2019 Deloitte Global Automotive Consumer Study

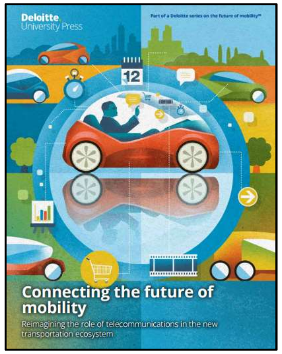
Advanced vehicle technologies and multi-modal transportation

European countries

For a decade, Deloitte has been exploring consumers’ changing automotive expectations and the evolving mobility ecosystem.

Key insights from our Global Automotive Consumer Study over the years:

- **2009** Vehicle safety ranked as the top priority for consumers.
- **2010** Overall value ranked as the primary factor when evaluating brands
- **2011** “Cockpit technology” and the shopping experience led differentiators
- **2012** Interest in hybrids driven by cost and convenience, while interest in connectivity centers on safety
- **2014** Shared mobility emerges as an alternative to owning a vehicle
- **2017** Interest in full autonomy grows, but consumers want a track record of safety
- **2018** Consumers in many global markets continue to move away from internal combustion engines (ICE)



The Global Automotive Consumer Study helps inform Deloitte’s work and insights into the evolution of mobility, smart cities, connectivity, transportation and other changes transforming the movement of people and goods.

2019 Deloitte Global Automotive Consumer Study

From September to October 2018, Deloitte surveyed more than 25,000 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.

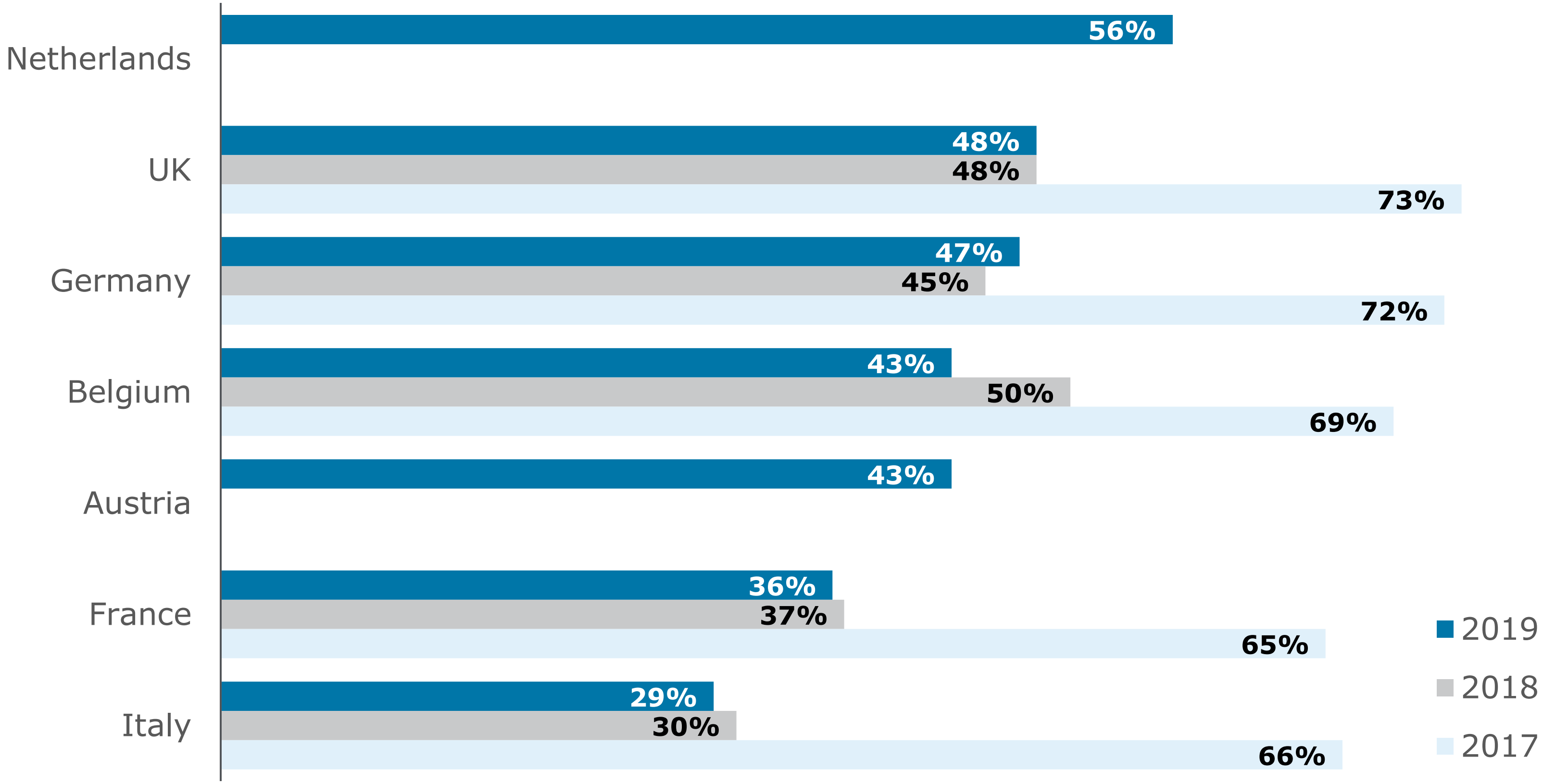
Key Insights

	**Consumers "pump the brakes" on interest in AVs**	As the technology gets ever closer to scalable, real-world application, consumers are questioning if autonomous vehicles are safe, which is causing some people to take a more cautious approach to the idea.
	**Electric vehicles finally showing potential to scale**	EV demand is growing in AP and EU regions due to supportive environmental policies, big brand bets, and shifting consumer attitudes. But, low fuel prices in NA are keeping consumers away.
	**Consumers may be reluctant to pay for connectivity**	Consumer opinions are mixed as interest in time-saving features is high, but significant concerns remain over privacy and data security. OEMs also face an uphill battle getting people to pay for it.
	**Mobility revolution faces significant headwinds**	Overall consumer behavior is proving difficult to change. A shared mobility future may hinge on younger people that have fully embraced the precepts of a digitally-enhanced existence.

Consumers “pump the brakes” on interest in AVs...

