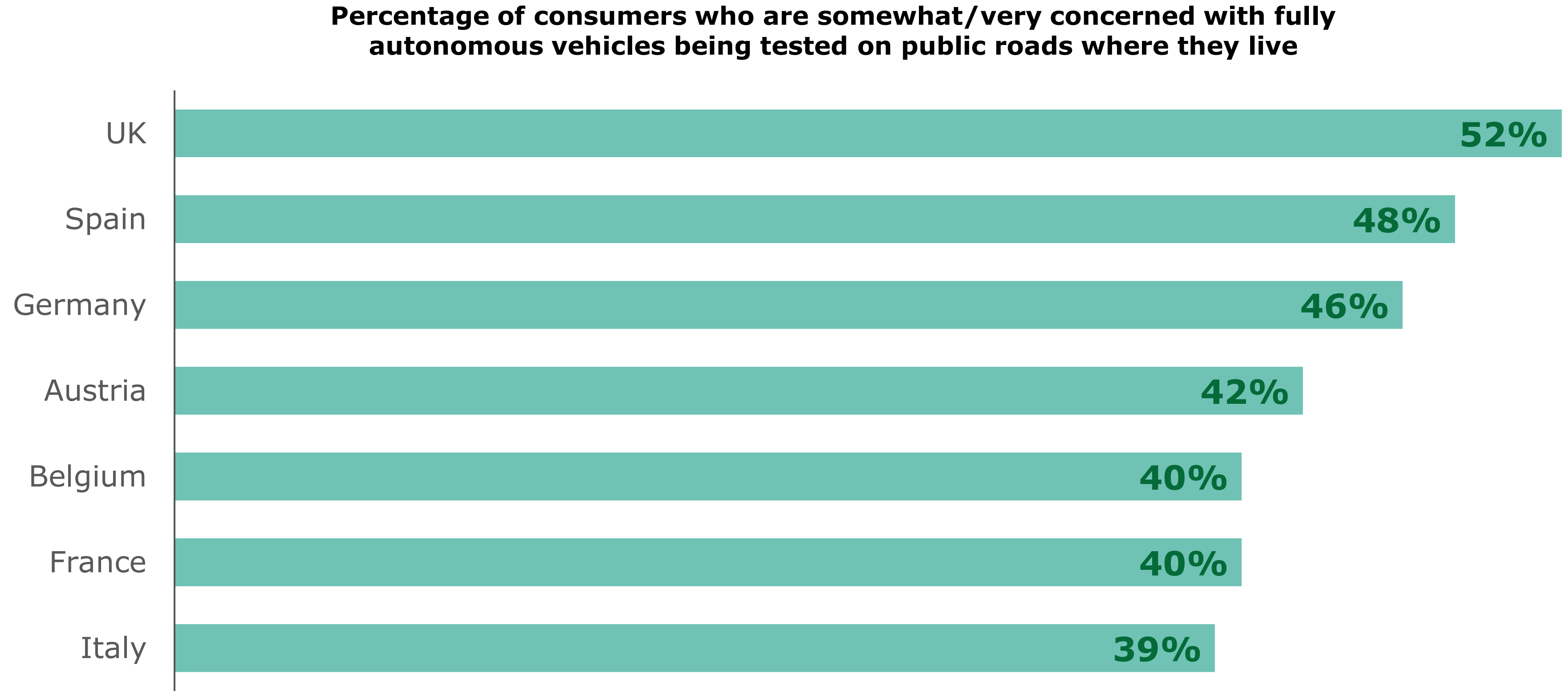


Note: Percentage of respondents who strongly agreed or agreed have been added together; did not consider "NA/Don't know" responses and Austria was not part of the 2018 study and Spain was not part of 2018 and 2019 studies.

Q3: To what extent do you agree with the following statements regarding future vehicle technology?

