



THE FREEDOM TO MOVE DRIVES HUMAN PROGRESS

FORD SUSTAINABILITY REPORT SUMMARY 2017/18

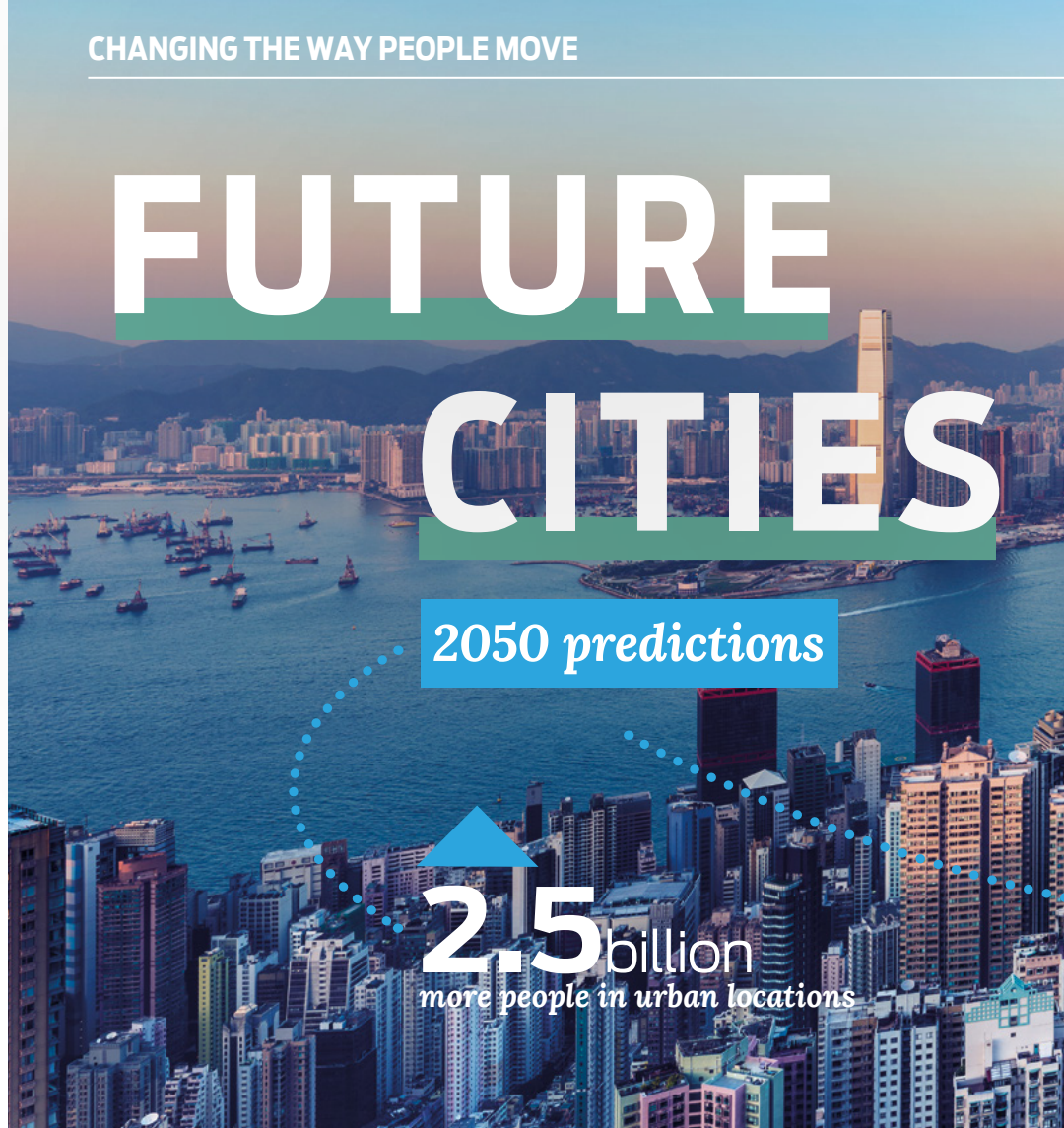
www.sustainability.ford.com

Sustainability at Ford

Every step we take comes from the understanding that mobility drives human progress. This puts Ford Motor Company in the forefront to deliver positive change for society, whether it's helping people to access ways to experience our world, generating economic value in communities or tackling environmental and social challenges.

