

# THE STATE OF EUROPEAN AUTOTECH

MONDIAL  
PARIS MOTOR SHOW

MONDIAL  
.TECH  
PARIS



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A continuing tradition in innovation and excellence: Europe's Autotech industry represents the strength and diversity of the continent's most vibrant technical companies.

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# A DIVERSE AND FRUITFUL INDUSTRY



Between 2017 and Q2 2018, European and Israeli Autotech startups received investments worth over

**€1.5 billion\***

## The impact of Autotech

Autotech investments support innovation all across Europe. Germany and Spain garnered the greatest investment in 2017-2018 thanks to big investments in



**Logistics & Carsharing platforms received the highest number of deals**



Investors supported 17 Logistics startups, investing over €90m. 17 deals were made to Carsharing companies. Six carsharing deals were made to French companies, totalling more than €24m 

## Auto Sales and Carsharing Platforms

received the greatest amount of investment

Connected cars and cloud technologies earned over €165m in investment in France, Germany, Israel, Portugal, Sweden, Switzerland and the United Kingdom.

# INTRODUCTION

Since we started, one of the key aims of the Tech.eu team has been to track all of the funding rounds and exits in Europe, providing the most comprehensive and accurate record and analysis of the European technology scene. We do this by meticulously monitoring hundreds of sources, across multiple languages and regions.

This report, developed in partnership with Mondial Tech, focuses on the European and Israeli automotive tech sector in 2017 and early 2018. Competition in this sector is fierce. Yet, European autotech represents some of the most promising examples of innovation across the continent. We find startups in this sector are supported by a vibrant ecosystem of established corporates, industry accelerators, incubators, and community partners enabling them to compete at the very highest levels.

In this report, we take an in-depth look at the bigger funding and M&A trends in the automotive sector, as well as an overview of the main deals that have taken place in the region and the companies and investors involved. This report covers funding and M&A activity in 2017 and in the first six months of 2018. In preparing it, we analyzed all companies that were working on technologies related to the automotive industry, taking a deep dive into our own data to present the most accurate depiction possible. Automotive technologies cut across multiple technology verticals. This report examines the sector from a variety of aspects, including, auto sales, parking, car sharing, software, design, safety, and connected cars technology.

We have worked to make this report as comprehensive and useful as possible. Please refer to the end of the report for this report's methodology and disclaimers. For any questions or comments regarding this report, we invite you to email us at [reports@tech.eu](mailto:reports@tech.eu)

This report was written by Natalie Novick, Research lead at Tech.eu

# SHAPING THE FUTURE OF TRANSPORTATION

*The MONDIAL - PARIS MOTOR SHOW is the most visited motor show in the world. Born in 1898, it has always been a window on the future, assembling the best of automotive innovation under the same roof. For 120 years and beyond, it reflects the challenges that current and next generations are facing and the changes which will come.*

*For the next edition, we are designing a new event dedicated to BtoB relationships through the whole mobility value chain.*

*Today, automotive innovation means low-carbon emissions, connected mobility, and the emergence of the autonomous car. Nevertheless, yet now more than ever, we believe that car has both a rational and emotional appeal.*

*Therefore automotive manufacturers, equipment suppliers, tech leaders and startups have to work closer and closer to shape the future of the transportation experience.*

*MONDIAL TECH will provide them with a worldwide platform to offer new opportunities for making contacts, help them to develop their projects and accelerate the drive to future.*

*Be part of it!*

**Jean-Claude GIROT, General Manager  
MONDIAL-Paris Motor Show**

**MONDIAL**  
PARIS MOTOR SHOW



# MONDIAL .TECH

## SHAPING THE FUTURE

## OF TRANSPORTATION

### OCTOBER 2<sup>nd</sup> – 6<sup>th</sup>

for mobility innovators  
to meet and make business.

It showcases pioneering technologies applied to the automotive industry and its whole ecosystem. Only focused on car and mobility innovation.

It will develop the link between the automotive industry's value chain and their current and future technologies suppliers.

The event will take place in the **NEW PARIS CONVENTION CENTRE**, the fully renovated pavilion of the **MONDIAL PARIS MOTOR SHOW**.



# MONDIAL .TECH

## PARIS

### STARTUP AWARDS



**1**

Startup competition



**64**

Early-stage startups selected



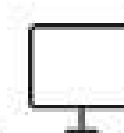
**24**

Jury members



**8**

Categories



**8**

Pitch sessions



**8**

Awards categories

**1**

Contest Champion



**478**

Candidates



**53**

Countries



# THE PARTICIPANTS IN THE SHOW & CONFERENCE PROGRAMME

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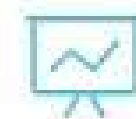


>100  
exhibitors

Mobility Startups IT & Telecom Companies  
Energy Providers Equipment Manufacturers  
Parts Electronic Components Car Body  
manufacturers Raw materials Infrastructure  
construction

>40,000  
attendees

All executives in charge of an innovation process: OEM  
OES Technology Groups Startup Accelerators  
Public Authorities Industry Service suppliers  
Investment Funds Press & medias



100

Sessions



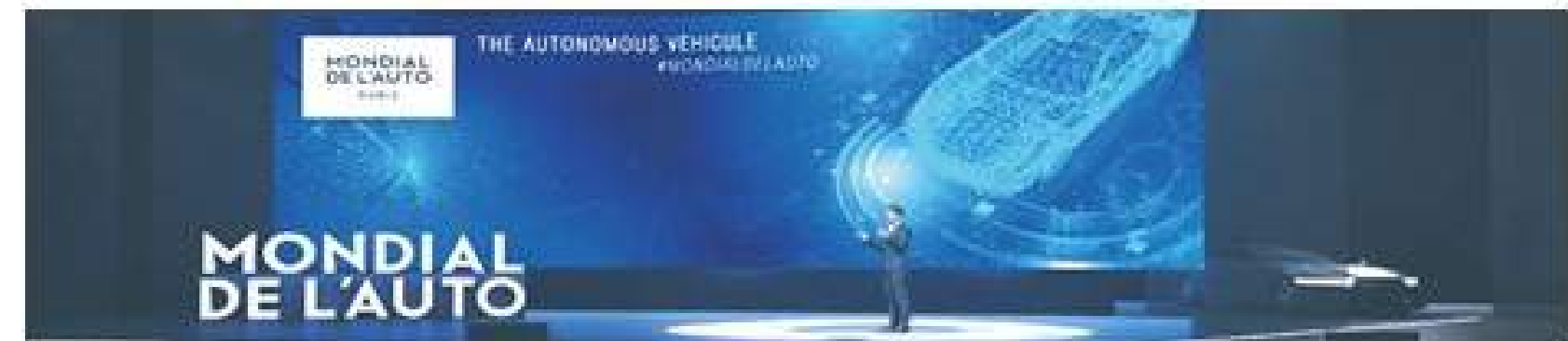
250

Speakers



10,000

Attendants



<https://mondial.tech>

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techsu





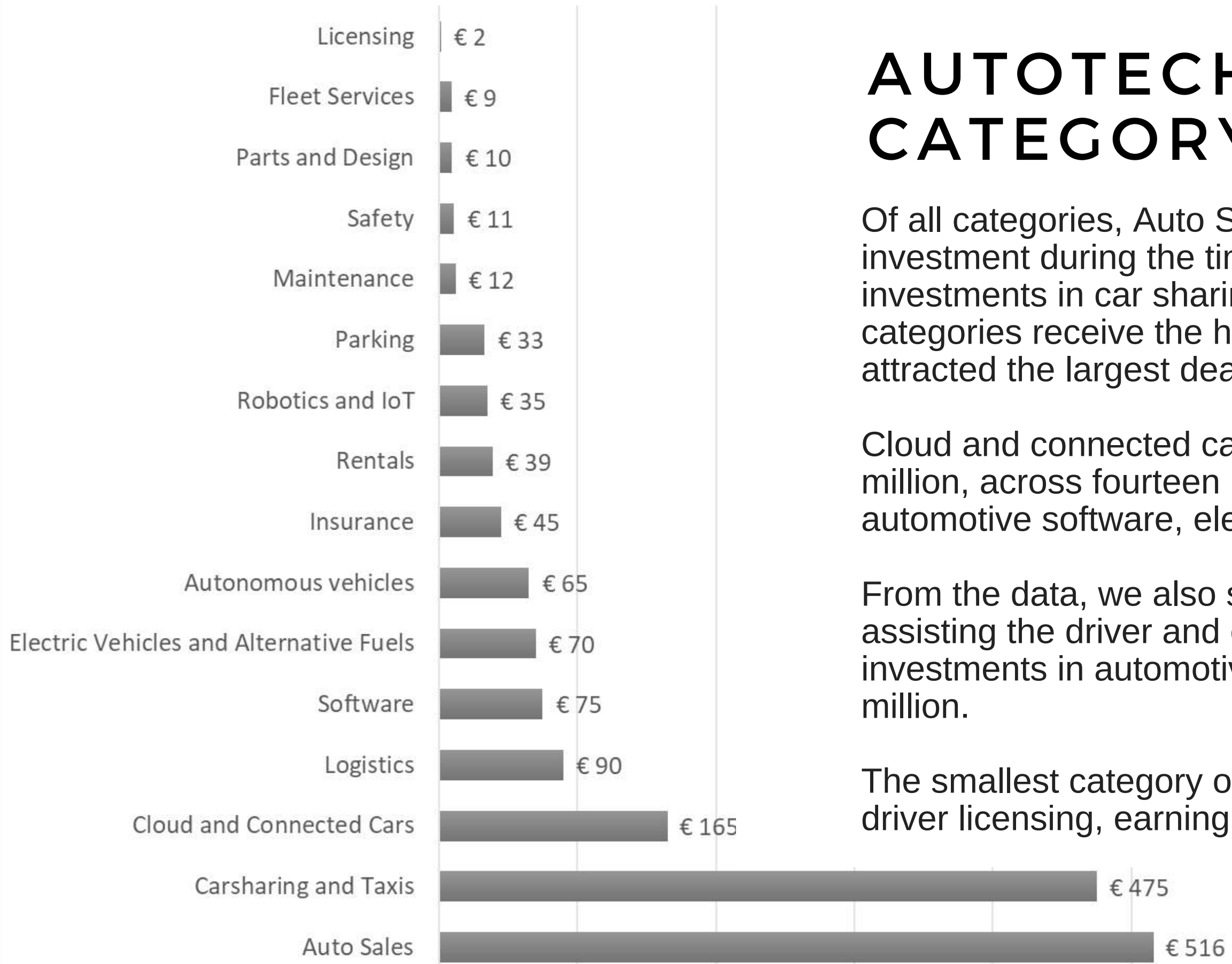
# EUROPEAN AUTOTECH BY THE NUMBERS

Investments in European Autotech, 2017 - Q2 2018

From Q1 2017 to Q2 2018 Tech.eu tracked hundreds of investments made to startups working in the European automotive industry. These verified deals represent investments worth more than €1.5 billion\*.

But the impact of these investments goes far beyond what can be calculated in financial terms. Each deal made is a tangible investment in innovation, a representation of new partnerships and built networks, each a shared commitment to future excellence in European Autotech.

*\*Figures correspond to investments in European Autotech, 2017 - Q2 2018. The overall totals tend to undervalue actual spending as not all financial terms of the deals are made public. Investment totals estimated in €, usually from reported \$ amounts.*



## AUTOTECH INVESTMENTS, BY CATEGORY

Of all categories, Auto Sales attracted the greatest amount of investment during the time period analyzed. This was followed by investments in car sharing and taxi services. Not only did these two categories receive the highest amounts invested, but they also attracted the largest deals overall.

Cloud and connected car technologies earned investments of €165 million, across fourteen investments. This is followed by investments in automotive software, electric vehicles, and autonomous cars.

From the data, we also see significant investments in companies assisting the driver and ownership experience. One example is seen in investments in automotive insurances, with ten deals earning over €45 million.

The smallest category of investment went to two deals for car and driver licensing, earning €2 million between 2017 and Q2 2018.