Sample size: Austria= 1,267 [2020], 1,232 [2019], NA [2018]; Belgium=1,243 [2020], 1,211 [2019], 1,206 [2018]; France= 1,232 [2020], 1,203 [2019], 1,145 [2018] ; Germany=2,950 [2020], 1,733 [2019], 1,705 [2018]; Italy= 1,257 [2020], 1,232 [2019], 1,236 [2018]; Spain= 1,239 [2020], NA [2019], NA [2018]; UK= 1,241 [2020], 1,229 [2019], 1,224 [2018]

Roughly half of consumers in Spain and the United Kingdom are concerned about the idea of autonomous vehicles being tested in areas where they live

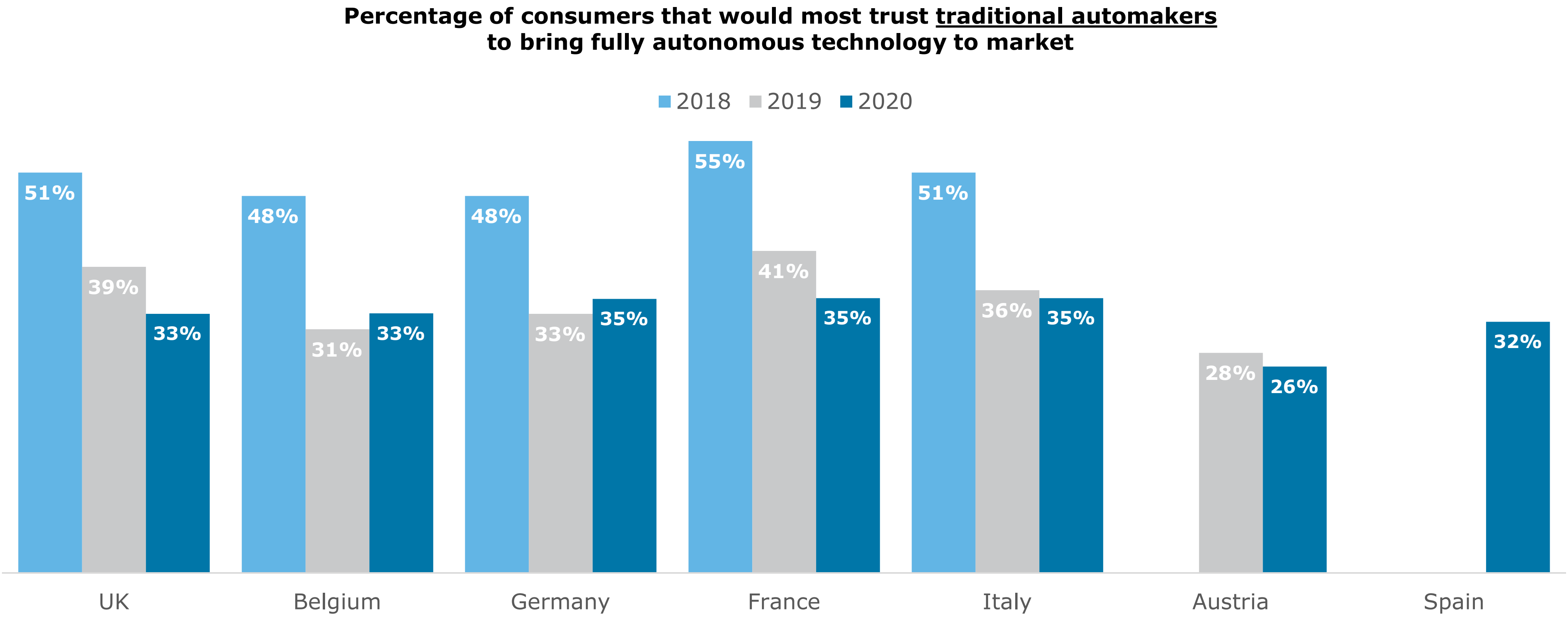


Note: Percentage of respondents who said 'somewhat concerned' or 'very concerned' have been added together

Q4: How concerned are you with each of the following scenarios?

Sample size: Austria=1,279; Belgium=1,286; France=1,266; Germany=3,002; Italy=1,274; Spain=1,268; UK=1,264

Consumer trust in traditional manufacturers to bring AV technology to market continues to decline in some markets across the European region



Note: Austria was not part of the 2018 study and Spain was not part of 2018 and 2019 studies

Q6: Which of the following type of company would you trust the most to bring fully-autonomous (self-driving) vehicle technology to the market?

Sample size: Austria= 1,279 [2020], 1,256 [2019], NA [2018]; Belgium= 1,286 [2020], 1,254 [2019], 1,275 [2018]; France= 1,266 [2020], 1,254 [2019], 1,258 [2018] ; Germany=3,002 [2020], 1,773 [2019], 1,759 [2018]; Italy= 1,274 [2020], 1,258 [2019], 1,260 [2018]; Spain= 1,268 [2020], NA [2019], NA [2018]; UK= 1,264 [2020], 1,250 [2019], 1,261 [2018]

Even as OEMs continue to spend billions on R&D in advanced vehicle features, questions remain over consumers’ willingness to pay for them

Deloitte.

