

REGIONAL REVIEW:
NORTH AMERICAREGIONAL REVIEW:
SOUTH AMERICAREGIONAL REVIEW:
EUROPEREGIONAL REVIEW:
MIDDLE EAST & AFRICAREGIONAL REVIEW:
ASIA PACIFIC

REGIONAL REVIEW: EUROPE

IN THIS SECTION

- [Strategy and Governance](#)
- [Customer and Products](#)
- [Operations](#)
- [People and Communities](#)

Being an active and responsible member of the communities in which we operate is a core value at Ford.

We demonstrate it by helping to alleviate shared social, economic and environmental problems and playing our part in creating a better world.

For example, the effects of global problems like climate change show themselves in different ways and to varying degrees in different locations. At the same time, technology is accelerating the pace of change in many areas of human activity, driving fundamental shifts in consumer trends in our markets. Our corporate strategies provide a framework for regional programs that reflect this fast-moving picture at the same time as addressing local circumstances and needs.

This section aims to give a flavor of material sustainability issues having an impact on our regional business units, and describes some key initiatives and programs supporting our corporate strategies.

Europe

This section offers a regional perspective and an overview of initiatives to implement the corporate sustainability strategy in our Europe regional business unit.

“The auto industry is at an inflection point as great as when Henry Ford first put the world on wheels more than a century ago. We’re moving from being an auto company to an auto and mobility company.”

This is becoming increasingly evident in Europe where we offer a very successful Ford Carsharing Program with our dealers in Germany, and are testing a fleet of 20 Ford Transit Custom plug-in hybrid electric vehicles in London before going into production in 2019. We’re also working with other manufacturers to create a joint venture business later this year – focused on supporting electrification through the development of an ultra-fast, high-powered, DC charge network across Europe – plus bringing Chariot, the crowdsourced shuttle service, to Europe. In addition, we are testing autonomous vehicles in the region, and using our engineering expertise to develop new mobility ideas in cooperation with cities, to make people’s lives better.

We’re doing all this because it is both the right thing to do from a business perspective, and also because it will bring significant benefits to society. Innovation has been at the core of our business since its founding, and continues to be one of our guiding principles as we move into the future.”

James D. Farley

Executive Vice President and President, Global Markets, Ford Motor Company (formerly Executive Vice President and President, Europe, Middle East and Africa)

At a Glance

- Ford produces, sells and services vehicles in 50 European markets
 - 52,000 employees
 - 24 manufacturing facilities (16 wholly owned or consolidated joint ventures and 8 unconsolidated joint ventures)
- › [Please see Ford's Annual Report 2016 for further information on our regional business units, including key financial metrics for Europe](#)

Strategy and Governance

Ford Smart Mobility

Through our Ford Smart Mobility plan we are pursuing emerging opportunities with significant growth potential:

- Electrifying our most popular, high-volume commercial vehicles, trucks, SUVs and performance vehicles
- Growing our autonomy leadership by building on more than a decade of development experience
- Developing mobility services and solutions to transform the customer experience and help solve people’s mobility challenges

› [Read more about our strategy in the Global Mobility section](#)

We moved ahead with a number of mobility projects in Europe in 2016:

- **Ford Carsharing Program, Germany.** When it comes to mobility, sharing offers flexibility, a potentially more economical alternative, and also can help reduce congestion. We launched our program in 2013, partnering with Deutsche Bahn Connect, which operates Flinkster, a large car-sharing company. By acquiring a Ford Carsharing customer card, customers have access to a comprehensive network of 4,000 car-sharing vehicles in 200 cities – covering not only the Ford car-sharing fleet of nearly 300 cars but also the Flinkster fleet. In 2016, the Ford Carsharing Program attracted more than 20,000 bookings over the year.
- **FordPass** our new mobility experience platform, debuted in Europe. This provides integration with Ford Carsharing, offering 24-hour access to cars nationwide across Germany, including Ford’s car-sharing fleet.
- We launched **GoPark**, our pilot in London that focuses on building a predictive system that can use data to show drivers where there is likely to be a space to park at their chosen destination.
- The Ford-led **Driver Behavior Project** uses a prototype driving app to empower drivers with a personal driver score, based on behavior on the road, and encourage them to drive smarter. This type of research could lead to cheaper car hire and car sharing, and provide insurers with information required to support discounts.

› [Watch a video about GoPark](#)

REGIONAL REVIEW:
NORTH AMERICAREGIONAL REVIEW:
SOUTH AMERICAREGIONAL REVIEW:
EUROPEREGIONAL REVIEW:
MIDDLE EAST & AFRICAREGIONAL REVIEW:
ASIA PACIFIC**CASE STUDY****Driving Our Leadership in Mobility and Electrification**

From fall 2017, a variety of selected business in London will be trialling a fleet of 20 new plug-in hybrid Ford Transit Custom vans that run solely on electric power for the majority of trips across the capital, including urban deliveries. This is part of a multimillion-pound project designed to contribute to the city's cleaner air targets, encourage the uptake of low-emission commercial transport and boost productivity for operators in tough urban environments. Ford of Europe will launch the project in collaboration with Transport for London, backed by a £4.7 million grant from the U.K. Government-funded Advanced Propulsion Centre.

