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REGIONAL REVIEW: EUROPE

Our move to being an automotive and mobility company is increasingly evident in Europe, from electric vans to bike sharing in Germany, a new partnership in London to develop self-driving vehicle technology, and our pilot studies with plug-in hybrid electric (PHEV) Ford Transits in the U.K. and Spain.

"People living in European cities have rapidly changing expectations about their mobility choices, even more so than they did even just a few years ago. Electrified vehicles, car-sharing, ride-sharing and bike-sharing are increasingly becoming part of the solution to navigating crowded urban areas. That is why Ford is thinking about mobility broadly, beyond traditional vehicles.

To prepare for and support the new, fully electric vehicles we are introducing in the coming years, we are addressing the need for a high-power charging network across Europe now, as part of the IONITY joint venture.

We are working to ease city congestion and further reduce emissions through Chariot, our smart ride-sharing commuter shuttle for urban areas that are underserved by public transportation. We also are taking a leadership role as Europe's leading commercial vehicle brand, trialing fleets of Ford Transit Plug-In Hybrid Electric Vehicles before the van goes into production in 2019, and designing battery-electric StreetScooter WORK XL delivery vans based on the Ford Transit that could each save around five tonnes of CO2 and 1,900 litres of diesel fuel each year.

In addition to developing smart vehicles for a smart world, our mobility efforts go beyond the products we build. In addition to introducing FordPass cars and bicycles available for hire, we also are helping to make our streets safer through our Share The Road campaign, through education and shifting driver and cyclist attitudes towards each other.

These are just a few of the strategic choices that will help create a more sustainable mobility ecosystem in Europe – and a sustainable Ford business in Europe."

Steven Armstrong

Group Vice President and President of Europe, Middle East and Africa, Ford Motor Company

AT A GLANCE

- Primary markets: Ford produces, sells and services vehicles in 50 European markets
- Approximately 54,000 employees
- 24 manufacturing facilities1

1. 16 wholly owned or consolidated joint ventures, and eight unconsolidated joint ventures.

HOW WE'RE DRIVING CHANGE

Case Study

PHEV Transits Tested in London and Valencia

In collaboration with Transport for London, a fleet of 20 plug-in hybrid electric (PHEV) Ford Transit Custom vans is participating in a 12-month trial in the U.K.'s capital. Exploring how they can contribute to cleaner air and enhanced productivity in urban environments, the PHEV Transits use an advanced hybrid system that targets a zero-emission range over 50 kilometers (31 miles), supported by Ford EcoBoost 1.0-liter petrol engines to extend their range. The vehicles, being used by fleet customers ranging from the Metropolitan Police and Heathrow Airport to courier services and construction firms, also feature an advanced telematics system to deliver real-time data on the vans' performance.

As no two cities are alike, in May 2018, we announced a second trial in Valencia, Spain, in a collaboration between Ford Smart Mobility, the regional government and the city of Valencia. This research will bring a fresh perspective of the benefits that small and medium fleets running primarily on electric power can bring.

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IONITY: EUROPE'S NEW HIGH-POWER CHARGING NETWORK

To deliver a pan-European high-powered charging network for electrified vehicles, Ford has co-founded <u>IONITY</u>, a joint venture with the BMW Group, Daimler AG and the Volkswagen Group with Audi and Porsche.

IONITY began construction of the first 20 ultra-fast charging stations on some of the continent's major highways in 2017, with the first station, on the A61 at Brohltal-Ost in Germany, opening in April 2018. We will have more than 100 in use by the end of the year, and 400 stations by 2020, facilitating long-range travel across 19 countries. The network's Combined Charging System can deliver up to 350 kW per charging point, significantly reducing charging time. This collaboration with other automakers is an important step toward the adoption of massmarket electric mobility.

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COLOGNE FUEL-SAVING CHAMPIONSHIP

Cologne's Green City Office invited 13 young employees to participate in a Ford-supported eco-driving and climate protection workshop, as part of the Cologne Fuel-Saving Championship. The fleet drivers from a range of companies and local authorities attended the one-day course, learning how even small savings in fuel use can result in measurable effects on our climate due to reduced emissions. The participants, driving manual and automatic Ford Transits, reduced fuel use by an average of 8 percent using the eco-driving techniques they'd learned, and one driver achieved a 15 percent saving. The results were then discussed in the classroom. The winners in the three vehicle categories – Stefan Römer, Matthias Schüssler and Daniel Chitsulo – will now go on to the district final.

