



OUR FUTURE IS IN  
**MOTION**

SUSTAINABILITY REPORT SUMMARY 2018/19



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# ENHANCING PEOPLE'S LIVES

Automotive companies can make a positive impact on millions of people by empowering employees and protecting human rights in the supply chain. We know, because we've been doing it for more than a century.

## WILL GREATER GENDER EQUALITY SHAPE THE WORKPLACE OF TOMORROW?

Creating workplaces that foster belonging and inclusion, through training, awareness-raising and strong talent pipelines, requires cultural transformation and proactive leadership.

We continue our Smart Redesign plan to reorganize our hierarchy, culture and capabilities. This global transformation will help us stay competitive by making our processes and systems more efficient. Our values and behaviors, now known as Our Truths, also have evolved.

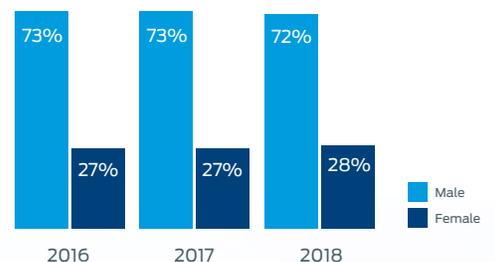
Maintaining a robust safety culture remains a priority, as does continuing to reflect the makeup of our local communities in our workforce. Nonetheless, we are redoubling our efforts by aspiring to become the most inclusive and diverse global company.

**Ford was included in the 2019 Bloomberg Gender-Equality Index for our commitment to transparent gender reporting and advancing workplace equality.**



**Jim Hackett, our President and CEO, has joined hundreds of business leaders in supporting CEO Action for Diversity & Inclusion, signing the "I Act On" pledge on Ford's behalf.**

Global salaried employees by gender





## HOW DO WE PROTECT HUMAN RIGHTS IN THE AUTOMOTIVE SUPPLY CHAIN?

The growth in electrified vehicles presents a number of challenges, including ensuring that sourcing the minerals needed for battery production doesn't contribute to forced and child labor.

Up to 20 pounds of cobalt is needed in an electric car battery and demand is rising, as drivers switch to lower-carbon vehicles. Most cobalt comes from the Democratic Republic of Congo (DRC), a country affected by civil war, political instability and child labor. This makes the responsible sourcing of child labor-free cobalt a significant challenge that

we can only hope to solve by collaborating with the miners, smelters and refiners in our supply chains.

### Using Blockchain to Source Cobalt Responsibly

We have joined an IBM-led pilot project to digitally trace and validate cobalt from a mine in the DRC, via a refinery in China and a battery factory in South Korea, to a U.S. Ford plant. The five-month trip will be recorded via blockchain technology to demonstrate how materials are responsibly produced, traded and processed in line with OECD standards.

## ARE COMPANIES PROGRESSING FROM CORPORATE GIVING TO COMMUNITY INVESTMENT?

Companies are becoming increasingly strategic with their community support, giving time, money and effort to projects that align with their key activities and business objectives.

In 2018, we made \$67.7 million of charitable contributions to good causes on our doorstep and around the world, with a focus on three key areas:

- **Community Life:** supporting projects focused on smart mobility, education and sustainable communities
- **Education:** fostering passion among young people for technology, engineering and science
- **Driver Safety:** extending our global Ford Driving Skills for Life (Ford DSFL) program, now active in 43 countries

Through the Bill Ford Better World Challenge, we have given \$1.4 million to seven projects in Mexico, the United States, Thailand, India and South Africa since 2015. In 2018, a total of \$450,000 was split between a project in drought-ridden South Africa that produces drinking water by extracting moisture from the air, and a program in Detroit that uses special vending machines to distribute first aid, hygiene products and clothing to the homeless.

### Supporting Social Enterprises Through SHE-MOVES

Our inaugural SHE-MOVES (Strengthen Her: Mobilizing Ventures for Social Innovation) grant program was launched in May 2019, empowering women in India, South Africa and Nigeria to develop their communities through mobility services. Grants provided by Ford Motor Company and Ford Fund went to the first successful applicants, whose community-level social enterprises focus on women, either as leaders or beneficiaries.



41,000

PARTICIPANTS IN THE FORD DSFL PROGRAM (2018)



148,849

HOURS OF COMMUNITY SERVICE BY THE FORD VOLUNTEER CORPS (2018)

### Sustainable Development Goals

Through our work in enhancing people's lives, we are contributing to the following UN SDGs:



# ADVANCING OUR PLANET

We have a role to play in protecting our planet by reducing the emissions from our vehicles, investing in world-class facilities and helping our suppliers reduce their impact on the world around us.