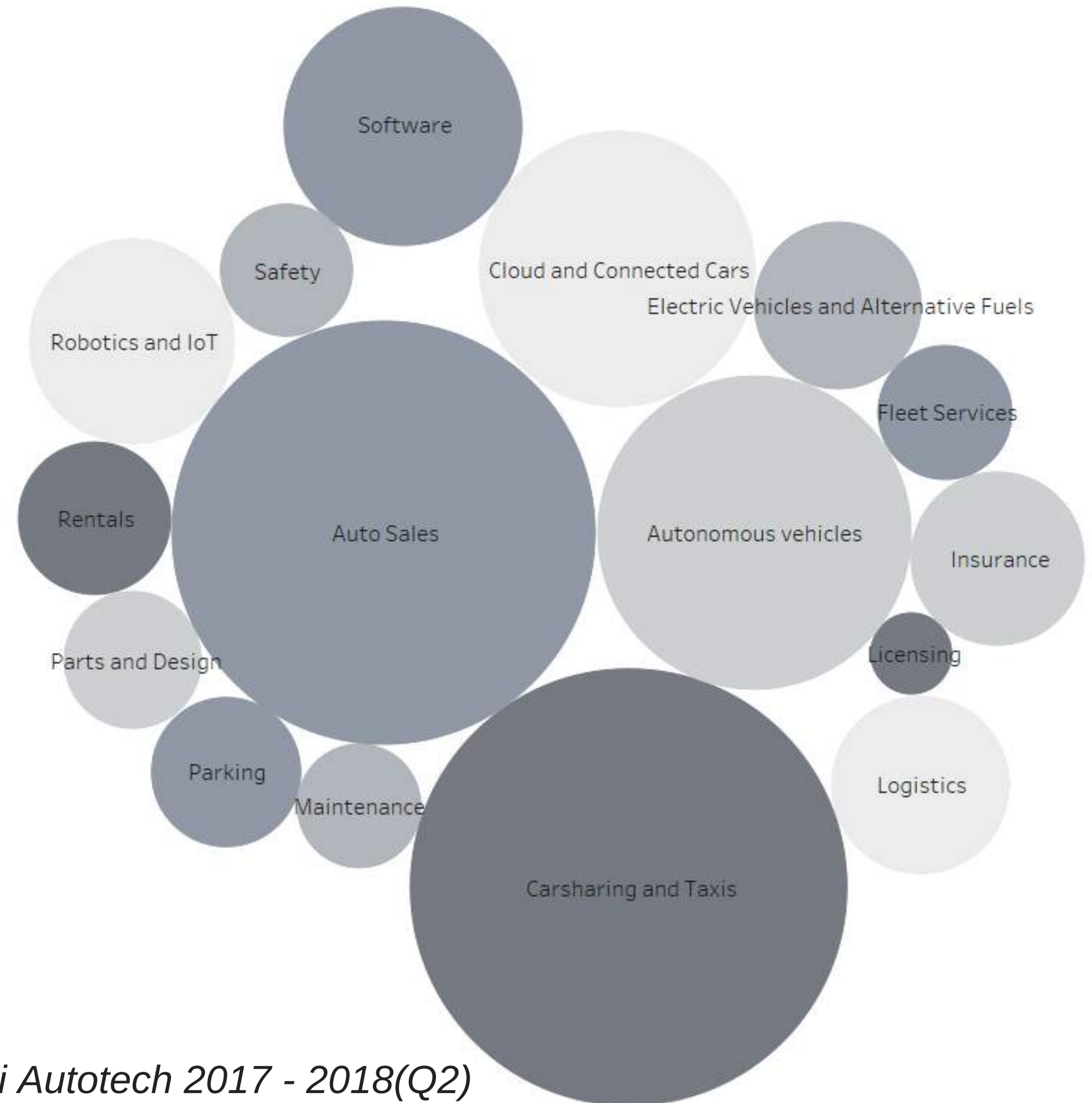
*Investments in European and Israeli Autotech 2017 - 2018(Q2), in millions*

# AVERAGE DEAL SIZE BY CATEGORY

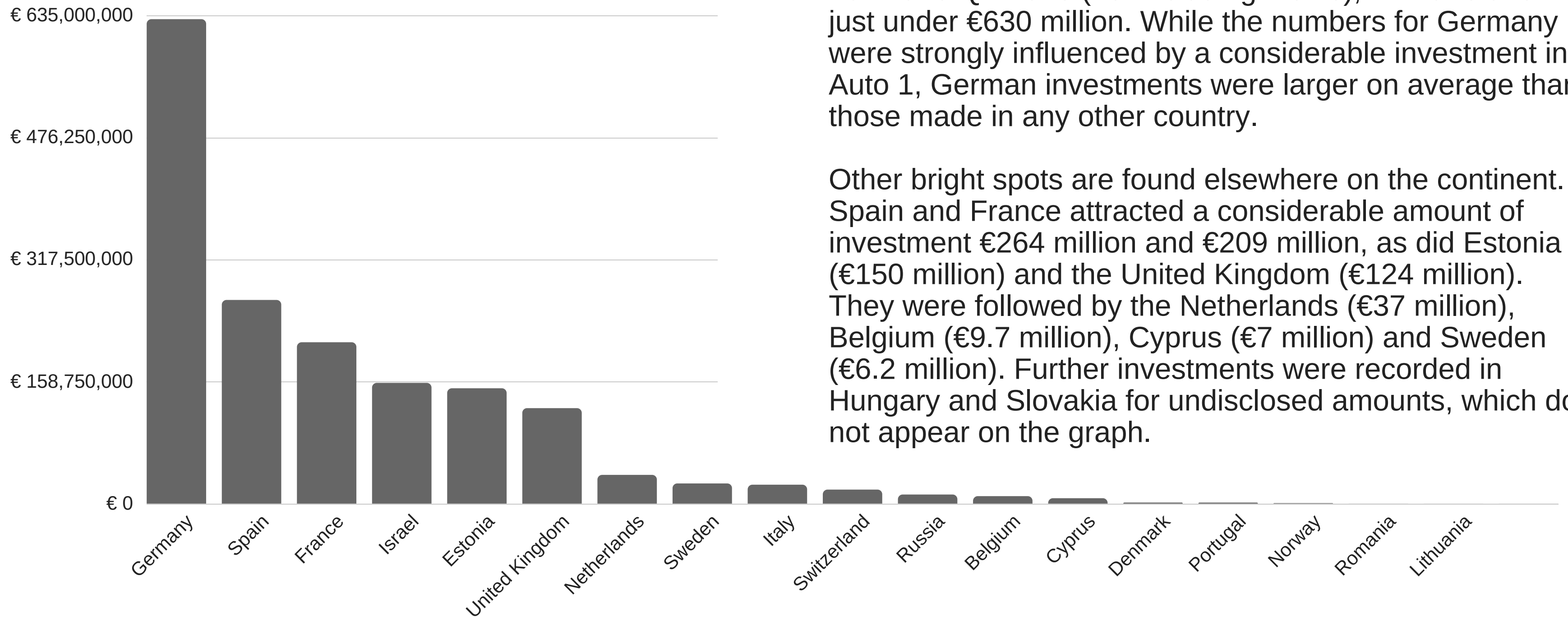
Investors in European autotech funded ventures across many sectors, however, some categories were more richly rewarded.

When comparing aggregate investments across Europe, we a number of unique trends can be observed. When looking at aggregate totals by deal category, it is clear to see that Auto sales and Carsharing companies received the highest average investment per deal. The next highest average deals were made to startups working on autonomous vehicle and connected car technologies, with average investments of just over €16 million and €12 million, respectively.

Investments made to companies working on Industry 4.0 technologies, such as Robotics and IoT and software solutions earned average deals of just over €7 million and €9 million.



# STARTUP INVESTMENT BY COUNTRY, TOTAL INVESTMENT

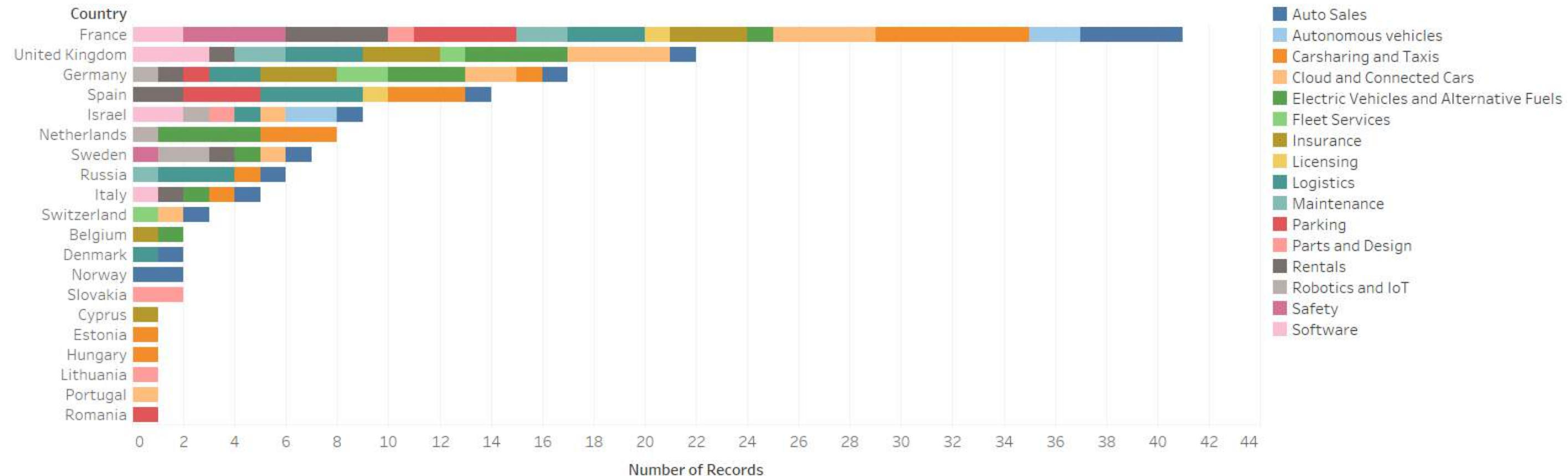


Germany attracted 36% of all startup investment between 2017 and Q2 2018 (not including M&As), with a total of just under €630 million. While the numbers for Germany were strongly influenced by a considerable investment in Auto 1, German investments were larger on average than those made in any other country.

Other bright spots are found elsewhere on the continent. Spain and France attracted a considerable amount of investment €264 million and €209 million, as did Estonia (€150 million) and the United Kingdom (€124 million). They were followed by the Netherlands (€37 million), Belgium (€9.7 million), Cyprus (€7 million) and Sweden (€6.2 million). Further investments were recorded in Hungary and Slovakia for undisclosed amounts, which do not appear on the graph.

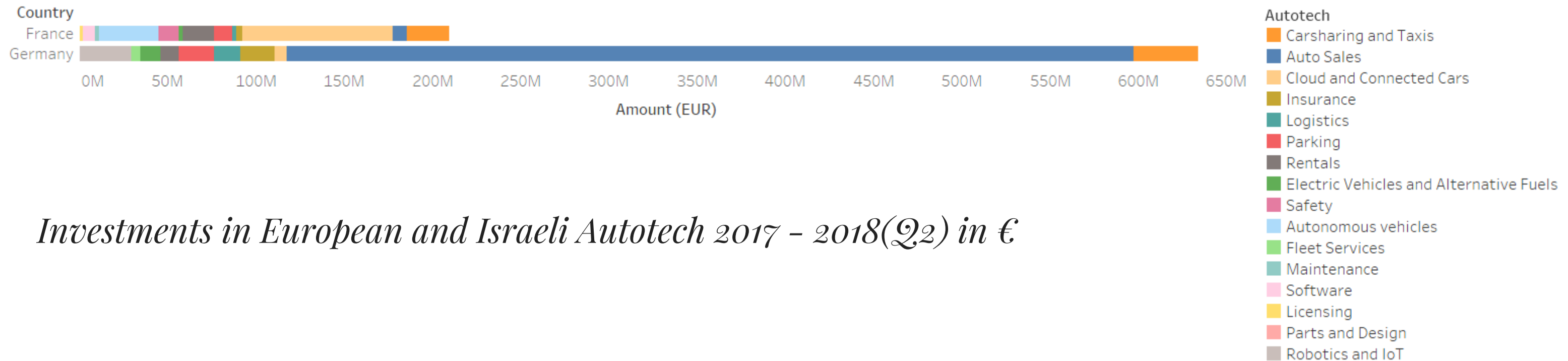
*Investments in European and Israeli Autotech 2017 - 2018(Q2)*

# STARTUP INVESTMENT BY COUNTRY, NUMBER OF DEALS



When changing the graph to analyze the number of deals, as compared to the amount, a different image emerges. We find that despite coming behind Germany and Spain in the total amount invested, of all countries, France earned the greatest amount of Autotech investments, with 41 between Q1 2017 and Q2 2018. Autotech investments made to France outnumber those by the next highest receiving country, the United Kingdom, which received 22 investments during the same time period. Germany follows in the third position with 17 investments. The strong investment landscape in France can be noted by the country's strong ecosystem of support institutions, including incubators, accelerators, and investors.