IMPROVING AIR QUALITY THROUGH U.K. SCRAPPAGE SCHEME

In August 2017, we launched a vehicle scrappage scheme to help reduce vehicle emissions and improve air quality in the U.K. It enables owners to trade in their old cars and commercial vehicles for new models with EcoBoost petrol and EcoBlue diesel engines, which meet the most stringent Euro 6 emissions standard. We extended the scheme into 2018, enabling more than 10,500 vehicles to be replaced with cleaner, more fuel-efficient vehicles.

DELIVERING MORE E-VANS FOR DEUTSCHE POST DHL

We're partnering with StreetScooter to produce electric delivery vans for Deutsche Post DHL Group. Our most recent model, the StreetScooter WORK XL, is based on our Ford Transit chassis and fitted with a battery-electric drivetrain with a range of up to 200 km, and an average charging time of just three hours. In 2017, almost 150 e-vans manufactured in Aachen, Germany, were used by the group's urban parcel delivery service, and we plan to build 2,500 more by the end of 2018. In total, they could avoid 12,500 metric tons of $\rm CO_2$ and save 4.75 million liters of fuel every year.

THE AUTOMOTIVE PARTNERSHIP: DRIVE SUSTAINABILITY

This partnership of 10 automotive original equipment manufacturers (OEMs), launched in 2017 and facilitated by CSR Europe, has a commitment to move to the next level of sustainability and supply chain management in the automotive industry. The partnership builds on the work of the European Automotive Working Group, of which Ford was an active participant.

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SAARLOUIS GETS NEW POWER PLANT

Delivering an overall energy performance of 20 MW thermal heat and 22 MW electricity power, a new combined heat and power (CHP) plant supplies all the energy needed by our Saarlouis manufacturing facility in

Germany. The new plant, developed with partner STEAG New Energies, significantly reduces our carbon footprint, and supports our global target of a 30 percent reduction in $\rm CO_2$ emissions per vehicle by 2025 compared to 2010.

"This €20 million investment in the future delivers more than heat and electricity: it supports the site's sustainability and shows impressive industrial competence. By reducing both the cost of energy and the plant's carbon footprint, this investment demonstrates that climate change projects and economic competitiveness go hand in hand."

Annegret Kramp-Karrenbauer

Minister-President of Saarland

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CHARIOT SHUTTLE SERVICE COMES TO EUROPE

After successes in the United States, Chariot is launching its daily commuter shuttle service in London to make getting around the city easier. Chariot connects city dwellers with nearby transit hubs and underground stations, enabling them to complete their journeys faster and more comfortably. The service in London kicked off in February 2018 with four routes that complement the city's existing public transport network. Informed by a detailed analysis of urban areas, the routes will help fill transportation gaps between several rapidly growing neighborhoods and six key transport hubs – Clapham Junction, North Greenwich, Abbey Wood, Kennington, Vauxhall and Battersea Park – and will also help commuters with their onward journeys on the city's public transport links.

"As well-served as London is by public transport, the daily commute can still be a bit of a slog for some in the city. Chariot is one way of providing residents with reliable, safe and affordable transportation."

Sarah Jayne Williams

Director, Ford Smart Mobility in Europe

Case Study

New Wheels: From Car Sharing to Bike Sharing

In September 2017, Ford Germany became the first automaker to help deliver a bike-sharing service in Europe, supporting a sustainable and affordable solution that supplements the existing public transport system.

Together with partners Deutsche Bahn Connect GmbH, 3,200 FordPass bicycles were made available to the general public through Deutsche Bahn's Call a Bike, the country's leading bike hire network. The service, operating in Cologne and Düsseldorf, enables consumers with the FordPass app to find the nearest available bike and pay for it online.

The program is a further expansion of our partnership with Deutsche Bahn Connect, having donated 100,000 free one-year Call a Bike memberships to its customers in August 2017, and collaborated on a car-sharing service since 2013.

3,200 FordPass bikes offered through Deutsche Bahn's bike-share service in Germany.