Percentage of consumers who are unwilling to pay more than €400[1] for a vehicle with advanced technologies

Advanced Technology Category	Austria	Belgium	France	Germany	Italy	Spain	UK
Safety	64%	72%	76%	71%	69%	64%	68%
Connectivity	76%	80%	79%	79%	74%	69%	70%
Infotainment	86%	88%	84%	84%	79%	78%	76%
Autonomy	66%	70%	70%	67%	59%	62%	61%
Alternative engine solutions	53%	65%	64%	58%	52%	54%	59%

[1] For UK, the amount is £400

Q7: How much more would you be willing to pay for a vehicle that had each of the technologies listed below and that met your wants and needs?

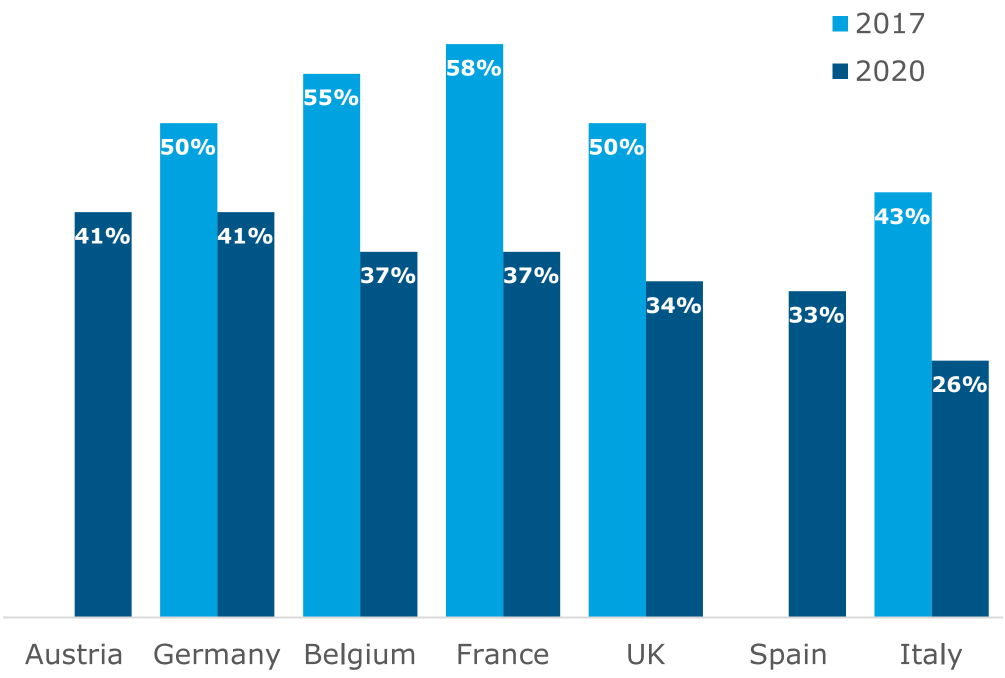
Sample size: Austria=1,279; Belgium=1,286; France=1,266; Germany=3,002; Italy=1,274; Spain=1,268; UK=1,264

However, there is some evidence to suggest that consumers' willingness to pay at least something for advanced technologies has improved over the last few years