# STARTUP INVESTMENT: SPOTLIGHT ON FRANCE AND GERMANY

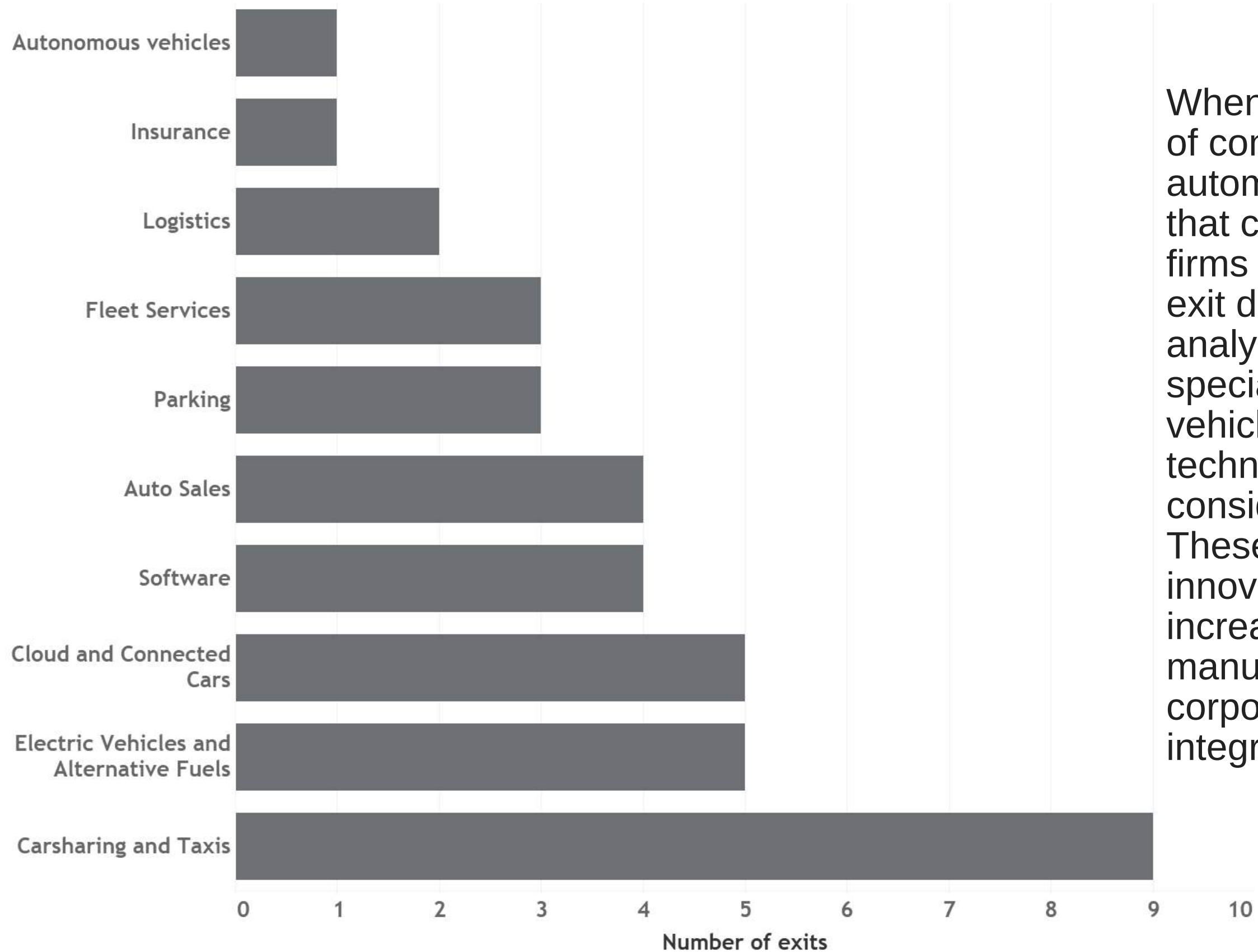


*Investments in European and Israeli Autotech 2017 - 2018(Q2) in €*

When comparing the country with the most deals (France) to the country with the highest amount of investment (Germany) we see a number of interesting trends. First, we notice France and Germany both receive investment in many different areas of Autotech, however, deals made in France (over 2x more than were made in Germany) received much smaller amounts of funding than those made in Germany. The exception is for cloud and connected car technologies.

The strength of the investments in each of these countries come as no surprise. The automotive industries are strong pillars of these countries economies, and both countries offer startups a strong ecosystem of local partners, a healthy and knowledgeable pool of local investors as well as strong engagement from each country's corporate automotive leaders.

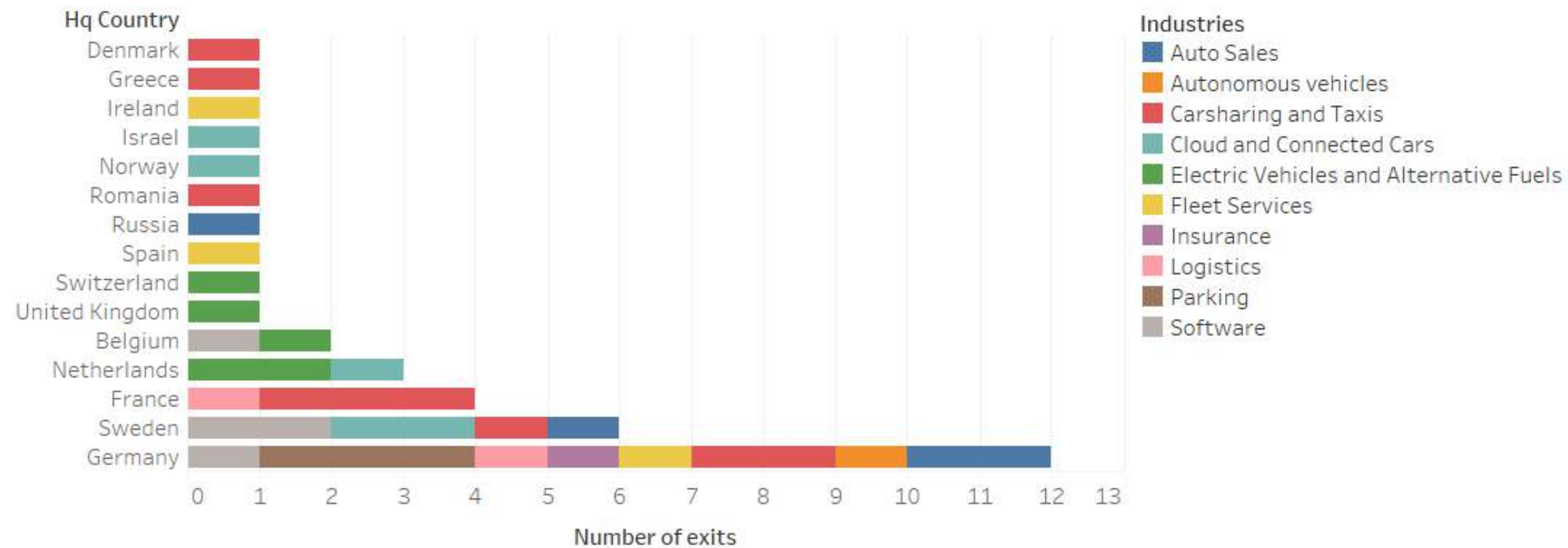
# EUROPEAN AUTOTECH EXITS BY INDUSTRY



When examining the exits of companies in the automotive sector, we find that carsharing and taxi firms were most likely to exit during the time period analyzed. Companies specializing in both electric vehicles and connected car technologies also found considerable exit activity. These industry 4.0 innovations are increasingly attractive for manufacturers and corporates that rely on integrated technologies.



# EUROPEAN AUTOTECH EXITS BY COUNTRY (NUMBER)

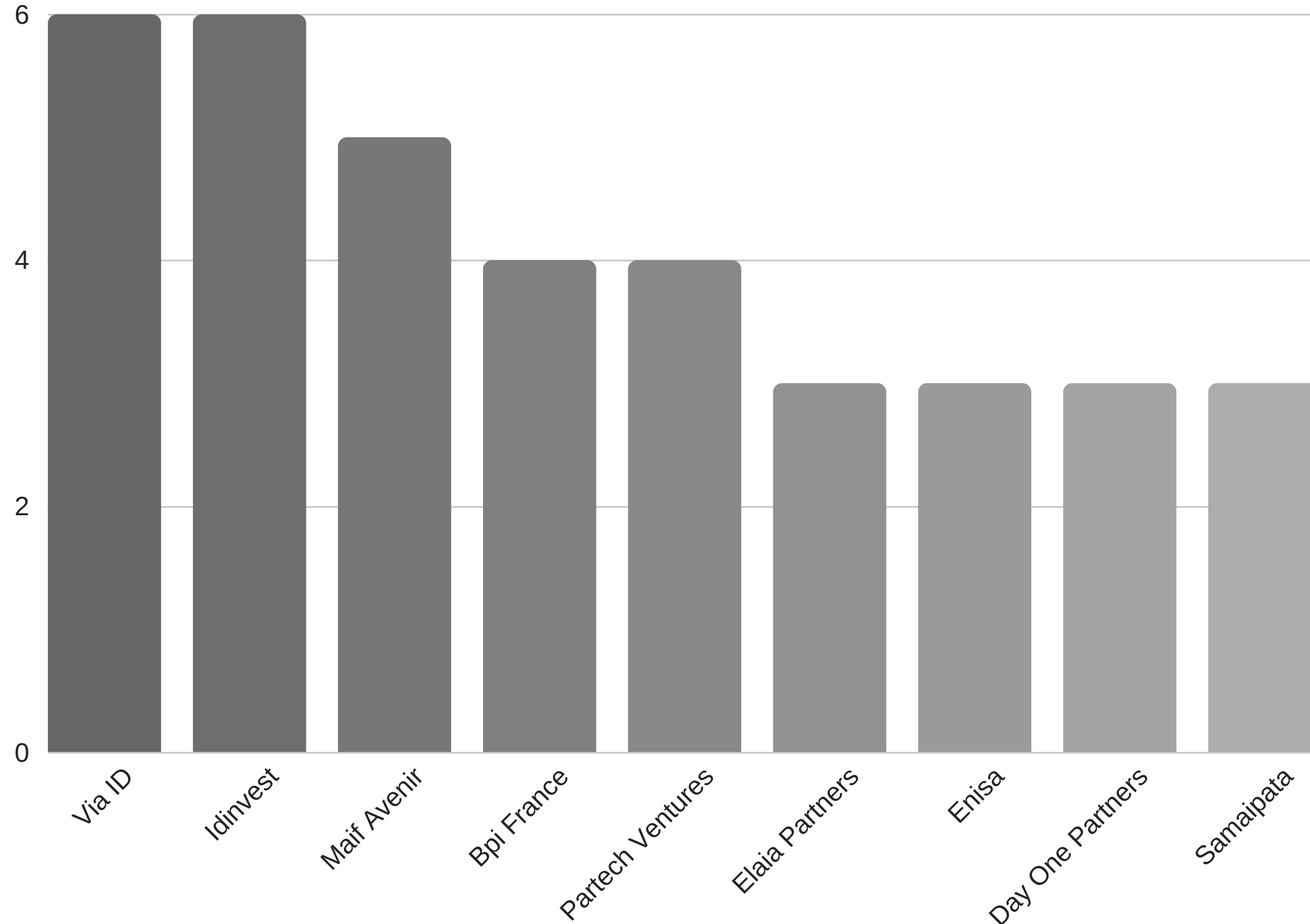


Germany led European autotech exits with 12 exits during the time period analyzed and with multiple technologies represented, including, auto sales, autonomous vehicles, car sharing and industry 4.0 technologies, including cloud and connected cars and logistics.

Sweden followed with six notable exits during this period, strongly representing the country's engineering talent, and cross-cutting many categories, including connectivity and ITS, material and weight reduction (software by Escenda) and sustainable mobility.

The Netherlands, Belgium, the UK, and Switzerland all exited companies dedicated to electrification and hybridisation and sustainable mobility.