Commercial vehicles in London make trips totaling 8 million miles a day while vans account for up to 75 percent of peak commercial traffic in the city. The 12-month fleet trial is part of Ford's commitment to work with major cities around the world to tackle their local transport challenges, and help people and goods move more easily.

The data gathered from a range of different drivers, uses and experiences will add to collective understanding and inform Ford's mobility solutions of the future. Similar trials are being planned in Cologne, Germany, Valencia, Spain, and Istanbul, Turkey, over the next two years.

Ford was Europe's number one selling commercial vehicle brand for the second consecutive year in 2016, and our Transit Custom plug-in hybrid is scheduled for commercial production in 2019. We intend to leverage this and our other core strengths in automotive to build our leadership in electrification.

> [Read more about the plug-in hybrid fleet trial in London](#)

Innovating to Address the Problem of the "Last Mile"

Kilian Vas is a systems engineer in Cologne, Germany, with an innovative idea for solving the problem of the "last mile" – often the trickiest part of an urban commute. Kilian's invention is the Carr-E – a four-wheeled electric pedestrian assistant for city mobility – which was a finalist in Ford's Last Mile Innovation Challenge, open to employees around the world.

> [Hear what inspired Kilian Vas to design the Carr-E.](#)

The Carr-E has a compact, circular design. Part of the design inspiration is to enable commuters to easily store it in a vehicle, then pull it out and use it in places where cars aren't permitted or practical.

Pothole Warnings: Working on Future Technologies

Damage caused by potholes can lead to costly repairs, while bad road surfaces contribute to more than a third of all accidents every year.

At our Aachen Research and Innovation Center in Germany, we are researching an ingenious crowdsourced virtual pothole map to provide warnings direct to the driver's dashboard. The data collected from drivers who encounter potholes is relayed to other road users in real time so they know where potholes are and can avoid them. The real-time warnings are made possible by cameras and an embedded modem in the car.

> [Read more about the pothole warnings research project](#)

Customers and Products**Developing Our Lineup of Electric Vehicles**

As part of our plan to introduce 13 new global electric vehicles in the next five years, the new Ford Focus Electric will soon be joining our European lineup.

The Focus Electric is a fully electric family car that drivers can recharge from zero to 80 percent full in just 30 minutes using fast-charging technology. The zero-emission five-door hatchback has a battery with almost 50 percent more energy storage than the outgoing model. It means drivers can go 225 km (140 miles) on a single charge. Focus Electric also gets sophisticated SYNC 3 connectivity.

In addition, Ford is planning to launch an all-new fully electric SUV for Europe with an estimated 480 km (300 mile) range by 2020.

> [Read more about the new Ford Focus Electric and Ford's electrification plans](#)

EcoBoost Engine Innovation

Ford engineers in Europe have delivered a global first with a breakthrough innovation for the 1.0-litre EcoBoost petrol engine. In early 2018, the engine will become the first three-cylinder engine in the world to feature cylinder deactivation technology.

The innovative engineering improves CO₂ and fuel efficiency by up to 6 percent with no compromise on performance. This defies industry views that thought it was not possible to deliver the necessary level of refinement with a three-cylinder, variable capacity engine.

The technology works by automatically stopping fuel delivery and valve operation for one of the engine's cylinders when full capacity is not needed – engaging or disengaging the cylinder 20 times faster than the blink of an eye. Combined with advanced solutions to counteract vibrations, cylinder deactivation will be imperceptible to drivers in terms of operation and engine performance.

> [Read more about fuel-saving cylinder deactivation technology for the 1.0-litre EcoBoost](#)

Operations**Sustainability in the EcoBlue Production Line**

Our state-of-the-art production line for the all-new 2.0-litre EcoBlue diesel engine is using the latest technologies to cut energy and water by up to 50 percent (compared to the previous 1.8-litre production line) for every new engine built.

Sustainability is a key feature of the new production line at our Dagenham Diesel Centre, U.K., with significant annual savings expected:

- Three wind turbines provide renewable energy and all the power for the final assembly building, while new LED lighting has been installed to deliver further energy efficiencies
- New machining tools enable fine mists of oil to be used in production, which reduces the volume of coolant needed and cuts water consumption by almost 100 percent compared to the previous equipment
- Annual water savings could fill seven Olympic-size pools
- The energy saved over a year could power 350,000 homes for a week

> [Read more about sustainability in our Dagenham plant](#)

Zero Waste to Landfill in Our European Facilities

Our 12 European manufacturing plants build well over a million cars a year. In 2011, they sent just over 5 kg of manufacturing waste to landfill for each vehicle produced. Since the end of 2016, they send none.

Starting with our plants in Cologne and Saarlouis, Germany, all our European (non-joint venture) plants have become zero waste to landfill (ZWTL) sites in the space of five years – making a big contribution to Ford's corporate waste reduction efforts.

Ford of Europe's manufacturing plants have reduced the amount of waste destined for landfill sites from an annual 6,000 metric tons to zero in just five years.