INSIDE

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- 06 Changing Lives for the Better



FUTURE CITIES

2050 predictions

2.5 billion
more people in urban locations



We have always believed that freedom of movement drives human progress, which is why we aspire to be the world's most trusted company, designing smart vehicles for a smart world. As we look to the future, we will move from reducing our impacts to contributing positively on the environment, while also making people's lives better through greater mobility, more connectivity, less congestion and reduced emissions."

William Clay Ford, Jr., Executive Chairman, Ford Motor Company

Jim Hackett, President and Chief Executive Officer, Ford Motor Company

Ford has a vision of streets designed for living. With this vision, we're reimagining how communities function, to build a true City of Tomorrow.

REIMAGINING URBAN MOBILITY

Faced with rapid urbanization, and the pollution and congestion that comes with it, it's clear that we need to update cities to move people and goods more efficiently. By developing smart vehicles for a smart world, we have the opportunity to take major leaps toward building a true City of Tomorrow and reimagining how our streets and cities function.

With the power of artificial intelligence and the rise of autonomous and connected vehicles, we have technology capable of completely redesigning the surface transportation system for the first time in a century.

Ford is taking a human-centered, systems-level design approach to mobility. We can't just implement this new technology without first fully understanding how it is going to make people's lives better. We need to get this new design right – and have begun by collaborating with cities, civic organizations, urban planners, technologists and designers around the world.

CREATING TOMORROW'S CITIES

We've just opened a new office in London, Here East, that will create new mobility technologies focused on the needs of European urban centers and help us build the city of the future.

[Read the full story on Building the City of Tomorrow](#)



2 in 3

people will be living
in “megacities” of more
than 10 million people

CREATING A SMARTER SYSTEM WITH THE TRANSPORTATION MOBILITY CLOUD

The way to tackle city mobility challenges is to think of the many elements as parts of a singular transportation ecosystem comprising infrastructure and equipment, personal vehicles, mass transit and ride-sharing services, and digital interfaces and processes. Individual solutions – electric vehicles, autonomous vehicles, ride-sharing services, etc. – need to interact with all the other components in this “ecosystem,” speak a common language and work together.

To address some of the issues we’ll face, collaboration will be crucial – partnerships such as the one with Autonomic to create the open Transportation Mobility Cloud. This will provide a platform able to facilitate the flow of information and perform key processes to support the entire system,

from payment methods and identity verification to parking assist and real-time traffic intelligence.

With this platform, transportation modes in cities can work together. For example, instead of double parking on an already crowded street, a delivery van could reserve and pay for curbside parking, and the city would be able to tell the next vehicle in line when that space will be available. With the Transportation Mobility Cloud, residents and businesses could use the information to make smarter choices for their schedules, for external factors such as weather and for their wallets.

This is where technology like cellular vehicle-to-everything (C-V2X) can play an important role. This capability, which we’re working on with another of our partners, Qualcomm, enables various technologies and applications in a city to speak to each other. We believe C-V2X will enable our vehicles to share fast,

MIAMI: THE NEW PROVING GROUND FOR SELF-DRIVING CARS

We’re investing heavily in breakthrough autonomous vehicle technology, the key to Ford’s urban mobility solutions of the future. In Miami, we are involved in pilots to understand human factors, such as how consumers interact with driverless deliveries.

 [Read the full story on Smart Vehicles for a Smart World](#)

safe and secure communications with the cities of the future.

The potential of our open mobility services platform to participate in a robust communications system will come into its own when self-driving vehicles become more commonplace, changing the way people and goods get around within an efficient, connected transportation system.

ELECTRIFYING *the* FUTURE

We believe that climate change is real and that we share the responsibility for reducing greenhouse gas emissions in our products. We are committed to making safer, more efficient, lower-impact vehicles and technologies accessible at scale.

MORE CHOICE, LOWER CARBON

Our plans for the future include researching and developing alternative powertrains and fuel options across all our vehicles, delivering on our promise to give customers the power of choice.

Electrified vehicles are a core component of that strategy, with enormous potential for smart mobility. We already offer our customers wide choices of electrified vehicles in our model lineup, and are significantly increasing our planned investments. For example, with sales of electrified vehicles and hybrids in China growing by 53 percent in 2016, we will launch 15 electrified vehicle models in the world's largest car market by 2025.