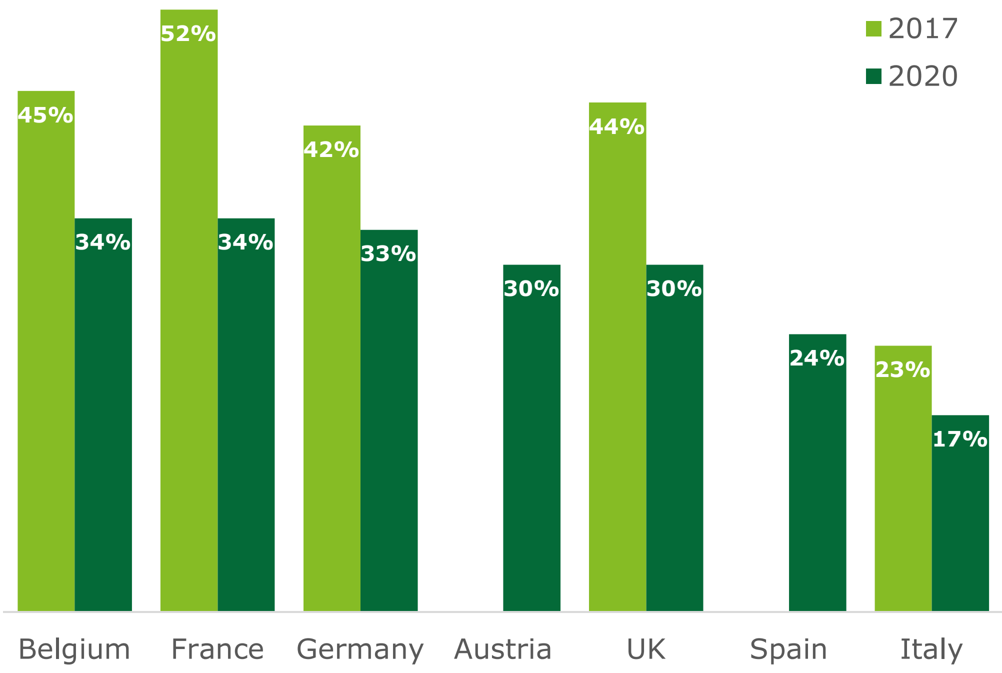
Deloitte.

Percentage of consumers who are unwilling to pay any more for…

Autonomous Technologies



Alternative Engine Technologies



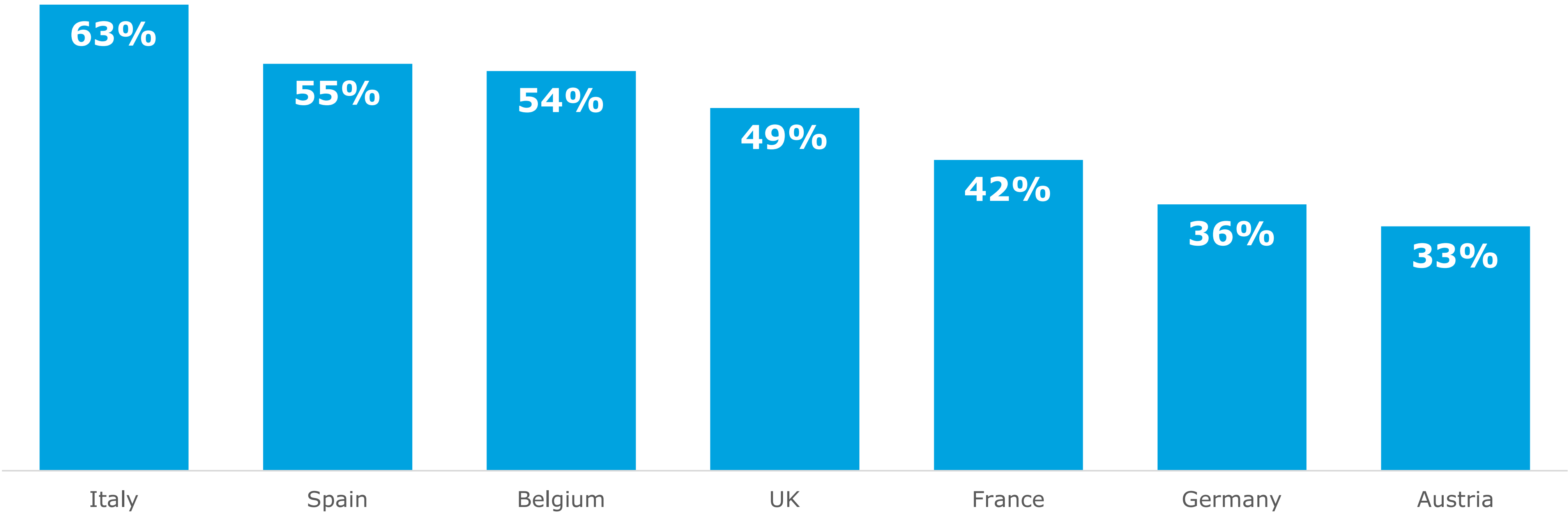
Note: Austria and Spain were not part of the 2017 study

Q7: How much more would you be willing to pay for a vehicle that had each of the technologies listed below and that met your wants and needs?