# INVESTORS IN EUROPEAN AUTOTECH



340 investments were made by 291 different investors in European and Israeli Autotech 2017 - 2018(Q2) (not including accelerator/incubator funding or M&As).

This graph represents the industry's top investors. We find French investors Via ID, Idinvest, Maif and Bpi France support investments in European autotech most frequently.

# EUROPEAN AUTOTECH INDUSTRY TRENDS

- *Sustainable Mobility, Storage & Energetic Systems Material & Weight Reduction, Electrification & Hybridisation*
- *Industry 4.0: IoT, Cloud and Connected Technologies, Connectivity & ITS*
- *Improving Consumer Experience: Comfort & Well-Being Experience, Safety, Automatization & Cybersecurity*

# SUSTAINABLE MOBILITY: EUROPEAN CARSHARING AND TAXIS: COMPETING AT THE HIGHEST LEVEL

With its founding in 2009, Hamburg's mytaxi claims to be the world's oldest ride-hailing app. Since that time, Europe has continued to innovate in this sector, and European carsharing and taxi services continue to receive a considerable amount of investment.

Barcelona's Cabify, earned two large value investments in 2017 and 2018, notably raising a \$100 million Series D round in May 2017 and a \$160 million Series E round in January 2018. These investments put Cabify's valuation at \$1.4 billion.

In May 2018, Estonian-founded Taxify announced a \$175 million investment headed by Daimler. Daimler's investment has pushed the valuation of Taxify beyond \$1 billion. Korelya Capital, a French venture capital fund, Taavet Hinrikus, the co-founder of U.K.-based money transfer start-up TransferWise, and existing investor Didi Chuxing, also participated in the round. Daimler and mytaxi also lead the acquisition of Greece's Taxibeat (since renamed Beat) for \$40 million in February 2017.

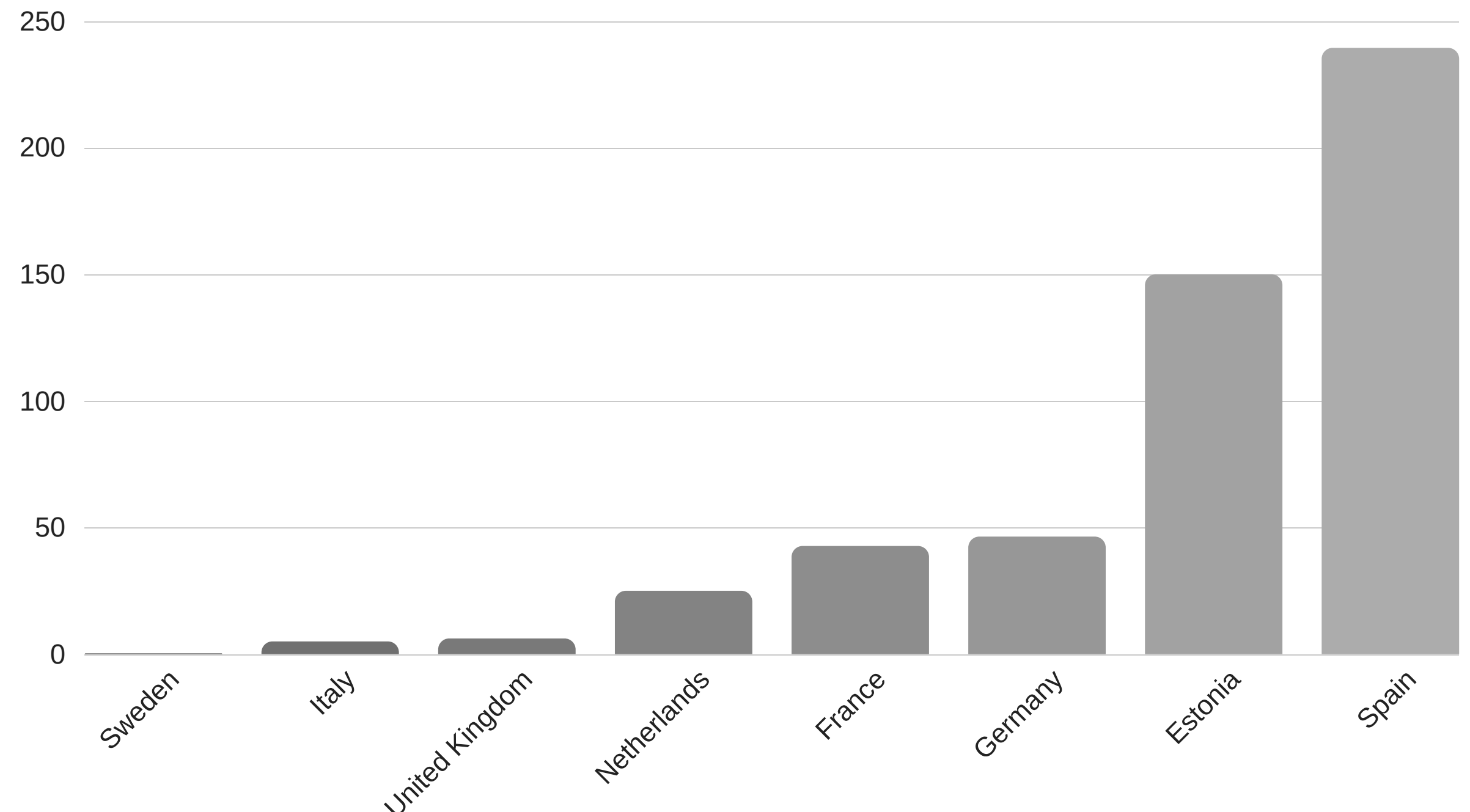
Other notable investments from 2017-2018: Berlin's Blacklane, a chauffeur and professional driver services firm earned a \$40 million investment led by Abu Dhabi's Al Fahim Group. Paris-based Heetch raised two rounds, \$12 million in September 2017 and \$20 million in follow-on funding in January 2018. These rounds were led by Felix Capital, in an effort to position Heetch to compete against Uber.



# SUSTAINABLE MOBILITY: EUROPEAN CARSHARING AND TAXIS, FUNDING DISTRIBUTION BY COUNTRY

Investments in carsharing, taxis and car rental platforms differed considerably by country. Spain received the highest amount of investment in this sector, anchored by Cabify, with an investment of just under €240 million (estimated). Estonia took the second highest country total from Q1 2018 to Q2 2018 with €150 million invested in hometown unicorn Taxify.

Further investments were made in Germany to the tune of €46 million, France €42.6 million, The Netherlands €25 million, the United Kingdom €6.16 million, Italy €5 million and finally Sweden, with an investment of just over three hundred thousand euros.



*Investments in European Carsharing, Taxis and Car Rentals 2017 - 2018(Q2) in millions of € (est.)*

# NOTABLE EUROPEAN AUTOTECH EXITS: DAIMLER'S MYTAXI ACQUIRES ITS COMPETITORS



Acquisition: Athens-based Taxibeat was acquired by Daimler's mytaxi in early 2017. Taxibeat enjoys a strong market position in Greece and also in Peru. While the terms of the deal were left undisclosed, at the time of the acquisition, Taxibeat had 500,000 riders and 8,000 drivers.

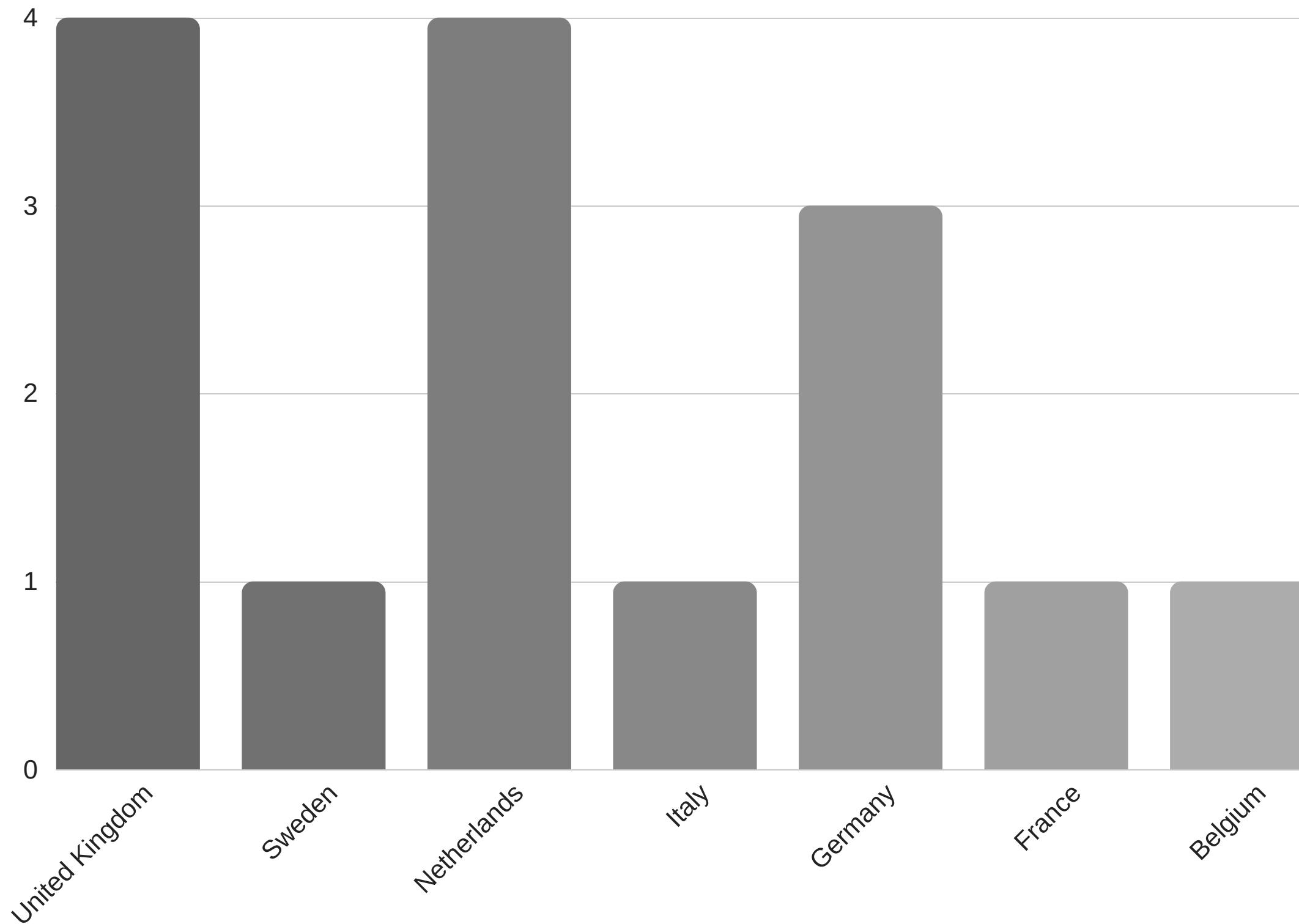
The company has since been renamed "Beat". Beat is now the only ride-hailing app in Greece after Uber left the country in April 2018.



A few months later, Romania's Clever Taxi was also acquired by Daimler's mytaxi. Clever Taxi was the first ride-hailing platform in Romania and also the country's largest, with over 600,000 users at the time of acquisition.

Clever Taxi was created in 2010 as a project of co-founders Mihai Rotaru and Alexandru Dumitru at Romania's first ever Startup Weekend event. Daimler's acquisition of Clever Taxi has furthered mytaxi's reach-- today the company has 120,000 drivers across 13 countries.

*Additional exits in European Carsharing and Taxis between 2017 - 2018 (Q2) include: DriveNow (Germany), Flinc (Germany), Cabonline (Sweden), Less (France), Marcel (France) and Chauffeur Prive (France)*



*Number of investments in electric and alternative fuel technologies, by country Q1-2017 through Q2 - 2018*

## ELECTRIFICATION & HYBRIDIZATION

Electric vehicles and alternative fuel technologies attracted considerable investment from 2017-2018, with investments spread across Europe.

Electric cars and alternative fuels are poised to be a key element of the future of Europe's automotive landscape, as cities begin to crack down on diesel and traditional fuels. In Europe, electric car technologies are behind competitors in the US and Asia, but they are beginning to catch up, with investments of over €70 million in Q1 2017 - Q2 2018.

# ELECTRIC CARS AND ALTERNATIVE FUELS

Many European Autotech startups are developing technologies related to sustainable mobility solutions. These include both electric vehicle solutions, hybridization, and also the infrastructure needed to support these, including storage and energetic systems.