THINKING BIG ABOUT ELECTRIFIED VEHICLES

Our extended electrified vehicle strategy aligns with increasing global demand. China, India, France and the U.K. have already announced plans to phase out vehicles powered by combustion engines and fossil fuels between 2030 and 2040. We remain focused on delivering affordable electric vehicles at scale, building on nearly two decades of experience in electrification. We're doing this by taking our mainstream vehicles – our most popular and iconic vehicles – and electrifying them.



\$11 billion
investment in
electrification



40 hybrid and
fully electric
vehicles by 2022

INNOVATION, WITH A SIDE OF HISTORY

In 2017, Team Edison – our new electric vehicle team – and our self-driving vehicle team moved to a refurbished factory in the center of Detroit. There, they will learn and guide how the next generation of urban vehicles works.

[!\[\]\(a8f9309f944226d1420f5fed22e2b6e6_img.jpg\) Read the full story on Scaling Up Electrification](#)

GROWING NEW VEHICLES ON THE FARM

Today, around 300 of our vehicle parts are made with sustainable materials that use less energy, consume less waste and move away from fossil fuels. And we're always exploring new possibilities with remarkable materials like bamboo.

[!\[\]\(c1168d6a8b365d11e842ece304635fa7_img.jpg\) Read the full story on Our Climate Commitment](#)

BETTER FUEL ECONOMY, LOWER EMISSIONS



A JOURNEY TO A LOWER-CARBON ECONOMY

Improving fuel economy goes hand in hand with our work on electrification. In line with our climate strategy and glide paths, we're committed to making more efficient, lower-impact vehicles and technologies accessible at scale, and support increasing clean car standards in the United States through 2025.

Guided by our Sustainable Technologies and Alternative Fuels Plan, we use a variety of approaches to improve the fuel economy of our gasoline- and diesel-powered vehicles. These include the use of aluminum and other lighter materials, more aerodynamic designs and low-resistance tires.

IMPROVING AIR QUALITY THROUGH EUROPEAN SCRAPPAGE SCHEME

In August 2017, we launched a car and van scrappage scheme to reduce vehicle emissions and improve air quality in several European markets, including the U.K. and Germany. It enables owners to trade in their old vehicles for new, affordable Ford cars and commercial vehicles with EcoBoost petrol and EcoBlue diesel models; these meet the Euro 6 standard, the toughest vehicle emissions standard yet.

ALTERNATIVE TRANSPORT OPTIONS

As part of our efforts to develop lower-carbon transport solutions, Ford Germany has joined with Deutsche Bahn Connect to make 3,200 FordPass bicycles available to the general public, and developed StreetScooter WORK XL e-vans with Deutsche Post DHL Group. Almost 150 were used for the group's urban parcel delivery service in 2017 and we plan to build 2,500 more in 2018.

Vehicles replaced through European scrappage scheme

+10,500

HIGH MARKS FOR SAFETY



SAFER CARS, SAFER DRIVERS

We are committed to designing and manufacturing vehicles that achieve high levels of safety over a wide range of real-world conditions, and receive high marks in the industry's key public and private crash-testing programs.

Driver assist technologies help customers drive more safely, alert them to potential collisions and make routine tasks easier. Available on specific vehicles in certain markets, they include technology for speed assistance, braking and collision avoidance, lane management, parking,

vision and visibility. These technologies are also the building blocks for autonomous vehicles operating safely in a fully connected transport ecosystem. Driver safety goes way beyond the construction and safety features of a vehicle. We also encourage safer behavior through driver education, including our global flagship program, Ford Driving Skills for Life. As the initiative expands, we adapt it to suit different regions with a range of modules targeting a variety of challenges.

For instance, in 2017, we collaborated with Google to produce Ford Reality Check, a virtual reality (VR) app highlighting the danger of distractions to young drivers. The experience uses Google Daydream VR to cast the participant as a distracted driver picking up friends on the way to a party. Instant messages, phone calls and chatty passengers all compete for attention, before a final, fatal distraction. In initial tests, 90 percent of app users said they would change their driving behavior.

MOBILITY AND DRIVER SAFETY IN SAUDI ARABIA

In 2018, we began a ground-breaking program in Saudi Arabia: driving education for women. In a global first for us, we tailored our Ford Driving Skills for Life program specifically for female drivers.



[Read the full story on A Force for Good](#)

Ford Motor Company models achieving five-star rating, New Car Assessment Program (NCAP)

14

nameplates
U.S. NCAP

11

nameplates
EURO NCAP

5

nameplates
CHINA NCAP

CREATING *eco-efficient* OPERATIONS

As well as directly managing the impacts of Ford-owned and operated facilities around the globe, we also have a responsibility to help our suppliers reduce their environmental footprint while ensuring social standards.



