

2020

# CLIMATE CHANGE SCENARIO REPORT



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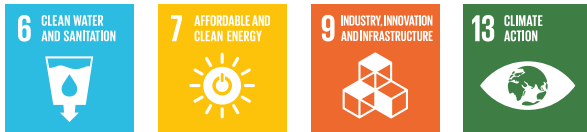


# ABOUT THIS REPORT

In conjunction with our annual sustainability report, this Climate Change Scenario Report is intended to provide stakeholders with our perspective on the risks and opportunities around climate change and our transition to a low-carbon economy. It addresses details of Ford's vision of the low-carbon future, as well as strategies that will be important in managing climate risk.

This is Ford's second climate change scenario report. In this report we use the scenarios previously developed, while further discussing how we use scenario analysis and its relation to our carbon reduction goals. Based on stakeholder feedback, we have included physical risk analysis, additional detail on our electrification plan, and policy engagement.

This report is intended to supplement our first report, as well as our Sustainability Report, and does not attempt to cover the same ground. A summary of the scenarios is in this report for the reader's convenience. An explanation of how they were developed, and additional strategies Ford is using to address climate change can be found in our [first report](#).



## SUSTAINABLE DEVELOPMENT GOALS

Through our climate change scenario planning we are contributing to SDG 6 Clean water and sanitation, SDG 7 Affordable and clean energy, SDG 9 Industry, innovation and infrastructure and SDG 13 Climate action.

“ IN THESE UNDOUBTEDLY UNPRECEDENTED TIMES, WHERE EVERY ACTION HAS REAL CONSEQUENCES FOR SOMEONE ELSE, WE ARE REMINDED HOW FRAGILE THIS WORLD CAN BE. BUT IT ALSO REMINDS US HOW MUCH WE DEPEND ON EACH OTHER, AND HOW POWERFUL IT IS WHEN WE ALL WORK TOGETHER TO DRIVE HUMAN PROGRESS. THIS JUST CONFIRMS THE NEED TO ACT ON CLIMATE CHANGE AND COMPELS US TO CHANGE BEHAVIOR IN PROFOUND AND LASTING WAYS. FORD IS THE ONLY FULL LINE U.S. AUTOMAKER COMMITTED TO DOING ITS PART TO REDUCE CO<sub>2</sub> EMISSIONS IN LINE WITH THE PARIS CLIMATE AGREEMENT AND WORKING WITH CALIFORNIA FOR STRONGER VEHICLE GREENHOUSE GAS STANDARDS.

TO HELP REDUCE THE CO<sub>2</sub> EMISSIONS ASSOCIATED WITH OUR VEHICLES, WE ARE OFFERING A NEW GENERATION OF LOWER-CARBON POWERTRAINS AND FUELS, INCLUDING HYBRIDS AND ELECTRIC VEHICLES (EVs). WE ARE LAUNCHING ELECTRIFIED VERSIONS OF OUR MOST POPULAR NAMEPLATES – THE WORLD'S NUMBER ONE TRUCK, ICONIC SPORTS CAR AND COMMERCIAL VEHICLES AMONG THEM – AND OFFERING CUSTOMERS ACCESS TO NORTH AMERICA'S LARGEST EV CHARGING NETWORK AS WELL AS EXPANDING THE EV INFRASTRUCTURE IN EUROPE. TO PROTECT OUR PLANET, BOTH NOW AND FOR FUTURE GENERATIONS, WE ARE ALSO AIMING TO SOURCE 100 PERCENT RENEWABLE ENERGY FOR ALL OUR GLOBAL MANUFACTURING SITES BY 2035. WE'VE ALSO SET OURSELVES A NEW GOAL: ACHIEVE CARBON NEUTRALITY GLOBALLY BY 2050.”

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

**Jim Hackett** President and Chief Executive Officer



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# FORD'S CLIMATE STRATEGY

Over the past decade, we developed a comprehensive approach to address climate change with a focus on three key areas: reducing vehicle emissions, implementing efficient state-of-the-art manufacturing and supporting our suppliers to drive positive change. In 2018, we conducted a United Nations human rights saliency assessment and identified climate change as one of the nine most important human rights issues due to the impacts of extreme weather events, natural disasters, rising sea levels, droughts, water shortages and the spread of disease.

## CARBON NEUTRALITY BY 2050

Doing our share to meet the collective challenge of climate change is a key responsibility and a strategic priority for Ford. As part of our goal to be the world's most trusted company, we are strengthening our commitment to limit the global temperature increase in keeping with the Paris Agreement through our aspiration to achieve carbon neutrality no later than 2050. We will also establish interim targets that address the urgency of climate change as well as regional differences.