## 500,000 MWh

OF LOCALLY SOURCED WIND POWER PURCHASED IN DETROIT – OUR LARGEST-EVER RENEWABLE ENERGY PROCUREMENT AND A STEP TOWARDS OUR GOAL OF 100% RENEWABLE ENERGY FOR ALL MANUFACTURING SITES BY 2035.

## HOW CAN AUTOMAKERS HELP TACKLE THE CLIMATE CHANGE CHALLENGE?

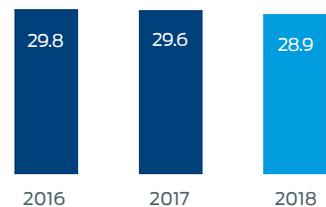
By reducing the emissions from their products and operations, vehicle manufacturers can help keep the rise in global temperature below 2°C, in line with the Paris Climate Accord.

Our approach to addressing climate change focuses on streamlining our portfolio, improving fuel efficiency and lowering the emissions associated with vehicle use. Our long-term roadmap demonstrates how we will migrate toward new engine, transmission and powertrain technologies, and lower-carbon fuels. This includes introducing hybrid and fully electric models around the world by 2022 (read more on page 6). We are also working to reduce the emissions, energy use and water consumption associated with our operations and throughout our supply chain (see page 4).

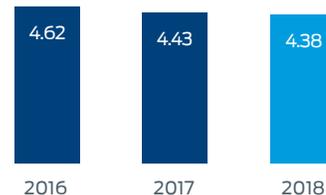
We achieved our 2025 goal to reduce the carbon footprint of our manufacturing operations eight years early, so we've now set a new target: an absolute reduction of 18 percent by 2023.

In 2019, we published our first [Climate Change Scenario Report](#) in accordance with the Task Force on Climate-related Financial Disclosures, detailing our vision for the transition to a low-carbon economy and our resilience to managing climate risk in the future.

### Corporate Average Fuel Economy, Combined Car and Truck Fleet (mpg)<sup>1</sup>



### Absolute Worldwide Facility CO<sub>2</sub> Emissions (million metric tons)



1. Includes FFV credits. Does not include A/C or Off-Cycle credits.

## CAN THE AUTO SECTOR CONTRIBUTE TO A CLEANER, HEALTHIER PLANET?

Large manufacturers like Ford are reducing their environmental impact by using water responsibly and reducing waste – and by replicating that effort throughout their supply chains.

As a signatory to the UN Global Compact CEO Water Mandate, we appreciate the need to manage water sustainably. We have set long-term aspirational goals: to achieve zero water withdrawals in our manufacturing processes and to only use freshwater for human consumption. Similarly, our global waste reduction plan outlines how we are working to achieve true zero waste to landfill wherever practicable and eliminate the use of single-use plastics.

But we can't tackle these complex issues by ourselves: we need to work with our supply chain to reduce our combined impact. That's where our Partnership for a Cleaner Environment (PACE) program comes in, by enabling us to share best practice with our key suppliers. Eight Ford suppliers participating in PACE report that they expect to save an estimated 480 million gallons of water from 2018 to 2030 – enough to fill 730 Olympic-sized swimming pools – according to data collected in 2019.

### Global Water Use per Vehicle Produced (cubic meters per vehicle)



### Total Supplier Sites Trained/Retrained in Sustainability Management (cumulative since 2005)



## CAN WE MOVE SOCIETY CLOSER TO A CIRCULAR ECONOMY?

To conserve the planet's resources, and find sustainable alternatives to petroleum-based plastics in particular, we all need to do more with less.

Progressing toward our ambition to use only recycled and renewable plastics in our vehicles globally, we are using an increasing range of sustainable materials. We already use many bio-based materials and agricultural byproducts in our vehicles, including rice hulls, soy and coconut fibers. We also make use of recycled rubber, nylon carpeting, plastic bottles and aluminum scraps from our stamping plants.

To ensure our vehicles are treated responsibly at the end of their useful lives, our dealerships reprocess the parts removed during servicing for reuse. In several markets, Ford owners have access to take-back networks, where items like tires and batteries are recycled and reused.

**88**  
FORD SITES WITH TRUE ZERO WASTE TO LANDFILL STATUS

**4 YEARS**  
IN A ROW, FORD NAMED IN THE CDP'S WATER A LIST



### Pushing the Boundaries of Auto Production

At our Advanced Manufacturing Center in Redford, Michigan, we've been exploring the latest technology to increase efficiency. We're creating auto parts from sand, nylon powder and carbon using 3D printers, enabling cross-continental collaboration through augmented and virtual reality, and seeing how collaborative robots ("cobots") can help assembly line workers perform repetitive or strenuous tasks.