Consumer perception regarding the safety of self-driving vehicles has stalled in the last year…

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

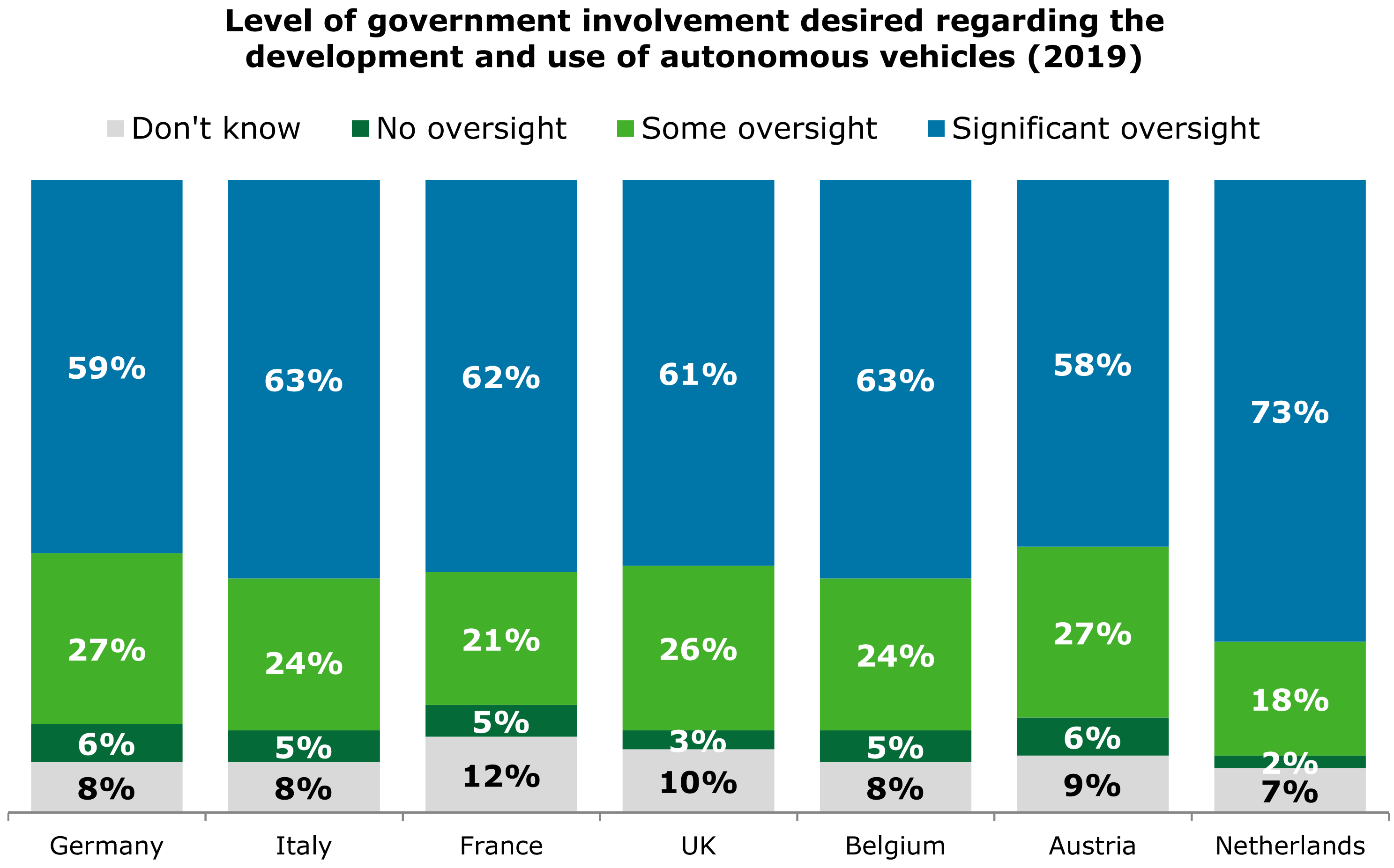


Note: Percentage of respondents who strongly agreed or agreed have been added together

Q3: To what extent do you agree or disagree with the following statements?

Sample size: France= 1,203 [2019], 1,145 [2018], 992 [2017]; Germany=1,733 [2019], 1,705 [2018], 1,574 [2017]; Italy=1,232 [2019], 1,236 [2018], 1,095 [2017]; UK=1,229 [2019], 1,209 [2018], 1,081 [2017]; Belgium=1,211 [2019], 1,206 [2018], 1,055 [2017]; Austria=1,232 [2019]; Netherlands=1,189 [2019]

In fact, the majority of consumers want governments to exert a significant amount of control over the development and use of autonomous vehicles.

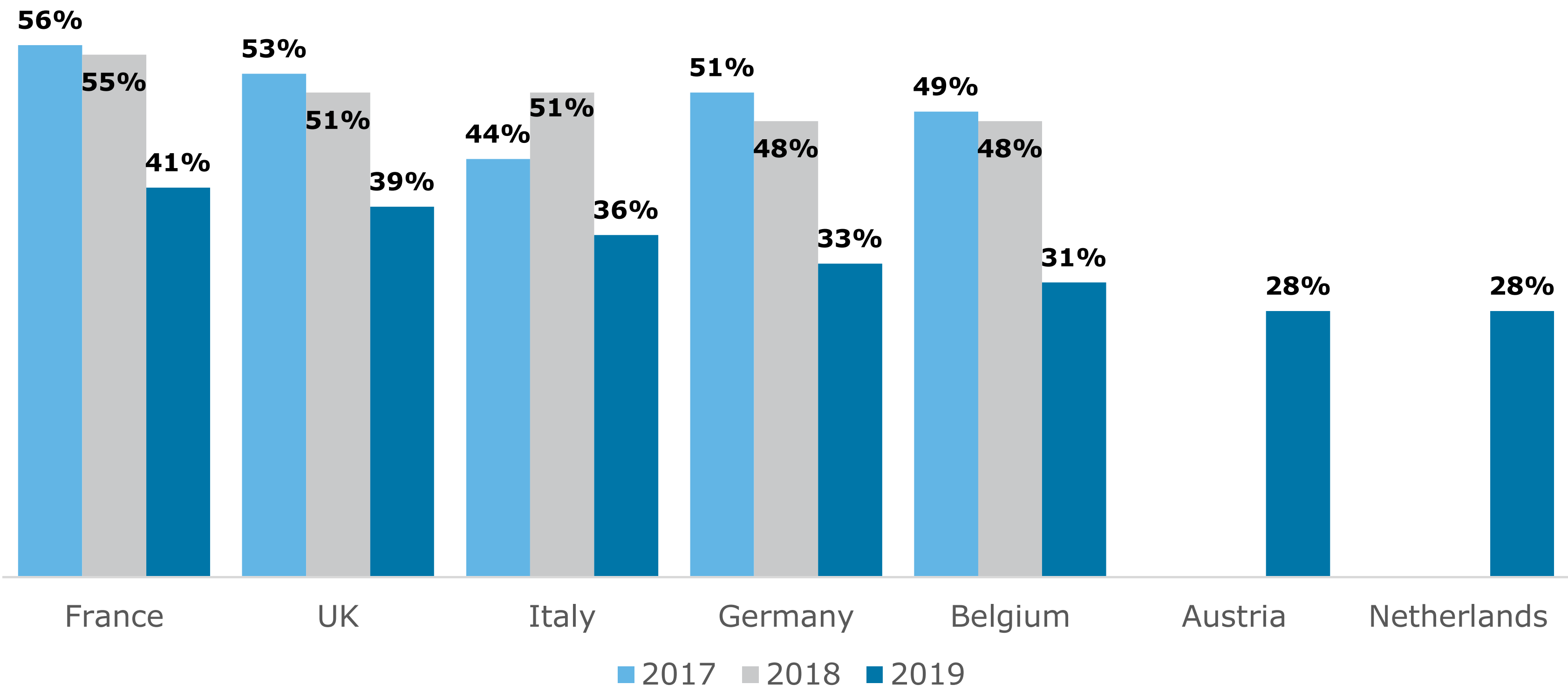


Q7: To what extent do you think government should be involved in the development and use of autonomous vehicles by providing oversight and standards?