Sample size (2020/2017): Austria=1,279/NA; Belgium=1,286/1,240; France=1,266/1,241; Germany=3,002/1,740; Italy=1,274/1,244; Spain=1,268/NA; UK=1,264/1,244

Consumers are split on the benefits of increased vehicle connectivity where people in Italy are embracing the idea at nearly twice the rate compared to Austria

Percentage of consumers who feel that increased vehicle connectivity will be beneficial

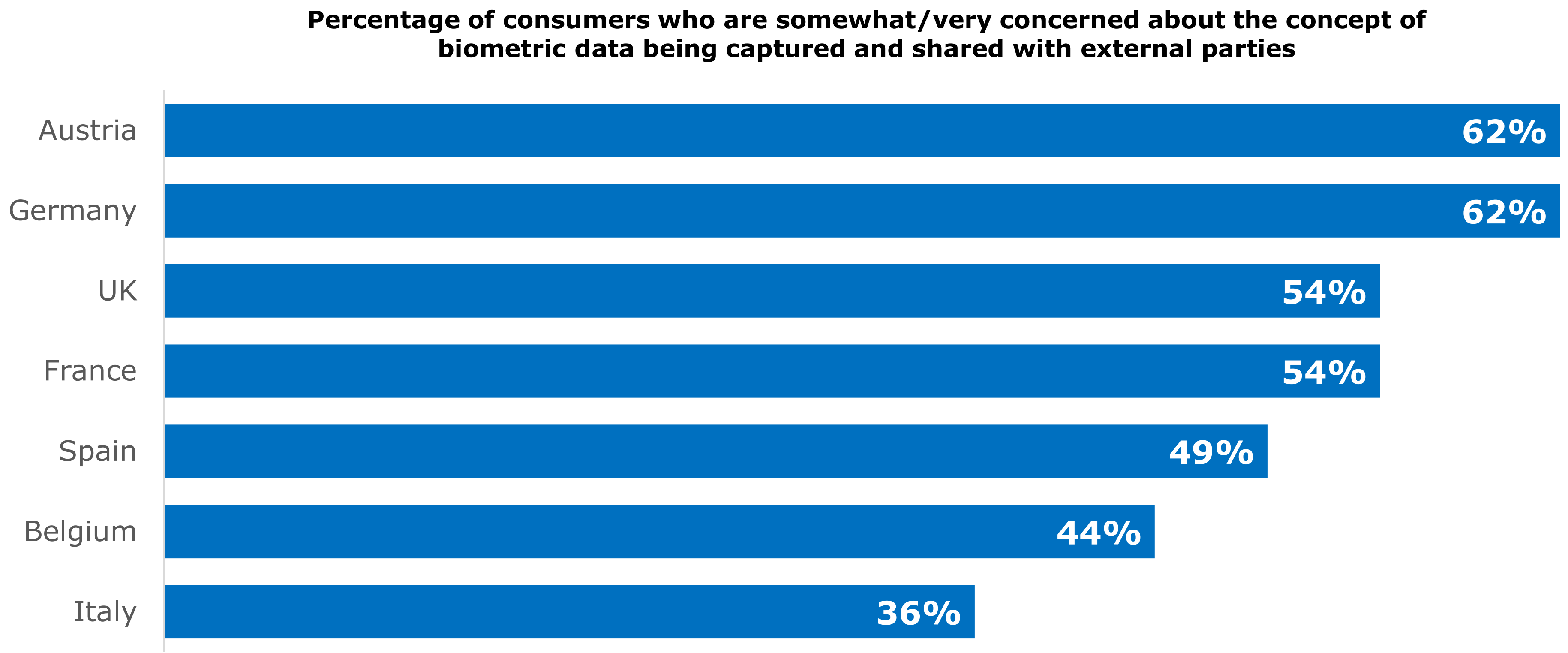


Note: Percentage of respondents who strongly agreed or agreed have been added together; did not consider "NA/Don't know" responses

Q3: To what extent do you agree with the following statements regarding future vehicle technology?