### Sustainable Development Goals

Through our work in advancing our planet, we are contributing to the following UN SDGs:



# INNOVATING FUTURE MOTION

Our belief, that freedom of movement drives human progress, fuels our passion for designing smart vehicles for a smart world. With urban transportation becoming increasingly congested and inefficient, we're already developing the mobility solutions of tomorrow.

## HOW QUICKLY CAN WE SCALE UP THE USE OF ELECTRIC VEHICLES?

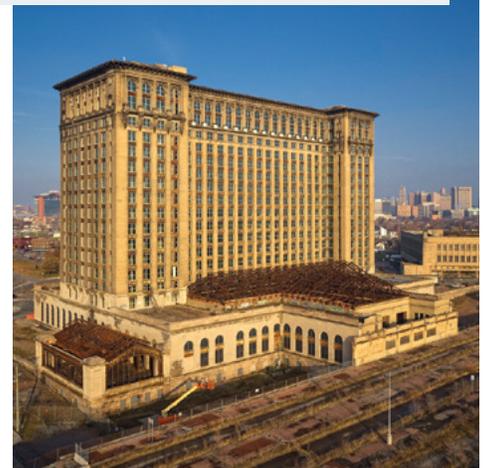
China, India, France and the U.K. are all planning to phase out vehicles powered by combustion engines and fossil fuels by 2040, so we need to start delivering affordable electric vehicles (EVs) at scale.

With global demand for cleaner transportation rising, we are investing \$11 billion in electrification over five years. We plan to electrify our most popular nameplates, including an all-electric, Mustang-inspired performance utility and the Ford F-150.

Collaborations are important in moving our industry forward, like the partnership Ford has established with Volkswagen to explore possible synergies, including EVs.

### **Transforming Michigan Central Station**

We are investing \$740 million to restore Michigan Central Station and several surrounding properties to create a hub of innovation in Corktown, Detroit's oldest neighborhood. This will bring together thousands of Ford employees, entrepreneurs and partners to shape the future of mobility. The area will serve as a catalyst for new ideas and a proving ground for self-driving vehicles, connectivity and new mobility solutions. We plan to transform the long-abandoned train station to its original grandeur and preserve the cultural heritage of existing neighborhoods, while creating modern, sustainable mixed-use spaces that foster innovation and community engagement.



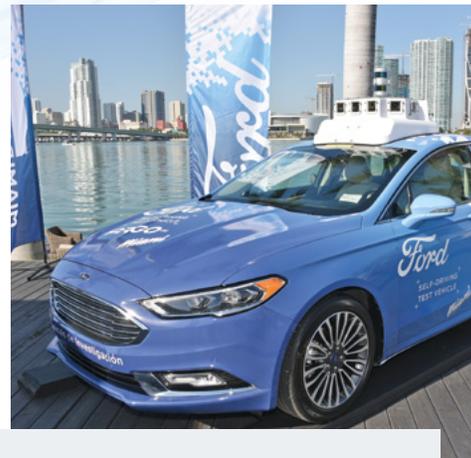
## HOW FAR DOWN THE ROAD TO A SELF-DRIVING FUTURE ARE WE?

Much of the technology needed for self-driving vehicles already exists, but we can't implement it without understanding how it will transform people's lives.

Aiming to launch commercial self-driving vehicles at scale, we expect to invest \$4 billion in our technology efforts through 2023, including a \$1 billion investment in Argo AI.

We've teamed up with Walmart, Postmates and Domino's on self-driving delivery vehicle projects. We are also working with city authorities to understand how self-driving vehicles might help residents move more freely. In 2019, Washington D.C. became our fourth real-world testbed for self-driving vehicles, after Pittsburgh, Detroit and Miami.

Our current portfolio offers customers a wide variety of driver-assist technologies, alerting them to potential collisions and making routine tasks easier. But, in addition to improving safety today, as demonstrated by our safety ratings in Public Domain programs, many of these automated features are the building blocks for a safe, autonomous future. Our recent safety assessment report for self-driving vehicle development, *A Matter of Trust*, outlines the research we have conducted with public, private and academic partners into the safety issues associated with autonomous, connected vehicles and infrastructure.



### The City:One Challenge

Our City Solutions team has launched the latest series of our City:One Challenge with its first 2019 location: Indianapolis. Through the competition, city officials and residents collaborate to solve their community's unique mobility challenges, with \$100,000 available to fund pilot projects. More cities will be announced in the coming months. The 2018 winners, from Pittsburgh, Miami-Dade County and Grand Rapids, have now received funding to pilot their ideas.