Sample size: France=1,254; Germany=1,773; Italy=1,258; UK=1,250; Belgium=1,254; Austria=1,256; Netherlands=1,263

At the same time, consumer trust in manufacturers to bring autonomous vehicle technology to market continues to erode across most countries.

Percentage of consumers that would most trust traditional automakers to bring fully autonomous technology to market

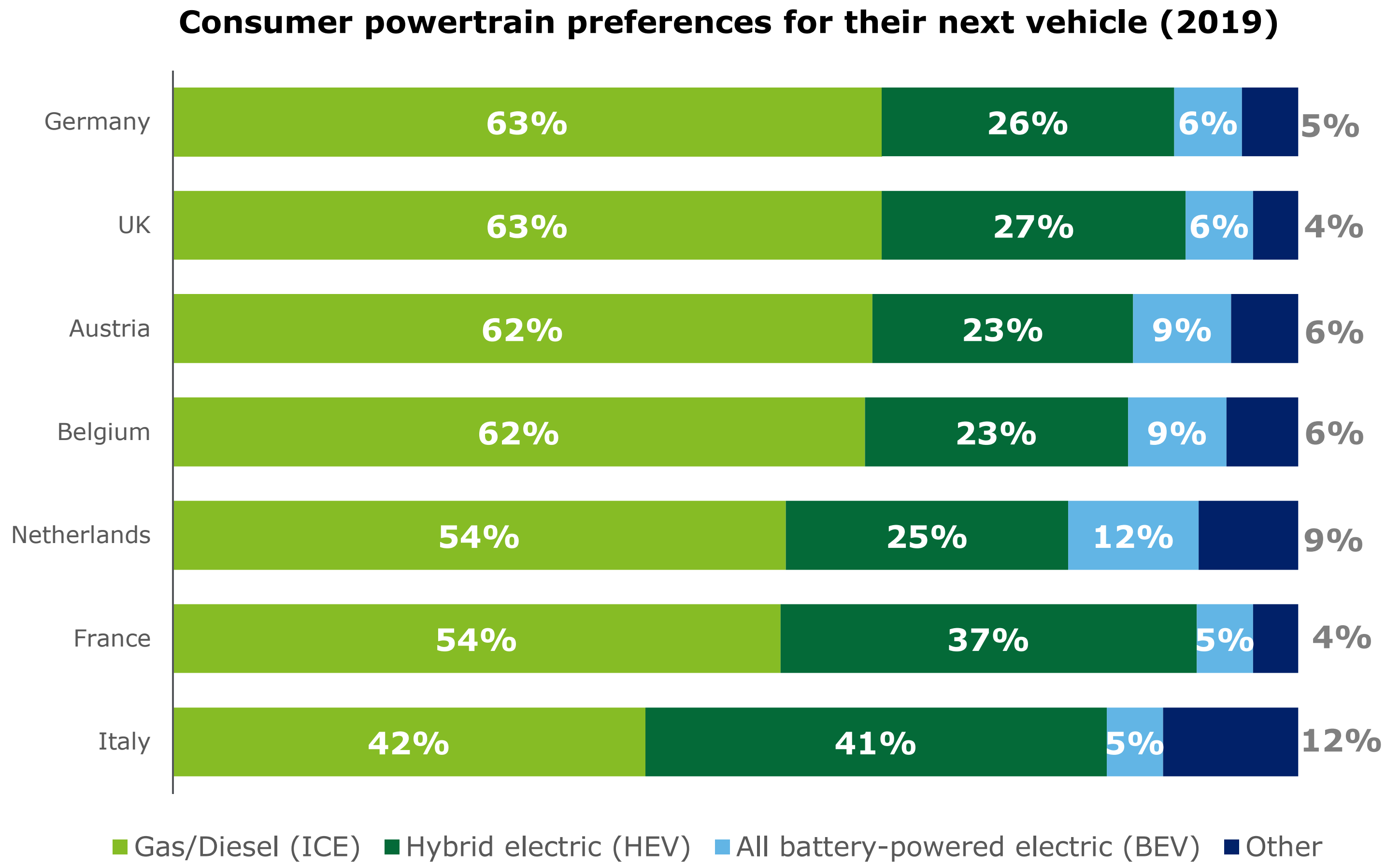


Q10. Which of the following type of company would you trust the most to bring fully-autonomous (self-driving) vehicle technology to the market?

Sample size: France=1,254 [2019], 1,258 [2018], 1,244 [2017]; Germany=1,773 [2019], 1,759 [2018], 1,743 [2017]; Italy=1,258 [2019], 1,260 [2018], 1,249 [2017]; UK=1,250 [2019], 1,261 [2018], 1,251 [2017]; Belgium=1,254 [2019], 1,275 [2018], 1,240 [2017]; Austria=1,256 [2019]; Netherlands=1,263 [2019]

Electric vehicles finally showing potential to scale…

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



Alternative Powertrain

	2018	2019
Germany	34%	37%
UK	27%	37%
Austria	-	38%
Belgium	36%	38%
Netherlands	-	46%
France	38%	46%
Italy	51%	58%

Note: ‘Other” category includes ethanol, CNG, and fuel cell; alternative powertrain refers to all types except gas/diesel