Notable among these, POD Point is a British supplier of electric car charging stations. In 2016, POD Point entered into an agreement with Volkswagen UK to be the exclusive supplier for their eco-friendly electric range of vehicles. This partnership highlights the important degree of collaboration that automotive manufacturers and startups must undertake to remain competitive in this rapidly changing industry. In February 2017, POD Point raised a £9 million series C round led by Draper Esprit.

Fastned, a Dutch competitor has begun building electric charging stations across the Netherlands and Germany. In 2017, the company raised two post IPO rounds, to further develop their network of charging stations across Europe. This was soon followed by a €4.1 million contract by the German government to build 25 charging stations across Germany. Partnerships remain a key facet of electric vehicle success. Fastned has joined a partnership with energy storage firm Leclanché SA to help deploy their network, as well as a partnership with the University of Newcastle, to bring their technology to the UK.

## Spotlight on: Little Cars, Spain

Supported by Impact Connected Car Accelerator, Little Cars builds electric vehicles from the ground up, designed and manufactured in Spain. Founded in 2004, Little manufactures 5 different models of electric vehicles. In 2018, Little has focused their development on international sales, chiefly in Latin America.



# NOTABLE EUROPEAN AUTOTECH EXITS: SUSTAINABLE MOBILITY, ELECTRIFICATION & HYBRIDISATION



IPO, Sustainable Mobility: Denmark's GreenMobility, an electric vehicle-sharing company raised €8.4 million in 2017 in an initial public offering (IPO) of publicly traded shares. This investment corresponds to a valuation of €33.6 million for the company. Green Mobility offers access to 400 electric City Cars in Copenhagen that may be rented by the minute.



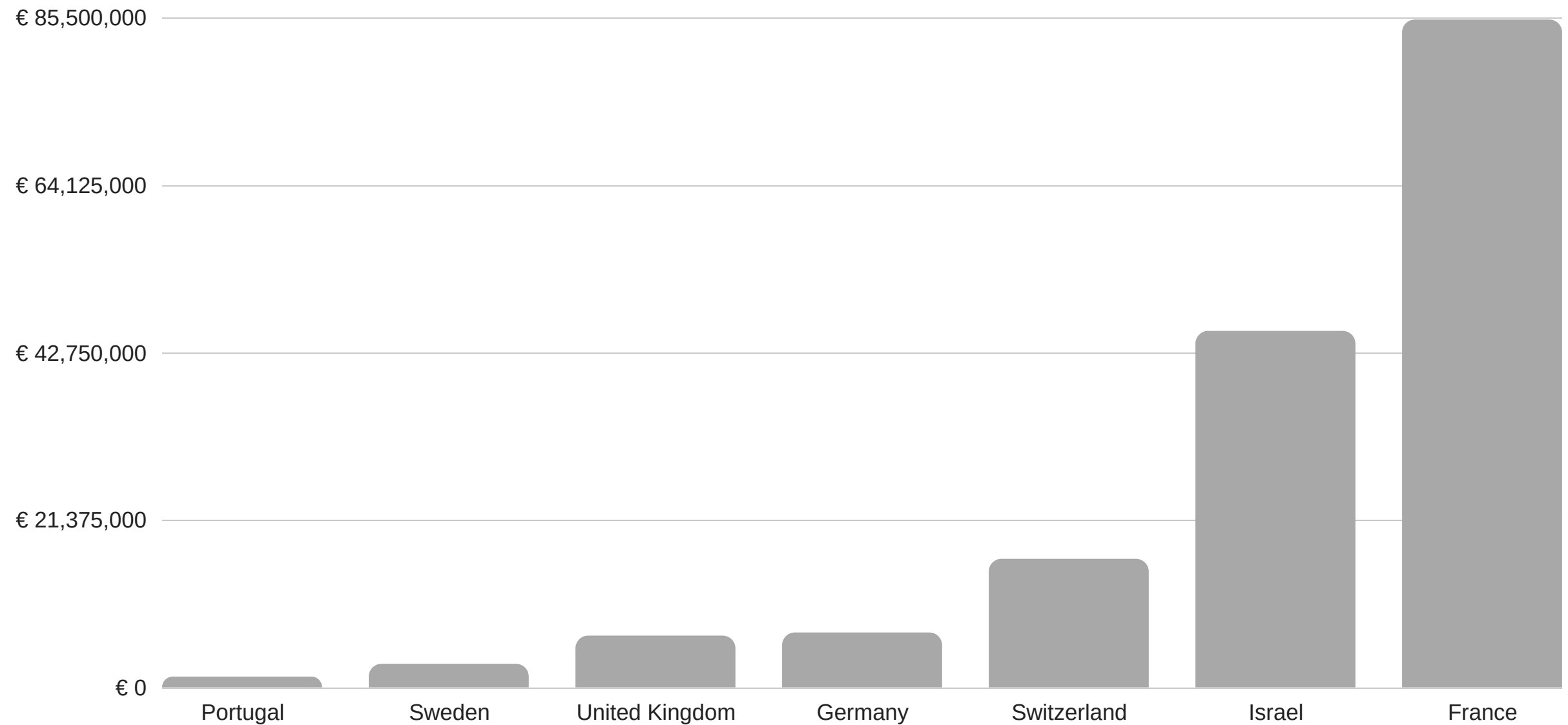
Acquisition, Electrification & Hybridisation: Amsterdam's EV-Box, a supplier of electric vehicle charging stations was acquired by French electric utility company ENGIE for an undisclosed amount. The company maintains over 40,000 charge stations across Europe and the United States.

*Additional exits in European Sustainable Mobility and Alternative Fuels from 2017 - 2018(Q2) include: Punch Powertrain (Belgium), NewMotion (the Netherlands), Chargemaster (UK), Adaptricity (Switzerland)*

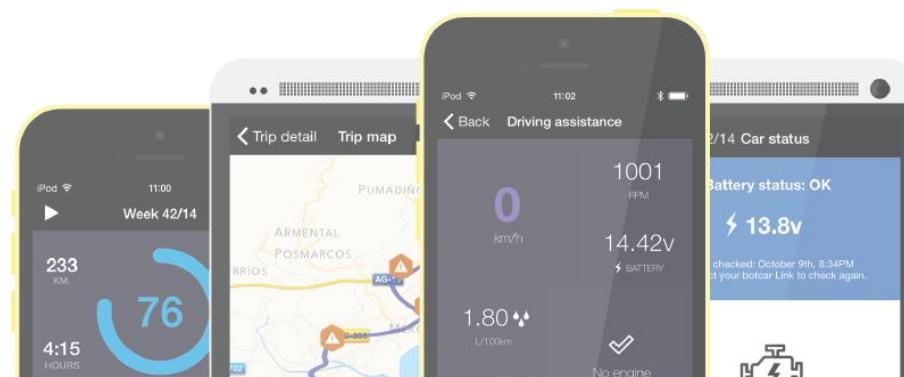
# INDUSTRY 4.0: INVESTMENTS IN CLOUD AND CONNECTED CAR TECHNOLOGIES

During the time period analyzed, France was noted as the industry leader in supporting startups dedicated to Industry 4.0. Both France and the UK led on the number of deals made in this sector, with 4 deals each. French startups Actility, Xee, Gkeep are some examples of companies in the Cloud and Connected Technologies space. Actility's Series D investment helped to put France as the top earner of all Cloud and Connected Car technologies, with an investment of over €68 million led by Bosch.

Industry 4.0 solutions also remains an area where traditional manufacturers are investing heavily.



FarePilot is an app used by ride-hailing drivers, bridging cloud, connected car, ITS and sustainable mobility solutions. The app points drivers to customer hotspots to help them get more jobs while spending less time driving.



Botcar's platform helps users enable connected car technology in older cars at a low cost. This creative solution using a low-cost sensor transforms any vehicle into a connected car, democratizing the Internet of Things

# NOTABLE EUROPEAN AUTOTECH EXITS: ENGINEERING AND INDUSTRY 4.0



Sweden's Escenda was acquired by Tata Technologies in 2017 for an unknown amount. The engineering services company has multiple automotive competencies, capable of building bespoke solutions from the design stage to technical software for active safety, telematics, infotainment, engine management, and diagnostics. At the time of the acquisition, Escenda Engineering AB had 150 engineers and had just capped off a 230% growth in revenue in the previous four years.



Netherlands-based Tass International was acquired by Siemens in mid-2017. Tass develops a comprehensive suite of engineering solutions for the automotive industry, ranging from simulation software, connected and autonomous car technologies, to driver and occupant safety to consumer testing. When acquired, TASS International had approximately 200 employees and an annual turnover of €27m.

*Additional Exits in European autotech engineering, software and Industry 4.0 solutions between 2017 - 2018(Q2) include: Autonomos (Germany), Abax (Norway), Movimento (Sweden), Fältcom (Sweden)*

# CONNECTIVITY & ITS: CONNECTED CARS AND THE CITY

*Personal transport is undergoing an incredible shift. Urban transport is shifting from personal vehicles to a more varied mix of transport types, among them, a stronger reliance on public transport, bicycles, scooters and hybrid mobility solutions, including car sharing. ITS and other connected technologies help to connect these vehicles to their environment, building integrated systems between cars, drivers, and streets.*

Europe's manufacturers and startups are leading the way in networked urban transport solutions. One key example comes from Volkswagen. While their main product offering remains personal vehicles, they have branched out into multiple transport solutions, including the Volkswagen MOIA "social movement" shuttle, launched in Hannover and the Volkswagen WE. In 2019, Volkswagen WE will launch in Germany and will head to other geographies in 2020. Volkswagen WE is an entire ecosystem of products that has the opportunity to revolutionize car ownership and use. One solution, Car-Net, connects you digitally to your vehicle, even when you are away from it, and others, turn your smartphone into a parking meter. Yet another, transforms the car into a delivery station, allowing it to collect parcels on your behalf. Digital solutions like these have the opportunity to drastically change our relationship with our vehicles in the future.

# CONNECTED CARS AND THE CITY: PARKING

*Denser urban environments have contributed towards a growing market in smart solutions to address parking headaches. Smart parking solutions often require serious technology, cutting across many categories, from ITS to sensor and network technologies.*

One of the most challenging aspects of owning cars in Europe's increasingly dense cities concerns where to park them. Munich's Cleverciti Systems uses sensor technologies across the urban environment to help users locate open parking spots, effectively reducing Co2 emissions and needless hunting for an appropriate spot. Founded in 2012, the company today working with municipal partners from the City of Auckland (New Zealand) to the City of Westminster, to Barcelona, Florence, and Dublin. In May of 2018, Clevercity raised a €12.6 million early stage round, led by Germany's EnBW New Ventures.

Another innovative parking solution comes from France's Stanley Robotics. Stanley is an electric valet parking robot that attaches to your vehicle and parks it in the most efficient position, all without human help. In May 2017, Stanley Robotics raised a €3.6 million early stage round to further develop their product.

## AUTOTECH EXITS: PARKING



Munich-based Parkpocket was acquired by German automotive manufacturing company Continental AG in 2017. Parkpocket is a smart mobility solution that helps inform drivers about available parking spaces, carparks, and electric charging locations.



Evopark was founded in Cologne in Cologne in 2014. The company maintains a cashless system for parking garage entry using RFID cards. Evopark was acquired in early 2018 by Scheidt & Bachmann, a world leader in fare collection and car park installations.



In late 2017, Sweden's Easypark was acquired by Vitruvian partners, in an undisclosed deal. Easypark's technology assists drivers in finding and paying for parking in 700 cities across 11 countries. Easypark's software additionally supports businesses, operators, and cities with parking administration, planning, and management solutions. The company was formed in 2005 and launched in Germany in 2006.

*Exits reported from Q1 2017 - Q2 2018*

# IMPROVING THE CONSUMER EXPERIENCE: SAFETY

One area where European Autotech startups are continually innovating is in automotive safety. Some solutions involve the safety and security of cars themselves, such as Slovenia's Carlock, a mobile app that warns you when your car may be in the process of being stolen. Carlock has raised over €300k to ensure car owners have peace of mind. Other safety solutions include features that make the driving and road experience safer for all users. One key example of this is France's Cosmo Connected, which markets a special helmet for cyclists and motorcyclists that helps warn drivers and other road users about sudden changes in speed. Vision Systems, enhances car mirrors by using digital technologies.