85 Ford sites have now achieved zero waste to landfill status

+9 sites in 2017

REDUCING FACILITY ENERGY USE AND GREENHOUSE GAS EMISSIONS

In 2010, we set an ambitious goal to reduce operational greenhouse gas (GHG) emissions per vehicle produced by 30 percent by 2025, which we reached eight years early. In 2017, we also reduced facility energy consumption (on a per-vehicle basis) by 6.8 percent compared to 2015. We continue to focus on driving efficiencies globally, and have also applied the glide path targets developed for our future vehicle lineup to our manufacturing operations. These are based on climate science and the need to limit the rise in global temperature to under 2 degrees Celsius.

EFFECTIVE WATER STEWARDSHIP

Our 2020 target, to reduce water use per vehicle produced by 30 percent from 2015 to 2020, represents a significant challenge, but it's a vital step forward if we are to achieve our long-term aim: to manufacture vehicles without withdrawing any drinkable water. Since 2000, we've reduced our operational water use by 62.5 percent.

We're also proud to be a signatory to the UN CEO Water Mandate and to be named in the CDP's Water A List.

AIMING FOR ZERO WASTE TO LANDFILL

Our aim is to minimize manufacturing and production waste, helping to reduce the overall environmental impact of our operations. Our five-year global waste reduction plan outlines how we will seek to avoid sending waste to landfill wherever practicable, through the efficient use of resources and by developing closed-loop recycling processes.

BUILDING SUPPLIER CAPABILITY THROUGH PACE

Our supply chain sustainability initiative, the Partnership for A Cleaner Environment (PACE), was developed to reduce the overall environmental impact of both Ford and our supply chain partners.

PACE enables us to share the best practice examples we've implemented with 50 key suppliers, so that they can be replicated and we can minimize our overall environmental impact. We also encourage our Tier 1 suppliers to cascade the information down to their own suppliers to extend the reach of the program.

CHANGING LIVES FOR THE BETTER

CONTRIBUTING *to wider* SOCIETY



By working with and contributing to the communities where we live and work, we can help improve quality of life for all. We aim to create a positive impact in areas including hunger relief, poverty alleviation, environmental initiatives and support for underrepresented populations. We also support education to strengthen our talent pipeline.

RESPECTFUL, INCLUSIVE WORKPLACES

We are a human-centered company that wants to be recognized as an employer of choice, wherever we operate. As we transform our business, we need to attract, retain and nurture a diverse range of talented and motivated people, enabling them to develop the products and services

DEVELOPING *sustainable* MATERIALS

Our research scientists in the United States, Germany, China and Brazil have been exploring ways to replace petroleum-based plastics with more sustainable materials since 2000. We continue to be a leader in the research, development and integration of more plant-based, renewable and recycled content in our vehicles. As well as recycling materials such as aluminum from our auto parts back into the same use, known as “closed-loop recycling,” we are exploring other waste streams, including shredded banknotes and plastic bottles, as sources of recycled materials.

SOY WAS JUST THE START

It’s been over a decade since Ford first used soybean-based foam and since 2011, it’s been a key material in the seat cushions, seat backs and headrests of every vehicle we build in North America – that’s more than 18.5 million vehicles and half a trillion soybeans. Our expanded renewable materials program now features wheat, rice, castor, kenaf (hibiscus), jute and coconut, and we are exploring other bio-based resources such as tomato skin, bamboo, agave fiber, dandelions and even algae.

In addition, we’ve been researching cellulose from trees in its nano form.

We found that when added to plastics, nano-crystalline cellulose produces excellent sound damping and in foams, it improves the mechanical properties of the material significantly. We look forward to using these findings in our products soon.

More than 228 million pounds

CO₂ emissions avoided by using soy

Equal to carbon capture by 4 million trees in one year

that will help improve lives. Core to our employee promise is the need to create a safe, collaborative and respectful work environment for all 202,000 Ford people. We work hard to fulfill this responsibility and where issues and concerns arise, we work tirelessly to put them right.

PROTECTING HUMAN RIGHTS

It is an absolute priority to ensure that everything we make – or that others make for us – is consistent with local law and our own commitment to protecting human rights. We have adopted the Responsible Business Alliance audit methodology, conducted a formal saliency assessment to identify our key human rights issues, and are further expanding our reporting within recognized global frameworks.