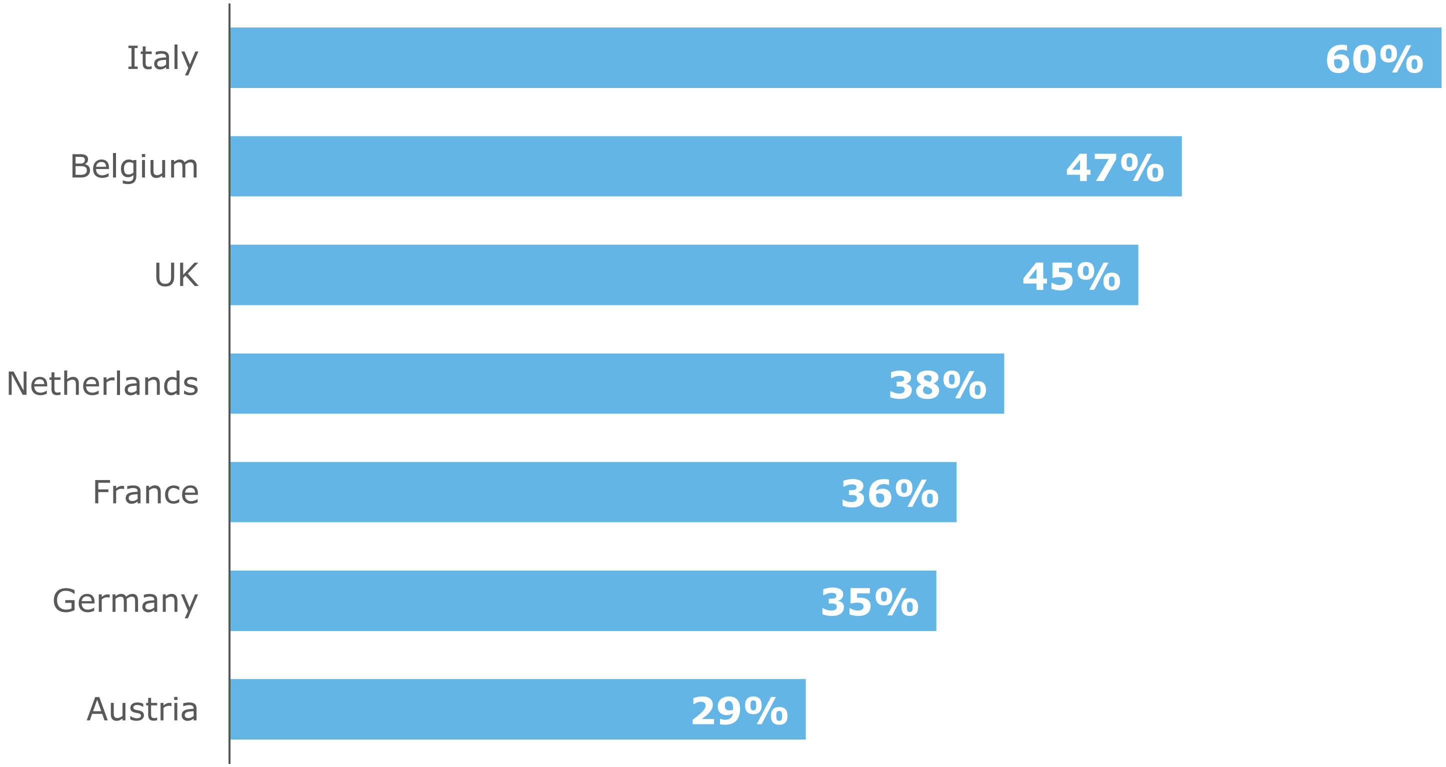
Q45. What type of engine would you prefer in your next vehicle?

Sample size: France=977; Germany=1,273; Italy=961; UK=857; Belgium=927; Austria=941; Netherlands=881

Consumers may be reluctant to pay for connectivity…

When it comes to vehicle connectivity, consumer opinion is split where people in Italy are embracing the idea at twice the rate compared to those in Austria and Germany.

Percentage of consumers who feel that increased vehicle connectivity will be beneficial (2019)

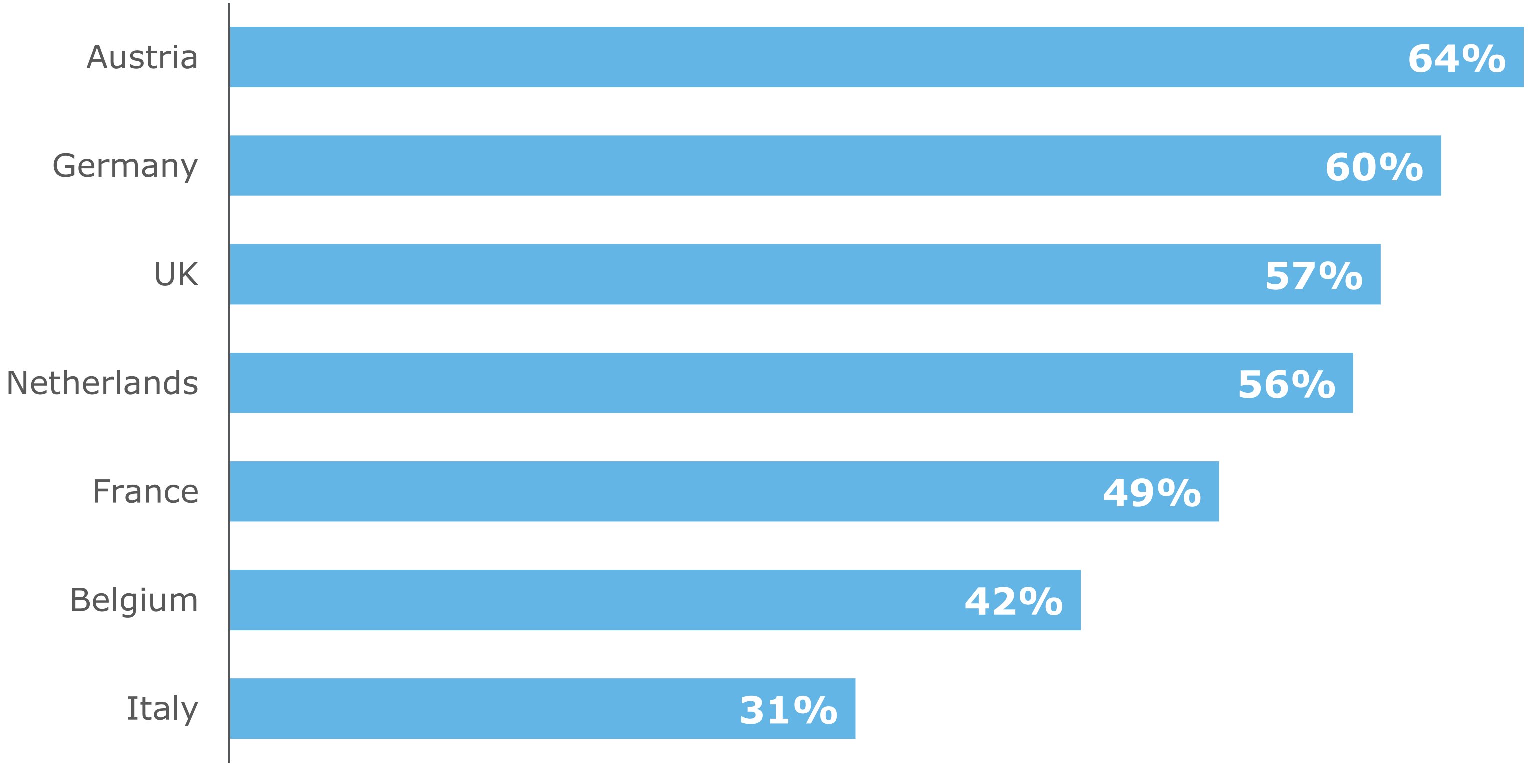


Note: Percentage of respondents who strongly agreed or agreed have been added together
Q3: To what extent do you agree or disagree with the following statements?

Sample size: France=1,175; Germany=1,688; Italy=1,223; UK=1,182; Belgium=1,160; Austria=1,195; Netherlands=1,173

Consumer opinions also differ on specific concerns around connectivity as the security of biometric data generated and shared by connected vehicles is top of mind.