Sample size: Austria=1,223; Belgium=1,224; France=1,173; Germany=2,862; Italy=1,246; Spain=1,218; UK=1,207

Consumer opinion also differs on specific concerns around connectivity, including the security of biometric data generated and shared by connected vehicles

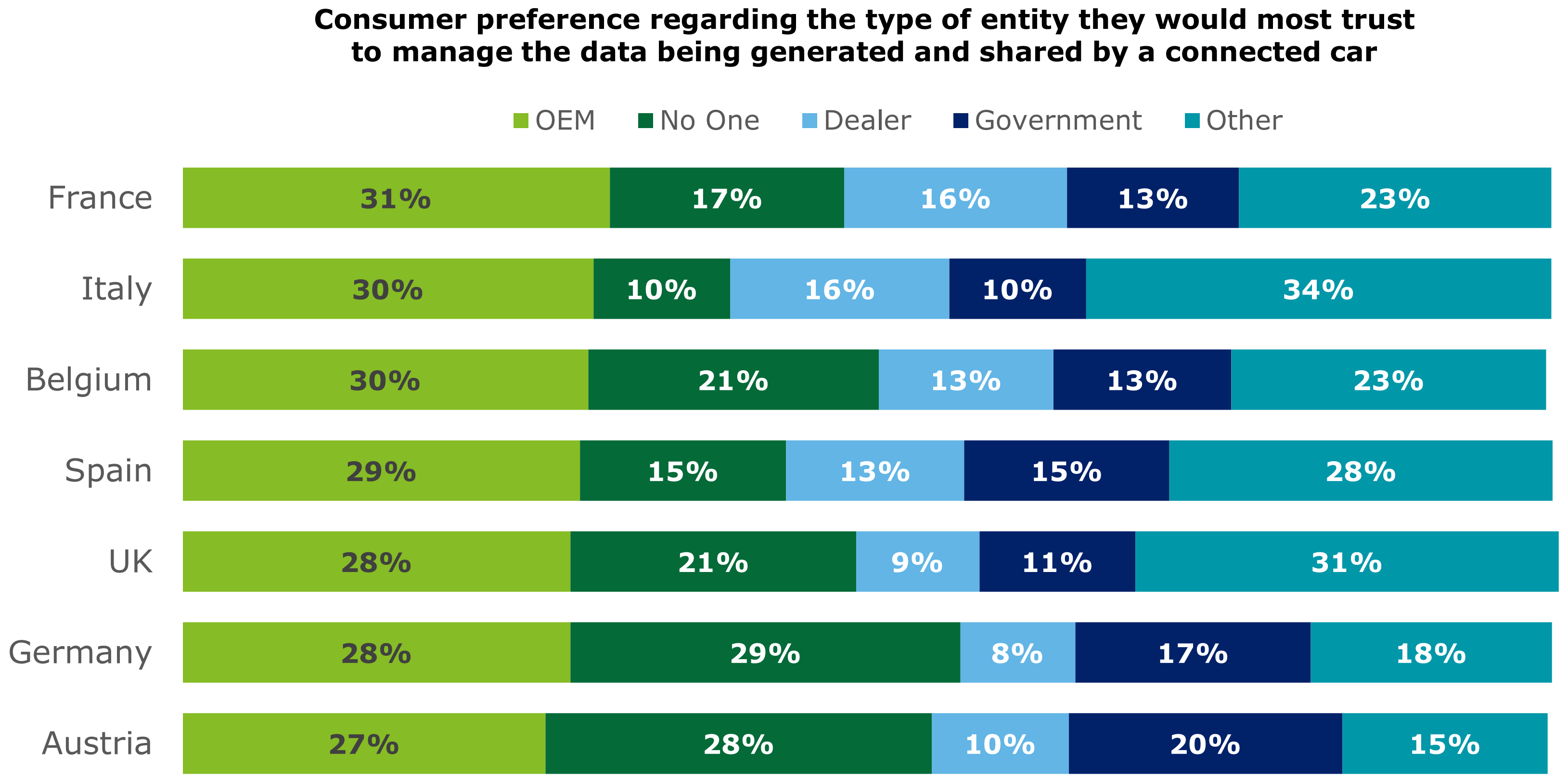


Note: Biometric data refers to information about the vehicle occupant(s) such as heart rate, blood pressure, blood alcohol level, etc.

Q34: As vehicles become more and more connected to the Internet, how concerned would you be if the following types of data were shared with your vehicle manufacturer, dealer, insurance company, and/or other third parties?