COMMUNITY INVOLVEMENT

Volunteerism is an integral part of our business. We encourage our employees to participate in programs that strengthen the communities in which we operate through the Ford Volunteer Corps. This network of current and retired Ford employees across six continents is dedicated to helping feed the hungry, deliver clean water, build homes, renovate schools and mentor young people.

IN 2017



more than
237,000 hours
of community
service



volunteer
time donated
equivalent to
\$5.72 million
financial investment

SUPPORTING WOMEN IN TECH

We’re working to correct the significant underrepresentation of women in tech by teaming up with Girls Who Code, a nonprofit that empowers young women with skills in robotics, web design, mobile development and more.



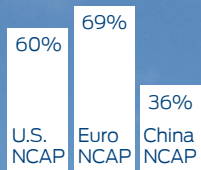
[Read the full story on A Force for Good](#)

2017 SUSTAINABILITY PERFORMANCE METRICS

VEHICLE SAFETY

Ford and Lincoln Nameplates With 5-Star Overall Rating in U.S., Euro or China NCAP¹ (as of June 2018)

Percent of Available Ford and Lincoln Nameplates With 5-Star Overall Rating²



FUEL ECONOMY

U.S. Corporate Average Fuel Economy, Combined Car and Truck Fleet

mpg



CO₂ EMISSIONS

Worldwide Facility CO₂ Emissions per Vehicle Produced

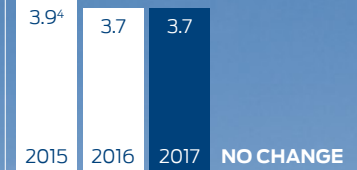
Metric tons



WATER USE

Global Water Use per Vehicle Produced

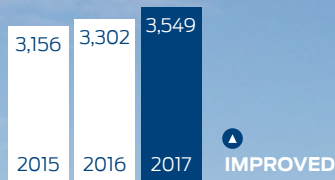
Cubic meters



SUPPLY CHAIN

Total Supplier Sites Trained/Retrained in Sustainability Management

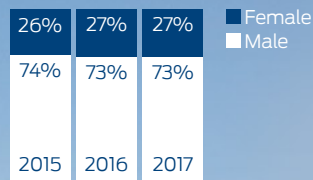
Cumulative, since 2005



DIVERSITY

Global Salaried Employees by Gender

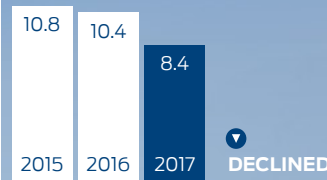
Percent



FINANCIALS⁵

Adjusted Pre-Tax Profit

\$ billion



1 NCAPs around the globe do not have the same test protocols, evaluation criteria and star rating methodologies. For example, a particular star rating in Euro NCAP does not necessarily mean that the vehicle will have the same rating if tested in a different NCAP. For the latest information on star ratings, go to an NCAP organization's website.

2 NCAP organizations do not necessarily rate all of a manufacturer's nameplates, for example:

- As of June 2018, U.S. NCAP has only rated 12 of 17 Ford and five of six Lincoln nameplates for the 2018 model year
- As of June 2018, U.S. NCAP has not yet rated the all-new 2018 model year Ford EcoSport nameplate
- The Euro NCAP vehicle selection protocol is such that the largest versions of the Ford Transit would never be rated by that organization; conversely, U.S. NCAP may choose to rate those variants
- China NCAP has only rated a limited number of Ford and Lincoln nameplates; for example, the Ford Explorer, Mustang and Mondeo, and Lincoln MKZ, MKX and Continental have not been rated by C-NCAP

3 Includes FFV credits. Does not include A/C or Off-Cycle credits. The decline in combined car and truck fuel economy of 1 percent YOY is primarily due to customers purchasing larger cars and more trucks and reduced CAFE FFV credits. Despite the decrease in combined car and truck CAFE, on an individual basis, our vehicles continue to make fuel economy improvements. See <http://corporate.ford.com/microsites/sustainability-report-2017-18/customers-products/reducing-emissions/fuel-economy.html>. Combined fleet fuel economy has improved by 9 percent compared to 2009.

4 2015 data has been restated due to water meter repairs at a number of facilities.

5 See pages 25 and 79 of Ford's 2017 Form 10-K for definition and reconciliation to GAAP.

Contact

Preparing this summary offers a valuable opportunity for us to assess and improve upon our progress and performance. To continue to do so, we need your feedback.



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