However, one of the most important developments for a safer driving experience is the development of autonomous vehicles. Self-driving car technologies are developing across the continent. One notable example is Germany's Autonomos, a self-driving car company created by academics from Berlin's Free University. The company was acquired by navigational company TomTom in 2017 after being bootstrapped for many years. Another company in this space, France's Kalray raised €23.6m to further development of their autonomous driving MPPA technology, a microprocessor that can handle the toughest requirements demanded by self-driving car technologies.

Other safety solutions are well positioned towards strong market opportunities. One important niche identified by European startups and investors concerns automotive maintenance, and the lifecycle of autonomous cars. As cars become more computerized, fewer technicians are able to maintain them. Startups and corporates have seized on this opportunity, pouring nearly €13 million into automotive maintenance platforms, €11.8 million into dedicated safety applications, €9.5 million in specific parts and design features, and a considerable €47.6 million in automotive insurance and licensing platforms to ensure that cars and drivers are safe and well protected on the road.

# AUTOTECH AND THE CONSUMER EXPERIENCE: COMFORT & WELL-BEING

Innovations in consumer comfort and well-being are key interests for European autotech companies endeavoring to make the entire automotive ownership experience more comfortable and efficient. Companies are innovating solutions from the very start, by assisting in the experience of purchasing a new vehicle, learning to drive it, to obtaining insurance, operating and maintaining it.

One area where considerable developments are being made is in "infotainment", entertainment and information delivery systems for drivers and passengers. One key example is what3words, a mapping system that utilizes words to help drivers navigate to addresses more efficiently and with less confusion. The company is working with Daimler to ensure their product is the first to arrive in the company's A-series sedans. Other companies working on infotainment are Sweden's Escenda, which has developed software interfaces for Volvo's cars.





## USED CARS ARE BIG MONEY

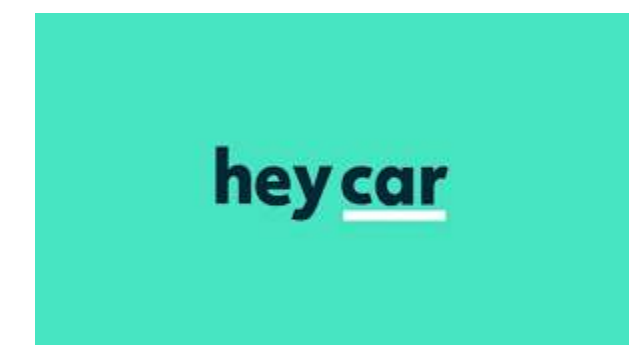
Investors in European Autotech have found the used car marketplace to be an area with considerable momentum for growth. Automotive sales platforms received over €516 million invested between Q1 2017 and Q2 2018.

Auto sales was the Autotech category that earned the largest single investment overall. This notable deal was to Berlin's Auto 1 Group, a used car marketplace. In January 2018, Softbank led a €460 million round in the company, at the time valuing it at €2.9 billion.

Elsewhere, further platforms dedicated to auto sales, either new or used were received 17 additional investments across Europe. Three of these went to Berlin's Frontier Car Group, a startup directly inspired by Auto 1 that manages used car platforms in developing countries. Frontier Car Group raised two rounds in May 2018, of \$89 million and \$58 million. These followed their series A investments of \$20 million in 2017.

Outside of Berlin, Italy's Brumbrum earned investment of €10 million. Further investments to auto sales supported early stage ventures Vroomly and Kyump in France, Carnovo in Spain and AutoOffer in Denmark.

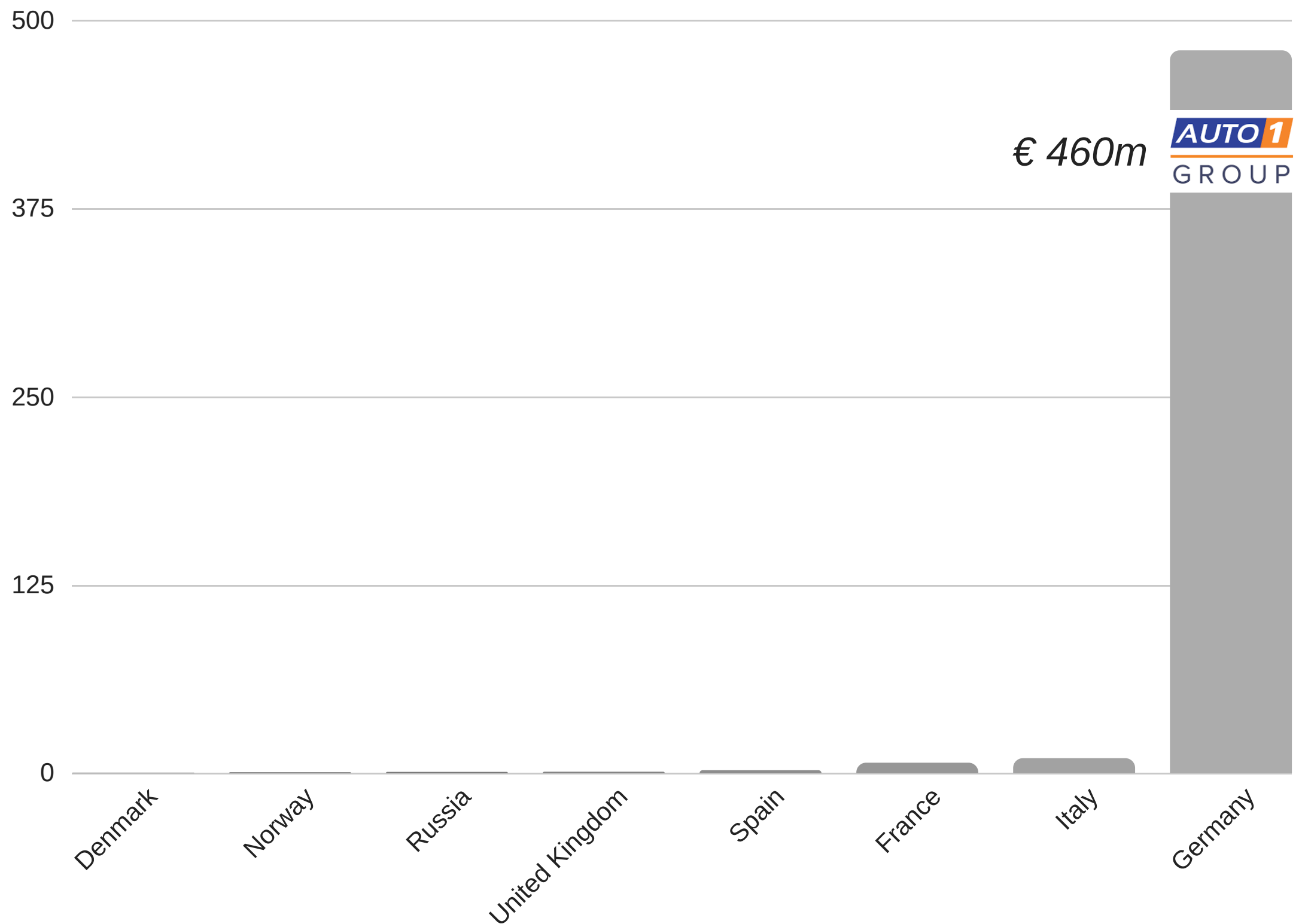
The used car market is so attractive, Europe's large manufacturers are getting in on the market. In October 2017, Volkswagen announced the development of their Hey Car platform, to help connect customers with quality used cars.



# AUTO1 DWARFS ALL OTHERS IN AUTO SALES

A €460 million investment in Germany's Auto 1 has helped draw the skewed graph at right. Softbank's investment in the Automotive sales platform represented nearly 90% of all value invested in the auto sales category during this time period. A substantial investment in Frontier Car Group helped put Germany's total investment in auto sales technologies at nearly €480 million (est.) during this time period. This was followed by Italy, with €10m from a sole investment in Brumbrum, then France at just over €7 million, Spain at €2 million, the UK at nearly €1 million. Denmark, Norway, and Russia received investments of just under €1 million in the category. Not pictured is Switzerland's Gowago, which raised an undisclosed round in 2018.

While Auto1 dominated much of the auto sales attention, other European companies in the sector reported happy news, with exits for Sweden's Garantibil, Russia's Auto.ru and Germany's MeinAuto.



Investments in European Auto Sales 2017 - 2018(Q2) in millions of € (est.) 32

# THE EUROPEAN AUTOTECH ECOSYSTEM



*Comprised of manufacturers, investors, accelerators, startups and community organizations, a strong network of partners helps to sustain innovation in European Autotech*

# EUROPEAN AUTOTECH IS SUPPORTED BY A STRONG ECOSYSTEM

Corporates, investors, startups, events, and even competitions all play a role in building tomorrow's automotive technologies. The diversity of these institutions support a varied ecosystem capable of sustaining innovation at every stage. In Europe, incubator and accelerator programs have become prominent actors in aiding early-stage companies, providing vital initial investments and a network of partners to help them grow. Events and competitions such as the European Startup Prize for Mobility further challenge innovators and provide a platform to share and build connections. Investors work collaboratively to support follow-on funding for especially prominent ventures, sharing in on funding rounds and contributing towards higher valuations.

# EUROPEAN INCUBATORS, ACCELERATORS AND STARTUP SUPPORT



# STRONGER TOGETHER: THE IMPORTANCE OF PARTNERSHIP IN AUTOTECH

*Automotive technologies touch many areas of innovation. For instance, successfully sustainable mobility depends on a multitude of further innovations in other aspects of automotive technologies, from power storage to energetic systems, to material and weight reduction, to electrification and hybridization,*

*An ecosystem approach ensures that these innovations can work together, propelling technologies further and faster than they would be if built in isolation. To aid these efforts, competitors are coming together in support of shared development.*

One key example is the joining of Daimler and BMW in the area of urban mobility. In order to offer customers a single source for sustainable urban mobility services, in March 2018, these southern German rivals signed an agreement to merge their mobility services business units. The BMW Group and Daimler AG found that by combining, they would be better suited to strategically expand their existing on-demand mobility offerings in the areas of Car Sharing, Ride-Hailing, Parking, Charging and Multimodality. In an example of a true partnership, each company will hold an equal stake in the joint-venture and remain competitors in other business.

# DAIMLER: A PILLAR OF THE EUROPEAN AUTOTECH ECOSYSTEM

The world's oldest automaker, Daimler remains one of the most important pillars of Europe's autotech ecosystem. The company has long supported innovations in mobility, both inside the firm and out by investing in the next generation of startups.

In 2016, the company established the Startup Autobahn accelerator in Stuttgart. The following year, the company established further accelerators in Asia and the United States. Daimler also supports startups through strategic investment with "Tech Invest", the Startup Intelligence Center SIC and the FC think tank, an institution dedicated to financial technologies.

Key Investments made in 2017-2018 (Q2) include:

Taxify, Taxibeat (acquired), Clever Taxi (acquired) Careem, StoreDot, what3words, and Vantage Power

London's what3words (pictured left) has divided the world into 57 trillion squares of three meters by three meters recognized by a unique three-word address. In 2018, Daimler acquired 10% of the company and will put their address system to work in as part of the new Mercedes-Benz User Experience infotainment system.



## ANCHOR INVESTOR: IDINVEST PARTNERS

Headquartered in Paris, Idinvest is a leading pan-European private equity firm with nearly €8 billion under management. The company is focused on supporting young, innovative companies with very high growth potential. The firm stresses their support in sustainability and supporting companies that adhere to their ethical values and long-term vision. Idinvest was one of the largest supporters of European Autotech from Q1 2017- Q2 2018, with key investments made in France, Spain, and Germany.

One key investment in Ornikar. Ornikar is France's first online driving school. As of Sept. 2018, the company had over 400,000 users with an average 90% pass rate of France's highway code.

Key Investments made in 2017-2018 (Q2) include: Ontruck, Stanley Robotics, Campanda, Ornikar, Vision Systems and Actility



**ONTRUCK**

**Campan<sup>da</sup>**

**orni<sup>k</sup>ar**

**Actility**



# ANCHOR INVESTOR: MAIF AVENIR

France's Maif Avenir has its roots in the insurance industry. The company aims to finance and strengthen partnerships with startups in the fields of collaborative economy, innovation, and digital products. Investing mainly in France, they are a considerable contributor to the country's Autotech startups.

Key Investments made in 2017-2018 (Q2) include:  
Koolicar, Pop valet, Wheeliz, Travelcar, Zenpark and Yescapa

Their investments span future car technologies, to more practical applications, such as Koolicar a car rental platform amongst neighbors. Wheeliz, has been called the "Uber for people with disabilities" and helps connect users with adapted cars.