Percentage of consumers who are somewhat/very concerned about the concept of biometric data being captured an shared with external parties (2019)

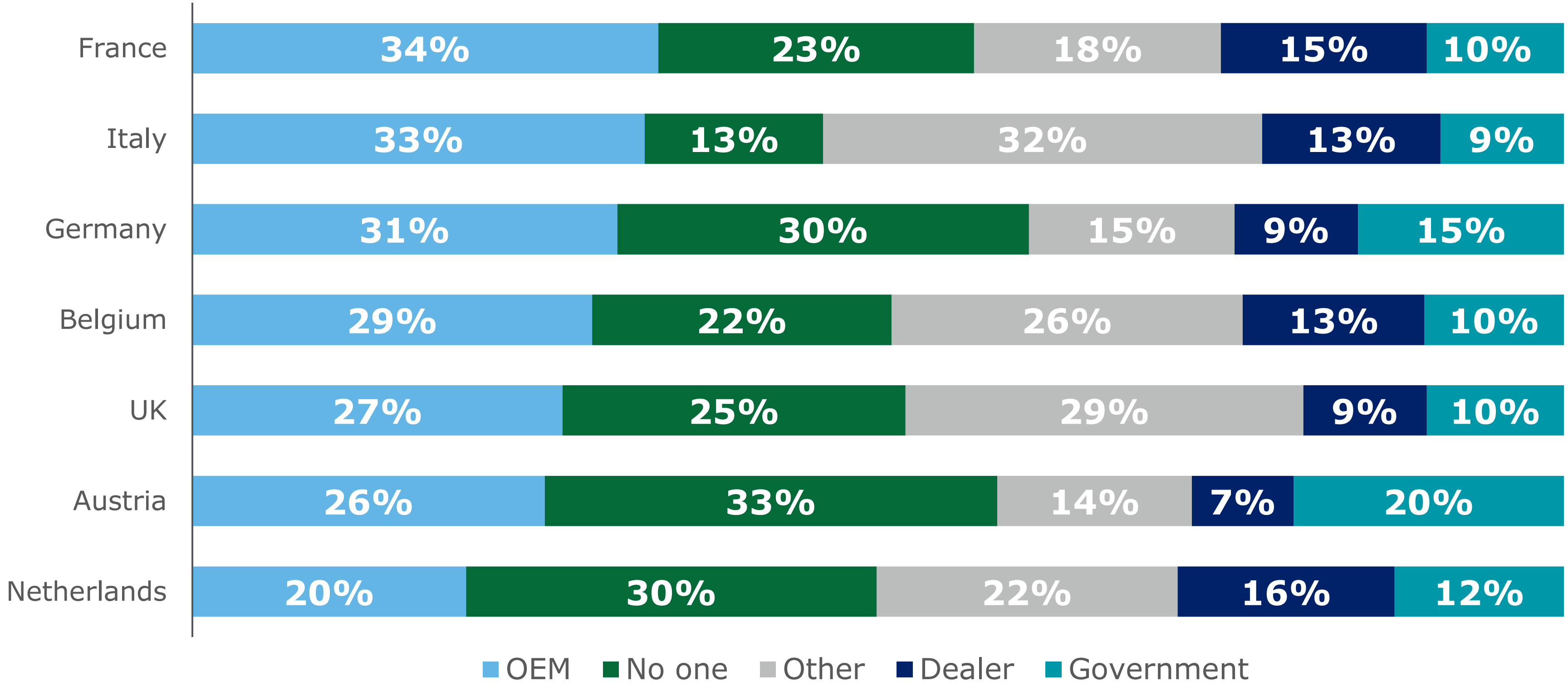


Note: Percentage of respondents who are somewhat concerned and very concerned have been added together
Q22: As vehicles become more and more connected to the internet, how concerned would you be if the following types of data were shared with your vehicle manufacturer, dealer, insurance company, and/or other third parties?

Sample size: France=592; Germany=1,207; Italy=765; UK=739; Belgium=816; Austria=852; Netherlands=744

And, consumer concern extends to who would manage the data being generated and shared by the vehicle. Some people would choose the OEM, but a lot of people would choose anybody else.

Consumer preference regarding the type of company they would most trust to manage the data being generated and shared by a connected car (2019)



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

Q23: 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: France=592; Germany=1,207; Italy=765; UK=739; Belgium=816; Austria=852; Netherlands=744

What do people want? Save me time and ensure my safety.