Sample size: Austria=1,279; Belgium=1,286; France=1,266; Germany=3,002; Italy=1,274; Spain=1,268; UK=1,264

People are also concerned about who would best manage the data being generated and shared by the vehicle



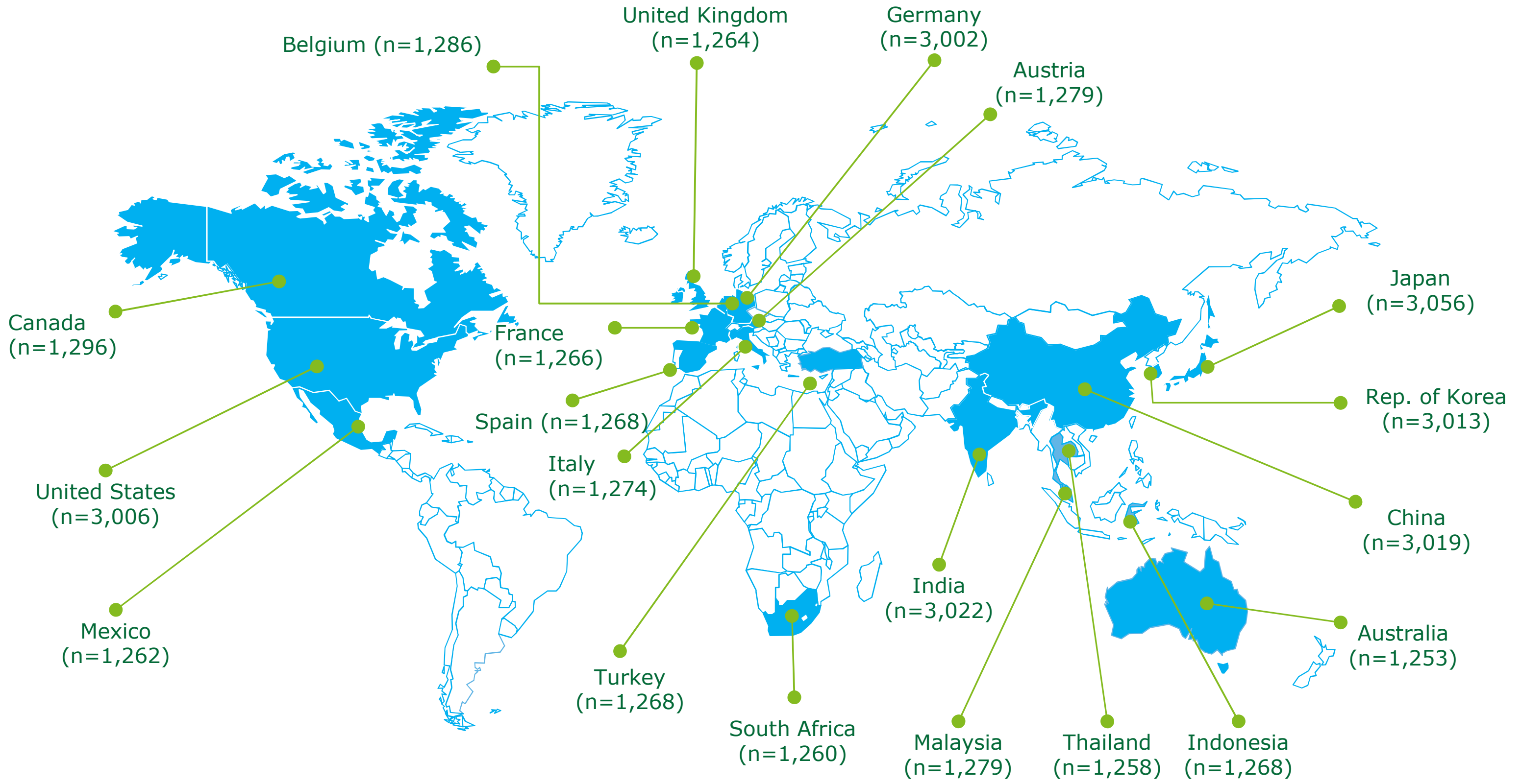
Note: the 'other' category includes financial service providers, insurance companies, cellular service providers, and cloud service providers

Q36: In a scenario where you owned a connected vehicle, which of the following entities would you trust the most to manage the data being generated and shared?
Sample size: Austria=1,279; Belgium=1,286; France=1,266; Germany=3,002; Italy=1,274; Spain=1,268; UK=1,264

About the study

Global study coverage

The 2020 study includes more than 35K consumer responses across 20 global markets



Study methodology

The study is fielded using an online panel methodology where consumers of driving age are invited to complete the questionnaire (translated into local languages) via email. It was fielded in 20 countries and designed to be nationally representative of the overall population in each market.