Another investment was made in SeaBubbles (pictured right). SeaBubbles is an aquatic car of the future. The product creates zero waves, zero emissions and zero noise. The Bubble Taxi is equipped with the Fly-By-Wire system and can transport five people.





## VIA ID: ACCELERATING FUTURE MOBILITY

Via ID is one of Europe's largest investors dedicated to supporting the future of mobility. With offices in Paris, Lille, San Francisco, Singapore and Berlin, the firm offers many different types of support for autotech companies, from incubation to acceleration, to investment and follow-on funding. Via ID concentrates on supporting companies under three themes dedicated to the future of mobility: Sustainability, Daily and Smart Mobility. These themes fit neatly into Via ID's common ecosystem, which is positioned to allow all startups to benefit from integration with one another.

Key investments made in 2017-2018 (Q2) include: Ector, Vroomly, Klaxit and Xee.

Groupito, a travel marketplace focusing on rental vans, mini buses and group transport was accelerated by Via ID in 2017.

## COMING TOGETHER FOR COMMON STANDARDS

Strong partnerships are integral in the face of increasing competition and stronger regulation. As automotive technologies cut across a wide number of regulations and industry segments, they can be particularly impacted by legislation and changing regulatory environments. This makes it hard for startups to compete and highlights why ecosystem approaches, such as those espoused by Via ID can be particularly useful. Collaboration between companies helps firms weather prospective difficulties.

One area where collaboration is key is seen in the current debate over common standards for connected car technologies. Europe's largest automakers and telecom companies are strongly united on common standards when it comes to connected vehicles. BMW, Daimler, Deutsche Telekom, and Ericsson have asked the European Commission to support C-V2X technology, a program to enable cars to communicate via 5G networks. Universal adoption and standardization of C-V2X would allow EU carmakers to compete in a global market, and enable for the faster penetration of 5G networks across Europe.

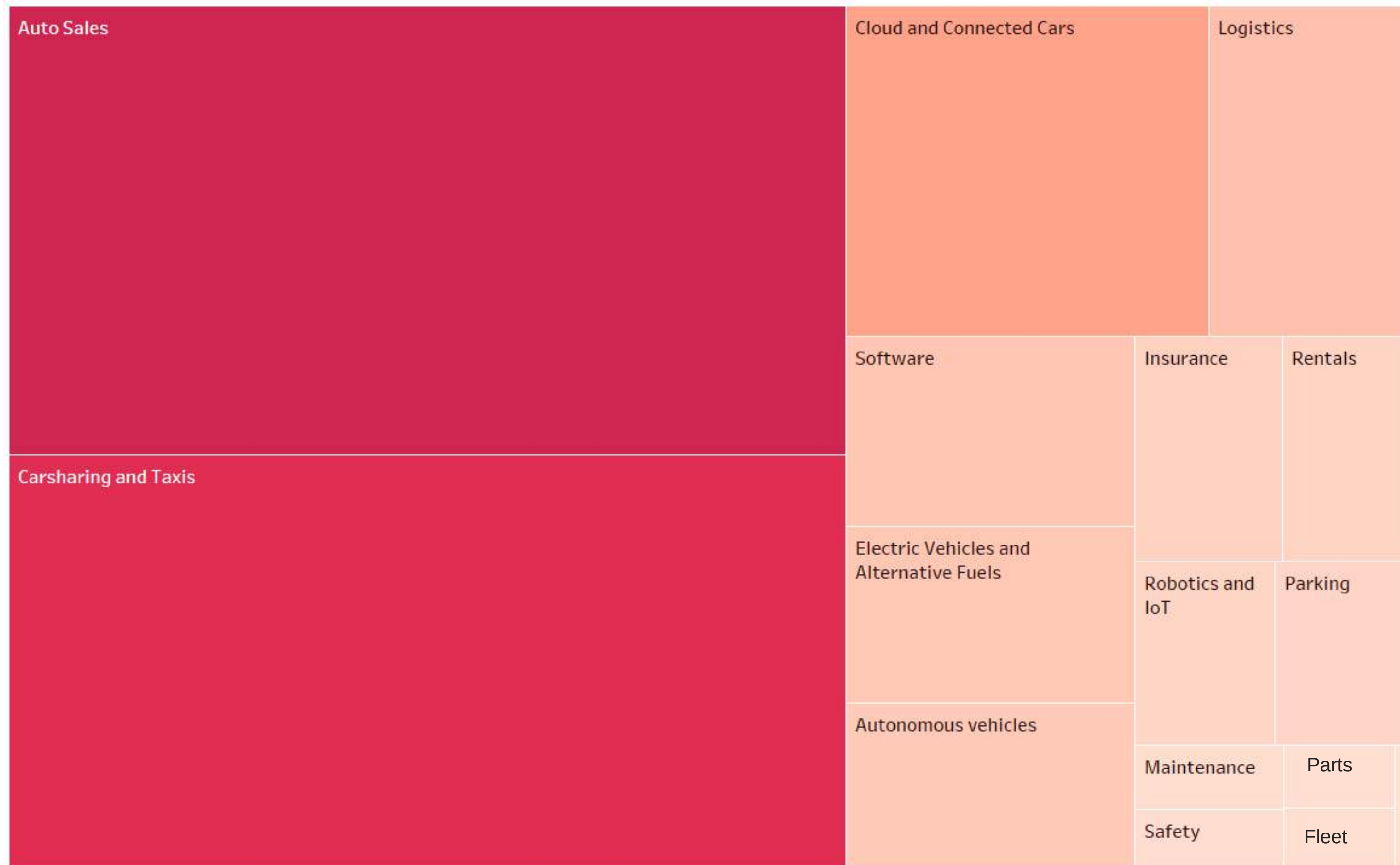
# EUROPEAN AUTOTECH: THE ROAD AHEAD

*Looking towards a promising future*

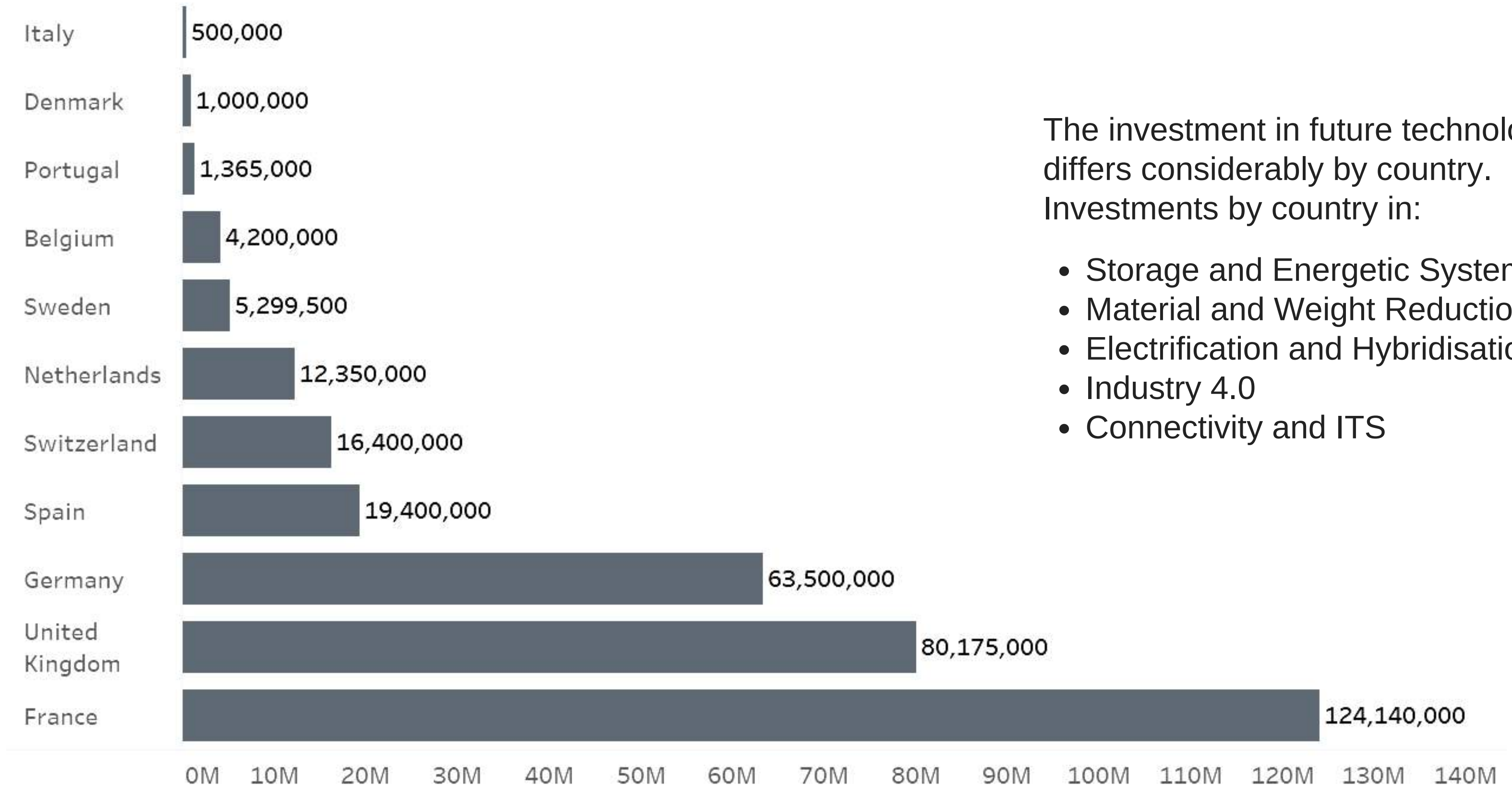
# BUILDING THE CARS OF THE FUTURE WILL REQUIRE INVESTING IN THEM TODAY

When analyzing the size of the largest investments made in European Autotech, it is clear to see that companies dedicated to automotive sales and ridesharing solutions attracted the largest amount of investment in Europe. With a clear market niche, the amounts invested in companies working on these solutions towered over investments made to startups dedicated to Industry 4.0, Connectivity and ITS and Electrification and Hybridisation.

Importantly, developing the future of mobility will require greater investment in much broader categories. Today, investments in many of these future technologies are done by corporates and manufacturers themselves. However, startups working on these critical technologies should not be ignored. While the current market returns of some of these technologies may be more precarious and carry more risk, innovation in these areas are critical for tomorrow's competitiveness. This becomes readily apparent as increasingly high investment rounds in the USA and Asia may encourage the best and brightest European companies to move abroad. Importantly, there is no limit to what could be achieved by European companies in future mobility with the right level of support.