Percentage of people interested in each connected vehicle feature

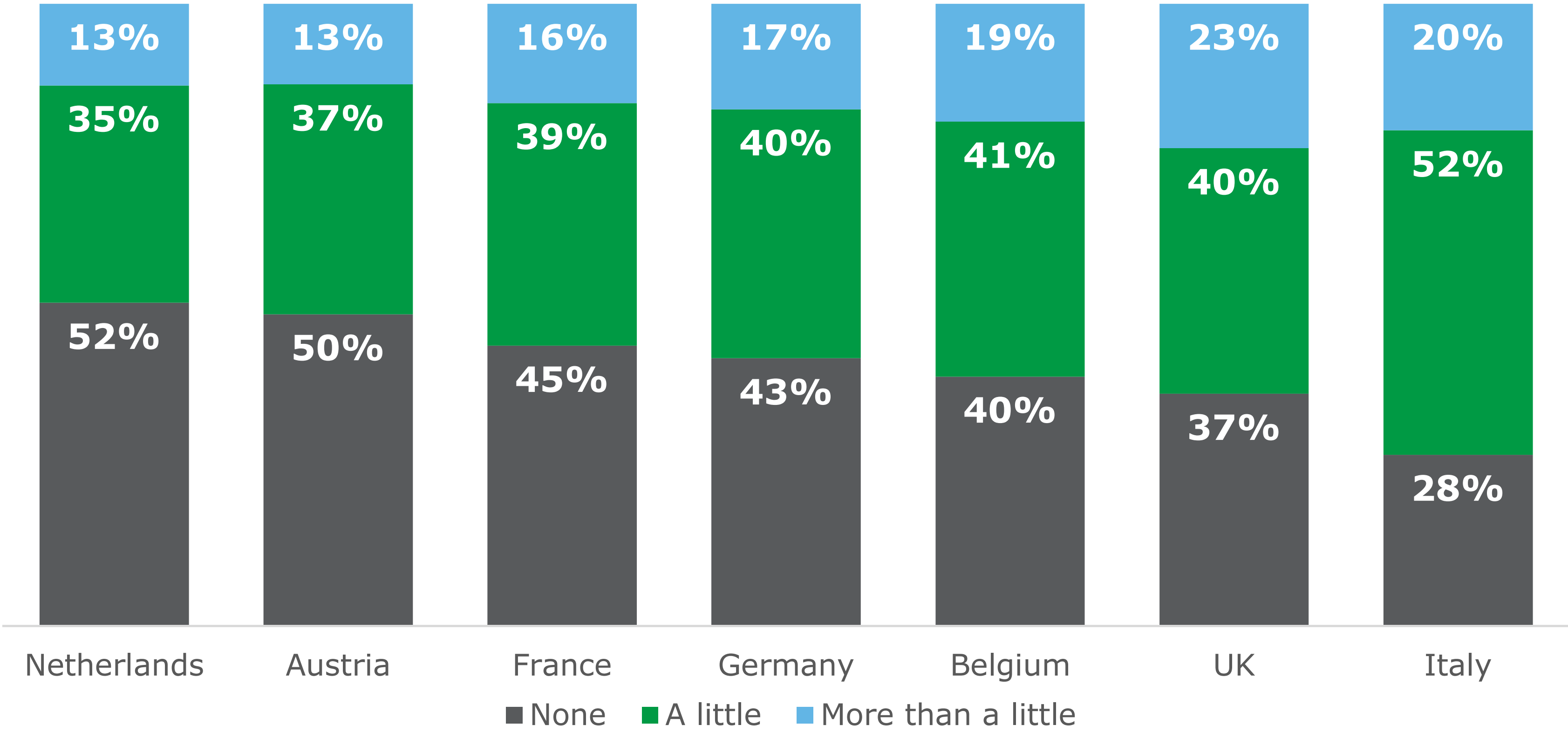
	Category	FR	DE	UK	IT	BE	AT	NL
Updates regarding traffic congestion and suggested alternate routes	Time	79%	73%	73%	79%	74%	76%	76%
Suggestions regarding safer routes	Safety	70%	67%	69%	77%	66%	67%	68%
Updates to improve road safety and prevent potential collisions	Safety	76%	67%	69%	80%	69%	71%	76%
Customized/optimized vehicle insurance plan	Cost	57%	43%	55%	70%	51%	43%	50%
Maintenance updates and vehicle health reporting	Cost	72%	64%	66%	76%	65%	67%	65%
Maintenance cost forecasts based on your driving habits	Cost	63%	49%	58%	69%	59%	51%	60%
Customized suggestions regarding ways to minimize service expenses	Cost	65%	53%	55%	64%	60%	53%	55%
Over-the-air vehicle software updates	Performance	65%	60%	52%	63%	53%	60%	61%
Access to nearby parking (i.e., availability, booking, and payment)	Services	65%	63%	65%	71%	62%	66%	61%
Special offers regarding non-automotive products and services related to your journey or destination	Services	37%	34%	42%	47%	33%	28%	36%
Receiving a discount for access to a Wi-Fi connection in your vehicle	Services	49%	43%	50%	54%	45%	39%	42%

Note: Percentage of respondents who are somewhat or very interested have been added together
Q21: How interested are you in the following benefits of a connected vehicle if it meant sharing either your own personal data or the data generated by the operation of your vehicle?

Sample size: France (FR)=592; Germany (DE)=1,207; Italy (ITL)=765; UK=739; Belgium (BE)=816; Austria (AT)=852; Netherlands (NL)=744

But, OEMs may also struggle to get consumers to pay for advanced connectivity features in most markets, even when it means increasing road safety.

Extra amount that consumers would pay for a vehicle that could communicate with other vehicles and road infrastructure to improve safety (2019)



Note: definition for "a little" is less than or equal to: DE (€600); FR (€600); UK (£400); ILT (€600); BE (€600); AT (€600); NL (€600); SA (Rand 5,000)

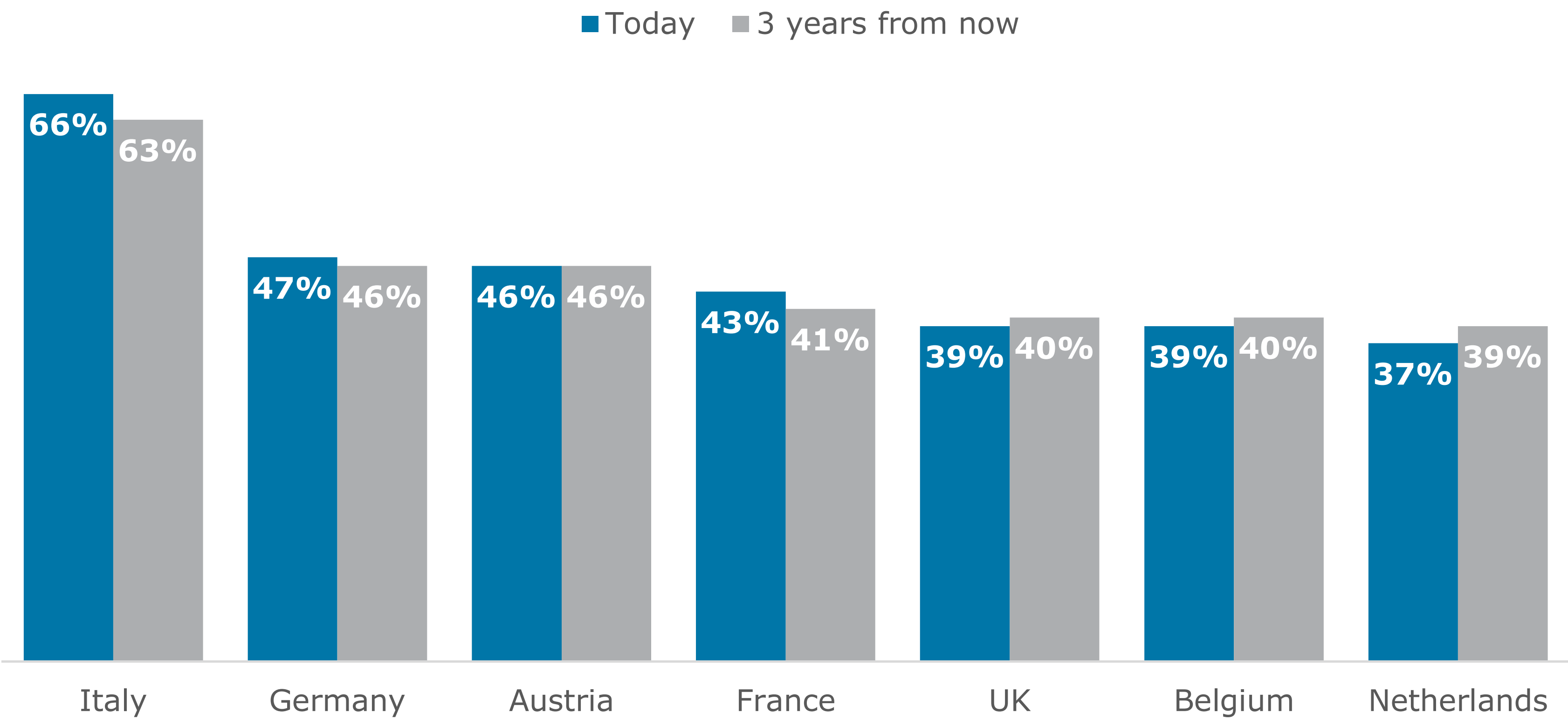
Q25. How much more would you be willing to pay for a vehicle that had the following connectivity technologies?