REGIONAL REVIEW:
NORTH AMERICAREGIONAL REVIEW:
SOUTH AMERICAREGIONAL REVIEW:
EUROPEREGIONAL REVIEW:
MIDDLE EAST & AFRICAREGIONAL REVIEW:
ASIA PACIFIC

Meeting the ZWTL Challenge

A key challenge is that waste management infrastructure varies across Europe and municipal facilities are not always fully developed. In some regions, our plants needed to go further and create pioneering, cost-effective approaches with suppliers. At our plant in Valencia, Spain, our local waste management partner opened a sorting facility, enabling all municipal waste to be sorted, recycled and reused instead of being buried in the ground. Any waste that can't be recycled at the plant is used to generate alternative fuel.

Innovative processes are also key to diverting waste from landfill at our plant in Dagenham, U.K., which creates briquettes and oil (for reuse as fuel) from grinding sludge.

› [Read more about sustainable manufacturing in our European operations](#)

People and Communities

Investing in Our Communities

Since 1949, Ford Fund has invested \$1.5 billion to build stronger communities worldwide, advancing Ford's vision of making people's lives better by empowering social mobility. Through the Ford Fund, we invest in innovative programs across the globe, focused in three areas: Community Life, Education, and Safe, Smart Mobility. In Europe, our key programs are as follows:



Ford Blue Oval Scholars – The Ford Blue Oval scholarship program is just one of many global initiatives for young people that aims to encourage an interest in science, technology, engineering and math (STEM). We support scholarships at RWTH Aachen University and the University of Cologne.



Formula Student – Ford Fund provides donations to several Formula Student teams, including three teams in Germany. The teams are challenged to build a single-seat race car to compete in dynamic and static tests as part of an established European educational motorsport competition.



Ford College Community Challenge (Ford C3) – Ford C3 is a global challenge grant competition that empowers college students to design and implement innovative community-building projects around the theme of Building Sustainable Communities. The 2017 Ford C3 winners in Germany are the University of Cologne, RWTH Aachen University and the Technical University of Munich.



Supporting local community projects – We support local communities through projects ranging from cardiovascular disease screenings in Romania and youth employment initiatives in Spain to cultural integration projects in Germany.



Ford Driving Skills for Life – Our global advanced drivers' safety training program for newly licensed young drivers helps to develop skills in four areas: hazard recognition, speed and space awareness, vehicle handling and driver distraction.



Volunteering in the community – Ford Volunteer Corps is an extension of Ford's history as a family company. Ford volunteers bring skill, enthusiasm and teamwork to nonprofits, helping to get essential jobs done while the organizations can focus on serving people in need.



Education workshops – Ford Fund supports the Children's University in Cologne that is focused on providing fun and engaging workshops for kids aged 8–15. These include math, information technology, natural sciences and technology (MINT) topics ranging from “sound and light” to “future technology” explaining scientific research and relevance for everyday life.

CASE STUDY

Refugee Integration Program, Germany

The refugee integration program is a cornerstone of Ford's community engagement in Germany. There is an active network of over 300 employees supporting refugees in more than 20 community projects. Approximately 2,500 Ford working hours and private time have been invested. Grants to support local community needs and assist refugees in 2016 include \$70,000 from Ford Fund.

Partnering with the city of Cologne and nongovernmental organizations, Ford is supporting a range of community projects, including meeting the needs of unattended minors and refugee teenagers with accommodation, mentoring, coaching and activities. Another key focus is supporting refugees of working age with training and work opportunities.

Training and Work Opportunities for Refugees

Our 11-month, full-time “entrance qualification” (EQ) program aims to help refugees enter employment and equip them with the skills, work environment knowledge and language competency to do so.

Ford has offered the EQ program for more than 40 years, which leads to the possibility of an apprenticeship in our plants or with other companies. First developed to provide opportunities to new immigrants to Germany, in 2016, we expanded the program to all refugees who come to the country. The program now enables a further 24 candidates (up to the age of 35, and with the necessary language proficiency and school education) to take part. Within the program, we offer German classes to help participants develop their linguistic confidence and ability.

Eighty percent of candidates who complete the program go on to start an apprenticeship with Ford as the first step in a future career.

Work&Ing Training Program

Ford is investing in the talent pipeline and future leaders, especially in the context of an aging workforce and a shortfall of engineers across the region.

The Work&Ing program was first implemented in 2012 and is now being rolled out to all Ford sites in Germany and Belgium. This award-winning training – which covers skillsets including engineering, legal and various other specialisms – is designed to support talented employees to study an engineering subject after finishing an apprenticeship.

The needs of shift workers are catered for by offering day shifts to help participants with their study time. Participants have a mentor and there is a regular exchange between the candidates, plant management and HR.

The program is open to five employees per year, who are chosen after assessment. One of the company's People Development Committees (PDC) is closely involved in the selection. Members of the PDC also mentor the chosen candidates during the program, monitoring progress regularly with a view to matching candidates with employment vacancies on completion.

While there is no guarantee of securing an engineering position after finishing the training, in agreement with the works council, Work&Ing candidates are considered first for vacant positions.