Investments in European and Israeli Autotech 2017 - 2018(Q2), by total amount invested



The investment in future technology differs considerably by country. Investments by country in:

- Storage and Energetic Systems
- Material and Weight Reduction
- Electrification and Hybridisation
- Industry 4.0
- Connectivity and ITS

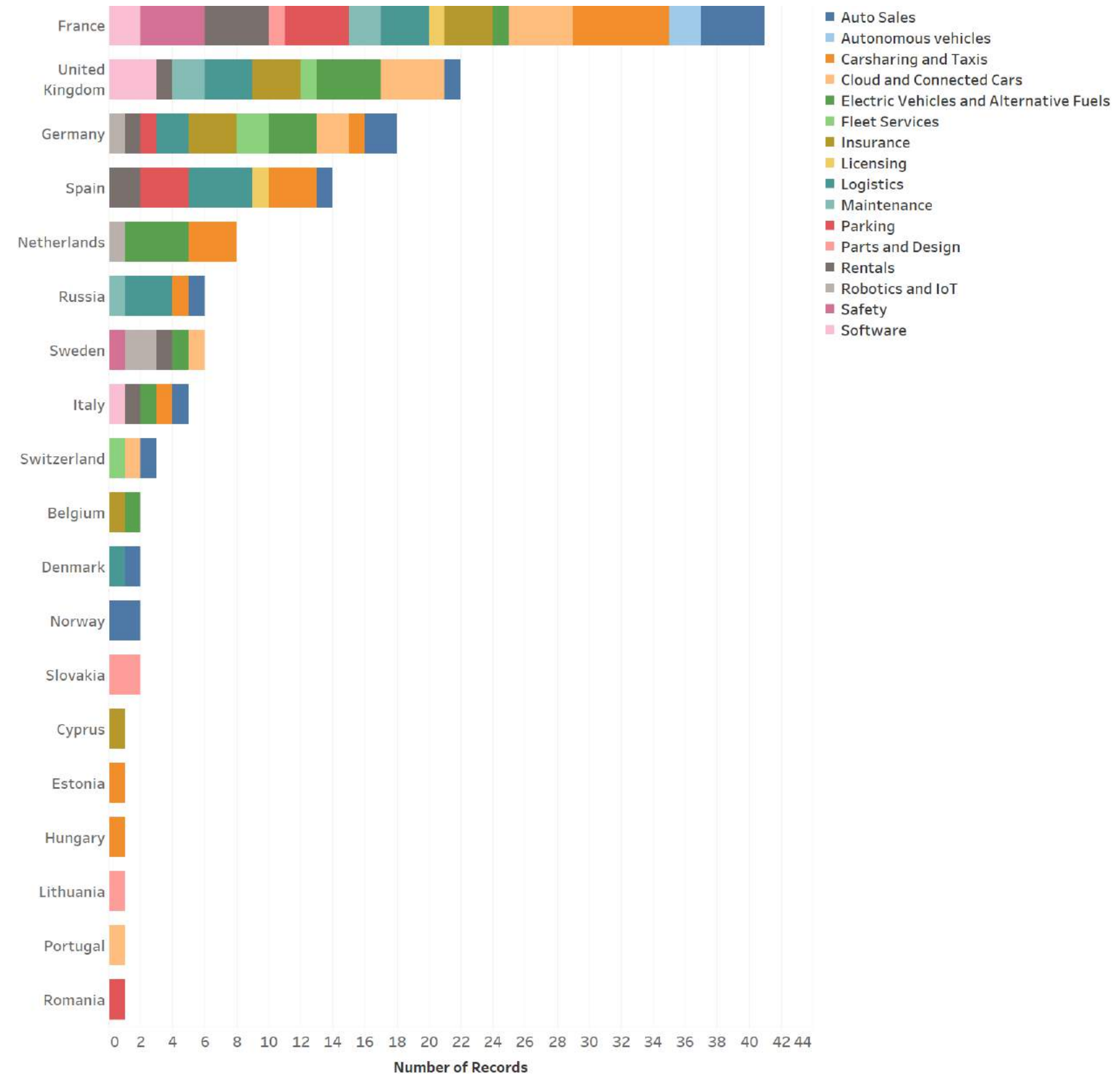
Investments in European Autotech 2017 - 2018(Q2), by amount, specific categories grouped

# SUPPORT THE EUROPEAN AUTOMOTIVE LANDSCAPE IS STRONGLY CONCENTRATED

From the numbers, we can easily see that investment and support for European autotech is largely concentrated in Germany, France and Spain. Germany and Spain, who received the largest investments during the time period analyzed also enjoy a strong ecosystem of support organizations, anchored by the country's automotive manufacturers.

Looking forward, it will be important that autotech innovations developed elsewhere on the continent can similarly benefit from these ecosystems of support. For example, consider companies such as Slovakia's AeroMobil, which has developed a roadworthy flying vehicle, far from autotech strongholds in France and Germany.

Autotech companies headquartered outside these bases of support can depend on fewer local partners for support. The importance of having local partners for support is especially key at the early stages of a new venture. Given the cross-cutting nature of the automotive industry, these partners can be instrumental in helping new companies navigate the competitive landscape of future mobility.



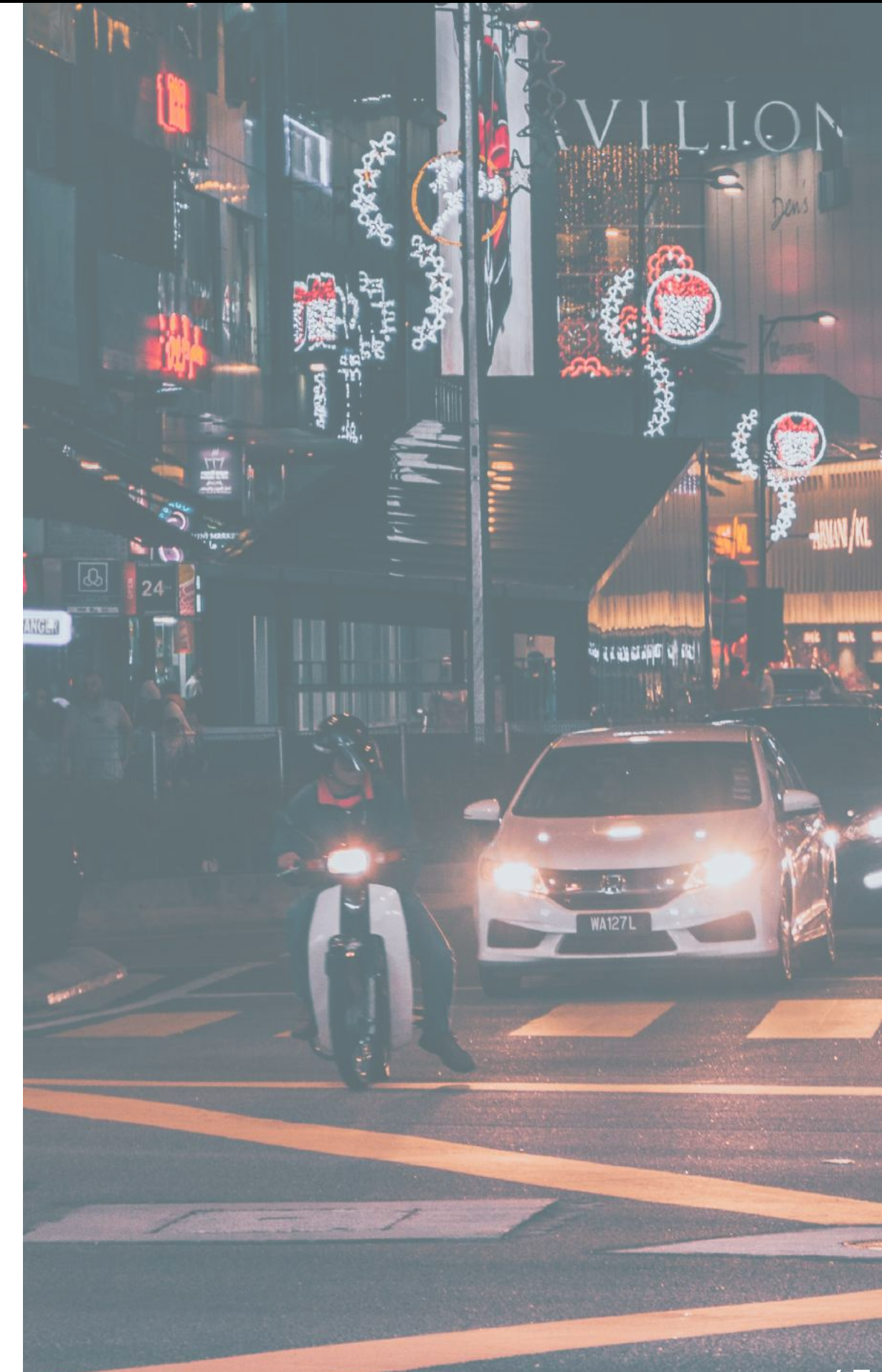
Number of investments in European Autotech 2017 - 2018(Q2)



# SUSTAINABLE MOBILITY: COPING WITH A FUTURE LESS RELIANT ON CARS

Europe is looking towards a more diverse transport future. Shifts away from personal ownership of cars have begun in earnest. This movement has led to a proliferation of different types of car-sharing platforms, including ridesharing, short-term rentals (Car to go, Enterprise Car Club, MyTripCar, Toosla, Carfully) to long-term rentals (Autolevi). As fewer cars are purchased for personal use, Europe's autotech industry will need to grow ever more connected to urban transportation networks. Importantly, European automotive companies and startups have been at the forefront of these changes, and are quickly innovating to support this growing space. Daimler's investments in ride-hailing companies and Volkswagen's investment in urban vans and busses show how manufacturers are approaching this changed landscape proactively.

Cars remain only one part of the diverse future of transport. Increasingly, multi-method transport networks have begun to grow and proliferate in Europe (for example, Comodule, Berlin's connected networks of bike and scooters). Tomorrow's "connected cars" will need to connect to these cohesive urban transport networks. In the ride-hailing and personal transport space, these changes are already taking place. Investments made in scooters and bike sharing by traditional ride-hailing companies such as Taxify and Uber highlight the importance for autotech companies to focus on diverse travel modes, as well as a connected transport landscape.



# FOR CONTINUED SUCCESS, COLLABORATION AND INVESTMENT WILL BE KEY

As Europe faces a more diverse mobility landscape, competition is fierce. In the United States, numerous efforts by both individual states and the federal government seek to sponsor and support initiatives for connected and autonomous car technologies. In China, competition in autotech has reached a height, with the country's most important companies Baidu, Tencent, and Alibaba moving swiftly into autonomous car technology. Chinese challenger company Banma further expects to have 6 million connected cars on the road by 2023. Further incentives are offered by municipal governments for electrification and hybrid technologies, in an effort to tackle the country's air pollution. For Europe to succeed, all aspects of the autotech ecosystem will need to pull together for excellence.

Competition from abroad, as well as an increasingly complex regulatory environment around smart mobility, will require European manufacturers and startups to continue to see one another as partners and collaborators. As this report shows, Europe has a strong network of manufacturers, investors, and support organizations devoted to future mobility technologies. The continent's historical legacy and strong tradition of excellence in automotive technologies make it a world leader, but the continent will need to continue to innovate. The development of many startup accelerator and incubator programs by European manufacturers, including Porsche, Daimler, Seat, Renault, and Volkswagen are an important step in supporting the next generation of innovations.

# METHODOLOGY AND DISCLAIMERS

From November 2013 onwards, Tech.eu has continuously monitored over 200 sources of news and information across multiple European regions and languages. All of the transactions have been analyzed by the Tech.eu team for the purpose of this report, along with additional transactions that were not reported by any of the aforementioned sources but flagged by people from our collective networks. In many cases, the deal size was not disclosed, but we've included estimates for any transaction reported by a publication that we consider reliable and trustworthy.

When a deal size was disclosed, but in a currency different from the euro, we've converted the amounts around the date the transaction was first announced or reported we cannot guarantee the converted amount exactly mirrors the price at the time of the closing of an agreement (mainly because that date is rarely shared). In this report, you will find all graphs and tables refer to this euro figure with the notation (est) for the estimated value. In the text, when referring to specific investments, the deal sizes are referred to in the context in which they were initially shared (usually U.S. dollars).

We have opted to include non-European Union member states such as Russia, Turkey, Israel, Norway, Switzerland and others in this analysis when available, as we consider them to be an integral part of the European technology industry as such. This is in line with Tech.eu's overall editorial policy. Considering the vastness, fragmentation, and breadth of the different languages that define Europe, it is possible that some transactions are not included in our analysis. It is important to remember, that as these are often deals made by private companies, not all are disclosed.

# MONDIAL.TECH PARTNER: STARTUP SESAME

Startup Sesame is the global network of Tech events. We believe that entrepreneurs can change the world by attending the right event, at the right time.

Recently we partnered with Mondial.Tech to help identify the best startups around the world to participate in this year's competition. As sourcing partners, we accelerated the awareness of the call for entries within the Tech industry by identifying a large number of relevant startups from our database and network of events to promote the event.

Over 1,900 startups were contacted during the promotion of this year's call for entries in collaboration with several international tech, mobility and startup ecosystem accelerators and associations. As with Mondial.Tech, Startup Sesame works with several international events to help them reach the most promising startups from a certain industry.

For scale-ups, investors and corporates we create event strategies that help them engage with the European ecosystem and our community of Tech event insiders.

In addition to sourcing, our services also include scouting, event hacking and personalized brand activations. clients include Atomico, BNP Paribas, EDF, Microsoft Ventures, European Parliament, European Commission, BPI, Orange and Michelin.

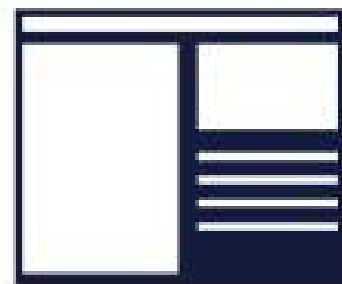
Find out how we can help you work smarter at events: [www.startupsesame.com](http://www.startupsesame.com)

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**>24,000** FANS



**>7,800** FANS



**>91,000** CONNECTIONS

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