Sample size: France=592; Germany=1,207; Italy=765; UK=739; Belgium=816; Austria=852; Netherlands=744

Mobility revolution faces significant headwinds…

Daily usage of personally-owned vehicles is quite high in some markets, but even where usage is lower, the expectation is to maintain the 'status quo' into the next decade.

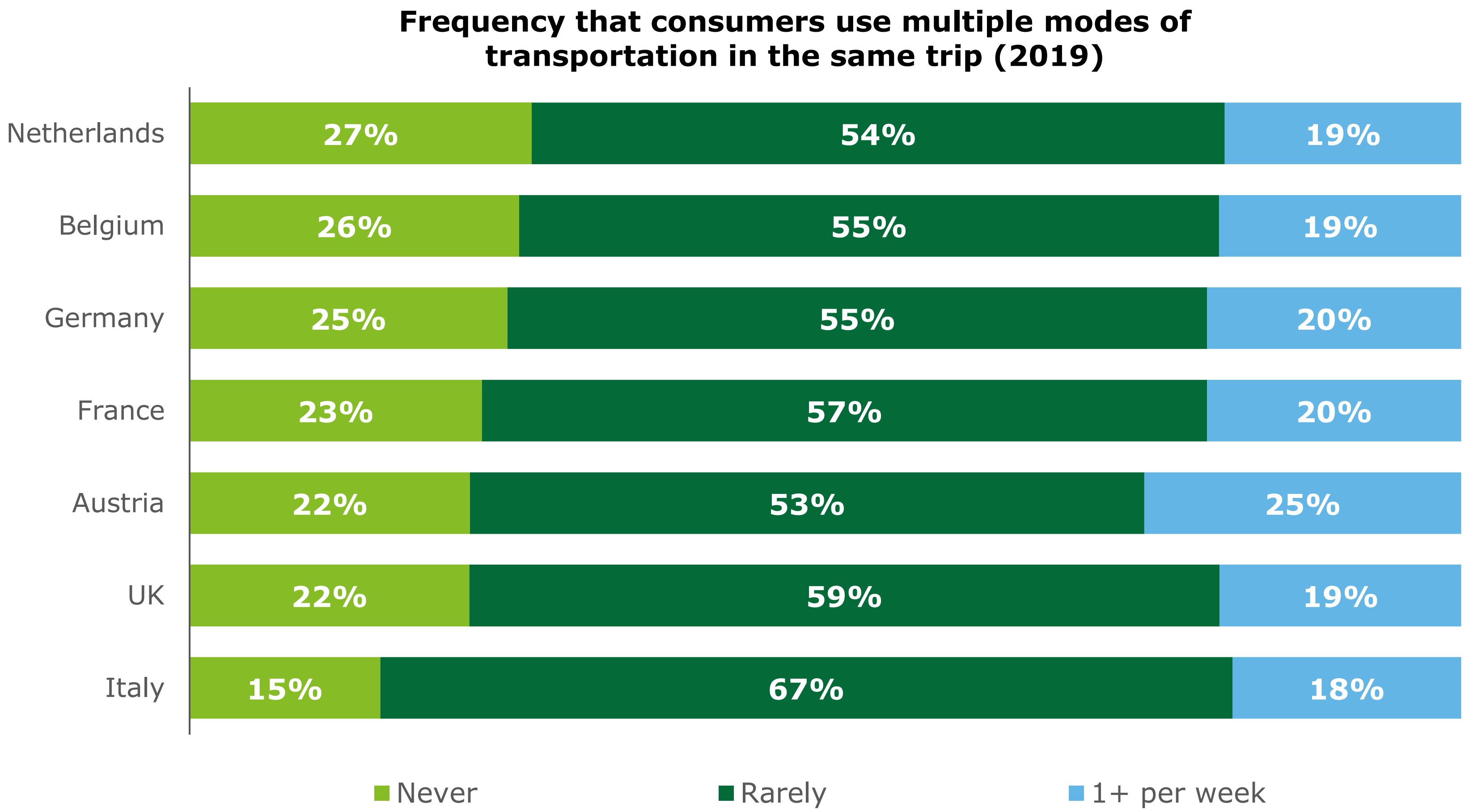
Percentage of consumers that use their own vehicle every day



Q26-27. Please indicate how often you use each transportation method (today vs. 3 years from now).

Sample size: France=1,254; Germany=1,773; Italy=1,258; UK=1,250; Belgium=1,254; Austria=1,256; Netherlands=1,263

And, the idea of combining different modes of mobility into one trip remains largely an occasional behavior for consumers.