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SUPPORTING U.K. FAMILIES WITH PATERNITY WORKSHOPS

In June 2017, Ford of Britain began offering paternity workshops for fathers, having successfully delivered similar maternity workshops. The workshops provide practical information and give expectant fathers the opportunity to share their experiences, receive parenting advice and access information about the company's maternity and paternity policies. The workshops demonstrate our commitment to families by creating a personalized environment that helps these fathers-to-be make a smooth transition into fatherhood, knowing their company and peers support them.

FORD COLLEGE COMMUNITY CHALLENGE (FORD C3)

In 2017, Ford C3, which supports young people and encourages social entrepreneurship through the implementation of sustainable community projects, celebrated its 10th anniversary globally and its third anniversary in Europe, where we partner with registered charity Enactus. Six Enactus student teams from the U.K. and Germany won a mini-grant from Ford Fund to support their community projects, which included initiatives designed to help tackle homelessness, support refugee integration, and provide training and employment for the deaf and hard of hearing.

Ford UK also ran the Ford Innovation Challenge as part of Ford C3, a competition to upscale community initiatives that address social needs. The winner, the University of Sheffield's "Motion" project, delivers chairbased exercise sessions for the elderly, to increase physical mobility, reduce social isolation and provide employment for vulnerable people.

FORD PARTNERS WITH CANCER TREATMENT CENTERS

Mike Butler, a quality director at our Cologne assembly plant in Germany, was fascinated by the process he underwent as a cancer patient. He saw how practices from the manufacturing facility could be applied to the Center for Integrated Oncology at the University of Cologne, contributing to a 30 percent improvement in patient flow. The sharing of ideas is now two-way, as hospital staff are bringing their experience of working with big data to support our product development and research.

ENCOURAGING YOUNG PEOPLE INTO STEM

Ford Fund, our nonprofit foundation, provides financial support to a number of initiatives designed to encourage young people to take an active interest in science, technology, engineering and math (STEM).

- We support six Formula Student teams across Europe, as well as a solar-powered vehicle team in Belgium. Formula Student is an educational motorsport competition that challenges students across Europe to build a single-seat racing car to compete in dynamic and static tests
- In Germany, Ford Fund is working with the University of Cologne Teachers Academy, developing language-sensitive STEM workshops and teaching materials to help refugee children become familiar with the German language while they learn about science

- Since 2014, we have partnered with the Cologne Children and Juniors University to provide workshops for children aged between eight and 15 years old. These include STEM workshops with topics ranging from "sound and light" to "technology of the future," designed to give children an insight into how scientific research is relevant to everyday life
- In the U.K., we support Primary Engineer, a nonprofit organization
 that runs engineering-based courses for primary school children.
 Working together, we invited 40 teachers to the Ford Dunton
 Technical Centre to attend a one-day training course covering the
 practical aspects of delivering a classroom engineering project. Each
 school is matched with a Dunton engineer who will support the inclass sessions and help to bring a real-world context to the learning
- In the U.K., we also support Loughborough University with a fourday residential STEM program for 14 and 15-year-old girls. Under the theme "Building a Sustainable Community for the Future," the workshops include design and architecture, computer science and robotics, environmental factors, energy sources and mobility
- In Romania and Russia, we have vocational training programs that focus on mechanical and electrical engineering. And in Germany and Romania, we offer engineering scholarships to students that provide much-needed financial support toward their higher education goals

FORD DRIVING SKILLS FOR LIFE

Ford Driving Skills for Life (DSFL) is a free driver safety training program for 17 to 24-year-olds that has been running in Europe since 2013. It provides hands-on classes that cover topics including hazard recognition, vehicle handling, and speed and space management. In 2017, more than 8,000 young drivers participated in the program across 14 European markets.

EMPLOYEE VOLUNTEERING

Our contributions to society are largely restricted to donations of money or materials but, by inviting employees to spend some of their work time on activities for public benefit, we have demonstrated social, cultural and environmental responsibility. While participation is voluntary, every salaried employee can spend up to two working days a year on community engagement. Across the region, 1,174 volunteers committed 8,760 hours to 35 projects during Global Caring Month, while a further 335 employees gave over 4,000 hours of their time to 16 further events in Vibrant Volunteer Week.

Related Pages:

- > People and Society
- > Please see our Annual Report 2017 for further information on our regional business units, including key financial metrics for Europe.