We are focusing on three main areas globally that account for about 95 percent of Ford's carbon emissions: vehicle use, our supply chain and our factories. In terms of our supply chain, our initial approach will include select Tier 1 suppliers. Factory emissions include both Scope 1 and Scope 2 emissions.

Ford is also pursuing targets consistent with the Science Based Target Initiative (SBTi) criteria and carbon neutrality for Scope 1, Scope 2, and Scope 3 – Use of Sold Products. As part of this effort, Ford will develop and report on interim targets in our future sustainability reports.

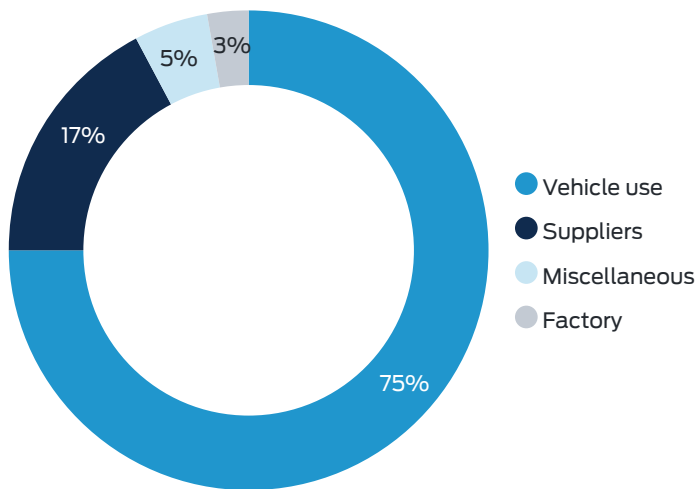
## WHY 2050?

First and foremost, achieving global carbon neutrality by no later than 2050 strengthens our commitment to the Paris Agreement, and is a natural evolution in our glide path approach. However, the challenge of reaching the 2050 goal for our industry and company should not be underestimated. Enormous changes will be required to decarbonize the global energy and transportation systems. While it will take time to update infrastructure, for the technology to become affordable, and other obstacles to be addressed, we expect the goal of carbon neutrality to be reached in different product segments and regions at different times. For example, we expect passenger vehicles to be carbon neutral before larger commercial vehicles with more demanding duty cycles. Given favorable policy, we expect the European Union and the U.S. Green States to be carbon neutral before the rest of the world. Our interim targets will reflect these differences.

It is important to note that carbon neutrality can be achieved using emission reductions and carbon offsets. Our philosophy is to focus on emission reductions. We are not planning to use carbon offsets for our light-duty vehicles, although they may be necessary for medium-/heavy-duty vehicles and in less developed regions of the world.

We also recognize that to be successful, we need to address many external factors. These include government policies, technical solutions, the green grid and market trends such as energy price fluctuations and changes in consumer demand. Ford will monitor and advocate for key enablers that support our goal of carbon neutrality – such as carbon pricing systems. To achieve this ambitious and complex goal, we are committed to serving as a positive force in increasing the collaboration required between all stakeholders.

FORD 2019 CO<sub>2</sub> EMISSIONS  
CDP



Note: Miscellaneous is total Scope 3 less vehicle use and purchased goods (i.e. upstream and downstream transportation and distribution, business travel, capital goods, franchises, etc.).



## FORD'S CLIMATE STRATEGY CONTINUED

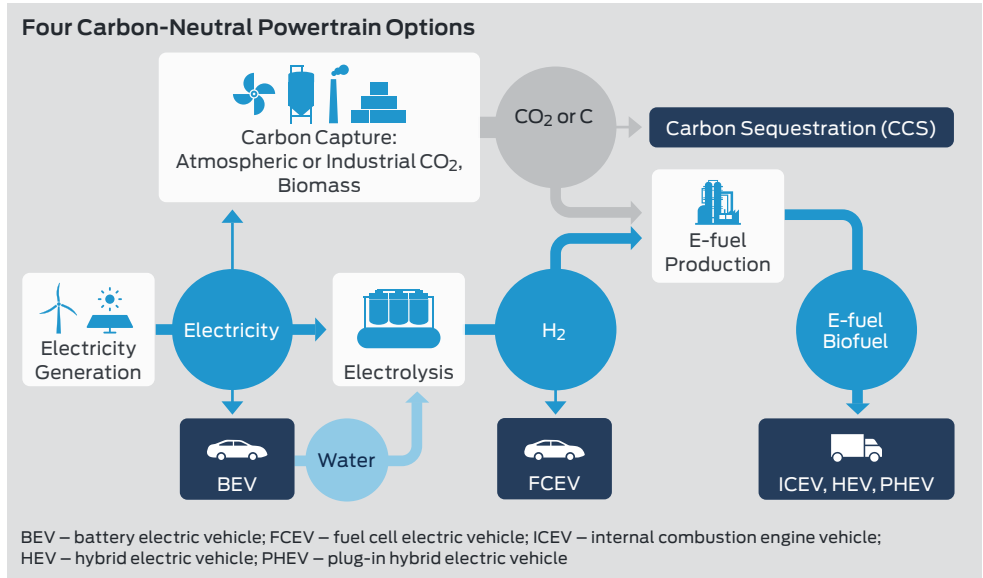
### HOW WE DEVELOPED OUR CURRENT APPROACH