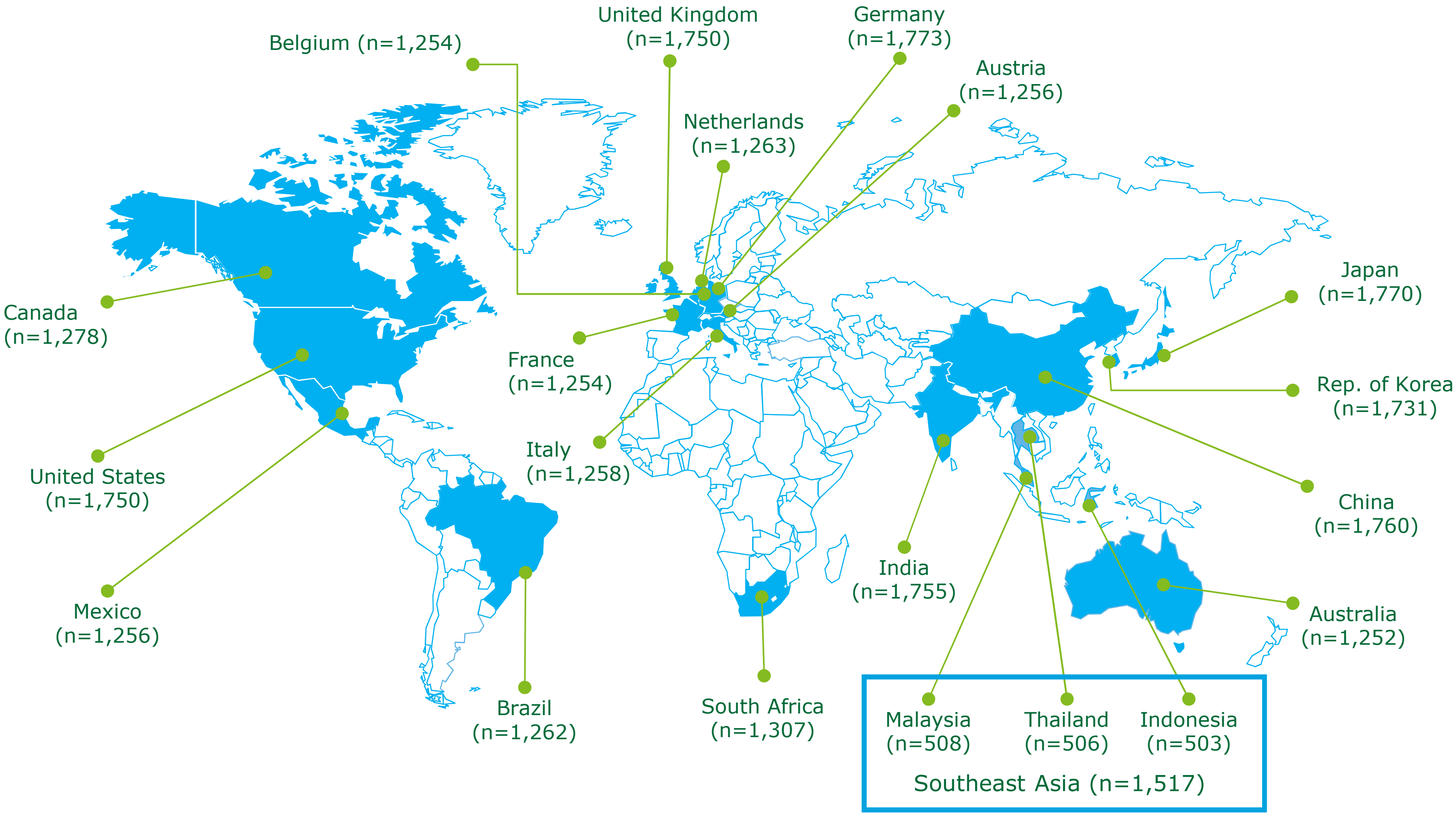


Q29. How often do you use multiple modes of transportation in the same trip (e.g., a trip using a subway, commuter train and your own vehicle?

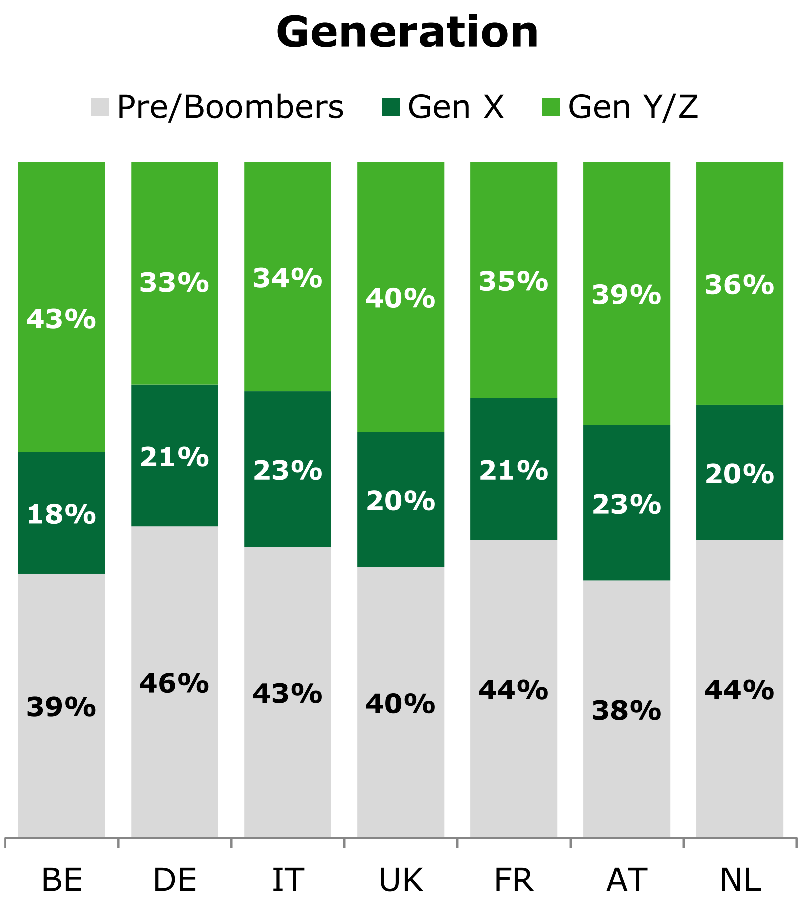
Sample size: France=1,254; Germany=1,773; Italy=1,258; UK=1,250; Belgium=1,254; Austria=1,256; Netherlands=1,263

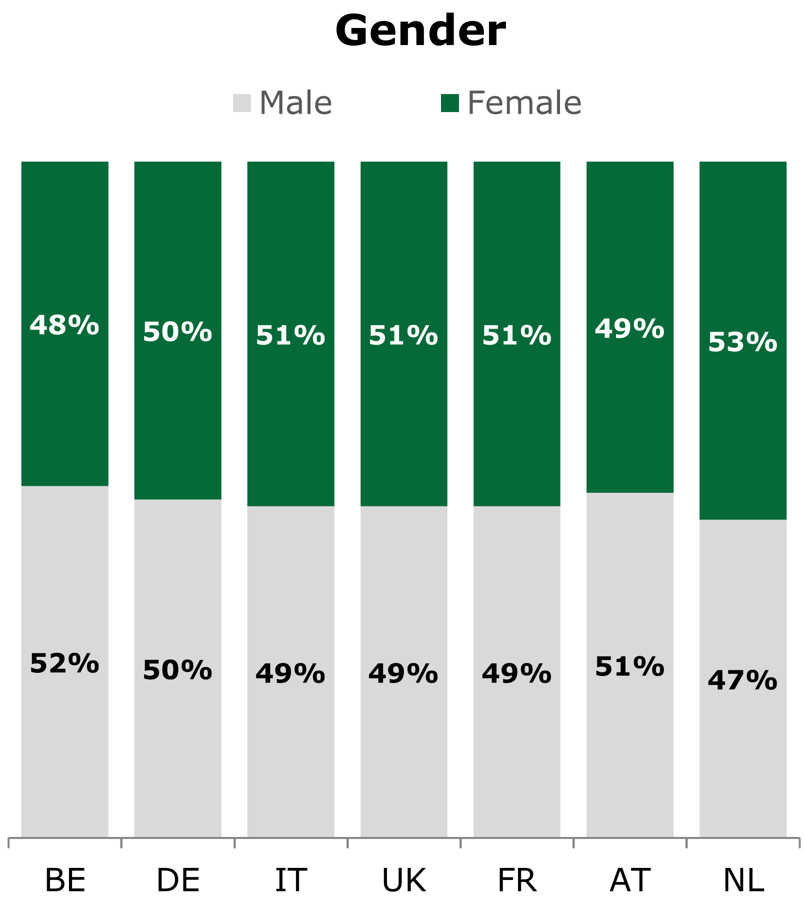
About the 2019 Deloitte Global Automotive Consumer Study

The 2019 Deloitte Global Automotive Consumer Study includes more than 25K consumer responses across 20 global markets.



The study is fielded using an online panel and designed to be representative of the population in each market.





Note: Pre/Boomers: Born Before 1965; Gen X: Born Between 1965-1976; Gen Y/Z: Born After 1976 (sample excludes consumers under 16 years of age)

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