Note: "n" represents the number of survey respondents in each country.

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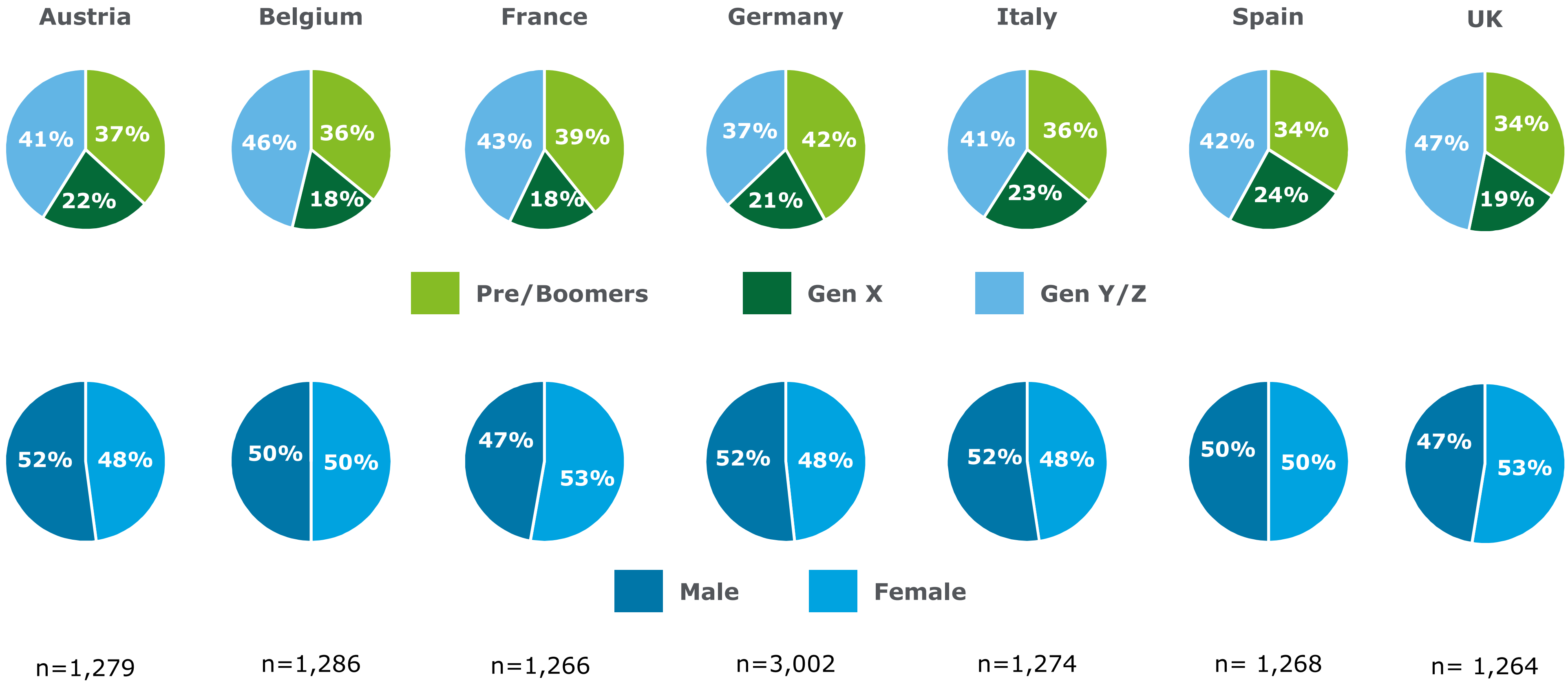

Note: "n" represents the number of survey respondents in each country.

Note: Pre/Boomers: Born Before 1965; Gen X: Born Between 1965-1976; Gen Y/Z: Born After 1976 (sample excludes consumers under 18 years of age)

2020 Deloitte Global Automotive Consumer Study

About the study

In September-October 2019, Deloitte surveyed over 35,000 consumers in 20 countries to explore opinions regarding a variety of critical issues impacting the automotive sector, including the development of advanced technologies. The overall goal of this annual study is to answer important questions that can help companies prioritize and better position their business strategies and investments.