### Putting a New Spin on Urban Mobility

Reflecting the pace and dynamic nature of modern mobility, we have acquired San Francisco-based electric scooter company Spin. Extending its existing operations in three U.S. cities and university campuses, we plan to deploy fleets of zero-emission two-wheelers in 100 locations by 2020, making those first and last miles of a journey more efficient and sustainable.

## CAN WE MOVE AROUND OUR CITIES MORE EFFICIENTLY?

Collectively, we spend an estimated 160 million hours sitting in traffic each year, and more vehicles will only increase congestion and pollution. No wonder a new vision for urban mobility – one that revolves around the people who live and work in our cities – is emerging.

To enable services and apps to communicate with private and public vehicles and, eventually, the road itself, Ford-owned Autonomic has developed the Transportation Mobility Cloud. This open-source platform will “join up” smart transport options – bikes and scooters, self-driving vehicles, public transit and ride-sharing services, as well as cars – so that we can navigate the cities of tomorrow more efficiently and sustainably.

We are already looking at ways to incorporate cellular vehicle-to-everything (C-V2X) connectivity into all new Ford models from 2022.

### Sustainable Development Goals

Through our work in innovating future motion, we are contributing to the following UN SDGs:





It has been 20 years since we produced our first sustainability report, but moving toward a more sustainable world has been a priority for us from the very start. Our goal is to revolutionize the way people move by providing transportation solutions that improve the lives of our customers and the communities in which they live.”



**William Clay Ford, Jr.**  
Executive Chairman



**Jim Hackett**  
President and  
Chief Executive Officer

## REFLECTING ON 20 YEARS

We've made great progress in sustainability over the last 20 years. Having initially focused on environmental issues, our approach to sustainability has since become much broader.

**1999**

Publish our first **Corporate Citizenship** report, "Connecting with Society"

*"We are in the early stages of exploring what the mobility issue means for Ford now and for the future, and what role the Company can constructively play."*

**2003**

Establish **Ford Driving Skills for Life** education program  
Adopt the **Code of Human Rights/Basic Working Conditions**

**2004**

Reopen our **Ford Rouge Center** with its living roof, daylighting system and waste minimization  
Launch the **Escape Hybrid**

**2005**

Human Rights Campaign names **Ford a Best Place to Work for LGBT equality** and awards a 100 score for the first time

**2007**

Introduce **SYNC**, a hands-free connectivity system  
Join the **United States Climate Action Partnership and UN Global Compact**  
Launch 2008 Ford Mustang with the first **soy foam-based seats and headrests**

**2009**

Launch the **EcoBoost** engine, which optimizes power and efficiency using turbocharging and direct gasoline injection

**2014**

Implement **Partnership for a Cleaner Environment (PACE)** program  
Become a signatory to the **UN CEO Water Mandate**  
Announce a saving of more than **10 billion gallons** of water

**2015**

Develop the **Ford Mobility** plan, advancing connectivity, mobility, self-driving vehicles and big data  
Begin exploring **self-driving vehicle** technology  
Launch the new, lightweight **all-aluminum F-150**

**2016**

Form a new business, **Ford Smart Mobility**  
Become a signatory to the **UN Sustainable Development Goals (SDGs)**  
Become the first OEM to join the **Responsible Business Alliance (RBA)**

**2018**

Ford-owned Autonomic develops the **Transportation Mobility Cloud**  
Meet our goal, set in 2010, to reduce **operational GHG emissions** per vehicle produced by 30 percent (eight years early)  
Celebrate **10 years of soybean-based foam** in more than 18.5 million vehicles built in North America  
Conduct a formal UN human rights saliency assessment

## THE NEXT 20 YEARS

We have no plans to slow down, as we aspire to become the world's most trusted company, designing smart vehicles for a smart world.



### ACCESS

We aspire to drive human progress by providing mobility and accessibility for all



### CLIMATE CHANGE

We support CO<sub>2</sub> reductions consistent with the Paris Climate Accord



### AIR

We aspire to achieve zero air emissions from our facilities



### ENERGY

We will use 100 percent renewable energy for all manufacturing plants globally by 2035



### WASTE

We will achieve true zero waste to landfill across our operations  
We will eliminate single-use plastics from our operations by 2030



### WATER

We will make zero water withdrawals for manufacturing processes

We aspire to use freshwater for human consumption only



### MATERIALS

We aspire to only use recycled and renewable plastics in our vehicles globally



### HUMAN RIGHTS

We aspire to responsibly source all raw materials used within our vehicles globally



### DIVERSITY

We aspire to become the most inclusive and diverse global company