Since the introduction of our climate science-based glide path for light-duty vehicle CO<sub>2</sub> reductions in 2007, we have updated the glide path about every five years, capturing the latest climate science and our progress. Our original model was based on 450 ppm CO<sub>2</sub> stabilization, and in 2017 we moved to a 2°C temperature stabilization pathway. Our previous glide path approach has been as follows:

- Based on climate science and modeling by recognized authorities, including the IEA, we developed a model of global light-duty vehicle (LDV) CO<sub>2</sub> emissions from different regions
- We calculated the 2°C stabilization emission-reduction levels for LDVs over time, resulting in “CO<sub>2</sub> glide paths” for the LDV sector, taking into account regional differences in vehicle size and fuel consumption, biofuel availability and market growth
- We then calculated Ford-specific glide paths (CO<sub>2</sub>-reduction goals) for our new vehicle lineups across our major operating regions, and applied the methodology to determine reduction targets for our facilities

Our CO<sub>2</sub> model is not intended to provide the “answer,” but a range of possible vehicle and fuel solutions in a carbon-constrained world. Our reduction targets are an approximate guide to cumulative CO<sub>2</sub> reduction, rather than a precise limitation of annual emission rates.

In 2019 we began to examine our climate strategy to see if there was a better approach to integrate the wants and needs of people, the possibilities of technology, and the requirements for business success using a human-centered/design-thinking approach. A team from various Ford functions and regions (U.S., E.U. and China) met regularly to formulate our carbon-neutral approach, analyzing information on the environment, customers, technology, legislation, energy, competitive approaches, life cycle assessments and other trends. The team has developed a framework for success that includes metrics that were reviewed and endorsed by management to



ensure integration of carbon neutrality in company processes.

We are also pursuing vehicle-use CO<sub>2</sub> targets consistent with SBTi criteria and carbon neutrality. We will continue to use our model to conduct sensitivity studies on how our pathway is affected by global changes such as economic conditions, availability of renewable, carbon-neutral electricity and fuels, and regulations. As the factors change and as climate science develops, we will further refine and adjust our science-based CO<sub>2</sub> targets and explore how best to factor in non-CO<sub>2</sub> emissions.

To reach this long-term aspiration, we need to prepare ourselves in the short and mid-term. We regularly review our vehicle development plans to assess how they align with our metrics for reducing CO<sub>2</sub> emissions. While achieved reductions will vary from year to year due to external factors that are outside of our control, we are improving the efficiency of conventional

and hybrid products and prioritizing a carbon-neutral portfolio that is key for the future. Depending on infrastructure, technology development, policy and customer acceptance, our long-term carbon-neutral portfolio will be powered by some combination of renewable, carbon-neutral electricity, hydrogen, and fuels (biofuels and e-fuels); fossil fuels may have a place in combination with carbon capture and sequestration technology.

To realize this portfolio, we are investing heavily in vehicle electrification, developing fuel cell solutions for the appropriate segments, and exploring renewable fuels. In the transition period, it will be important to remain financially viable and keep in step with consumer demand while finding ways to encourage market growth of our expanding zero-emission vehicle portfolio. Although we don't presently have all the answers, we are committed to achieving our goal.

ACTIONS TAKEN NOW AND IN THE NEAR FUTURE...	...LEAD TO US ACHIEVING OUR GOALS IN THE FAR FUTURE
<ul style="list-style-type: none"> <li>• Remain Financially Viable</li> <li>• Address Urgency</li> <li>• Prioritize Carbon-Neutral Portfolio Development</li> <li>• Connect With Customers</li> <li>• Encourage Market Development (Communicate, Advocate &amp; Partner)</li> <li>• Monitor Key External Enablers</li> </ul>	<p><b>Aspirational Goal</b> To Achieve Carbon Neutrality by 2050</p>

# CLIMATE CHANGE SCENARIO PLANNING

## OUR APPROACH TO SCENARIO ANALYSIS

Scenario planning is a disciplined method of defining possible future environments that companies might face over a set time period. By engaging in scenario analysis, we can explore a wide range of economic, regulatory, technological and societal conditions, and consider how Ford's businesses and strategies might fare under varying operating environments.

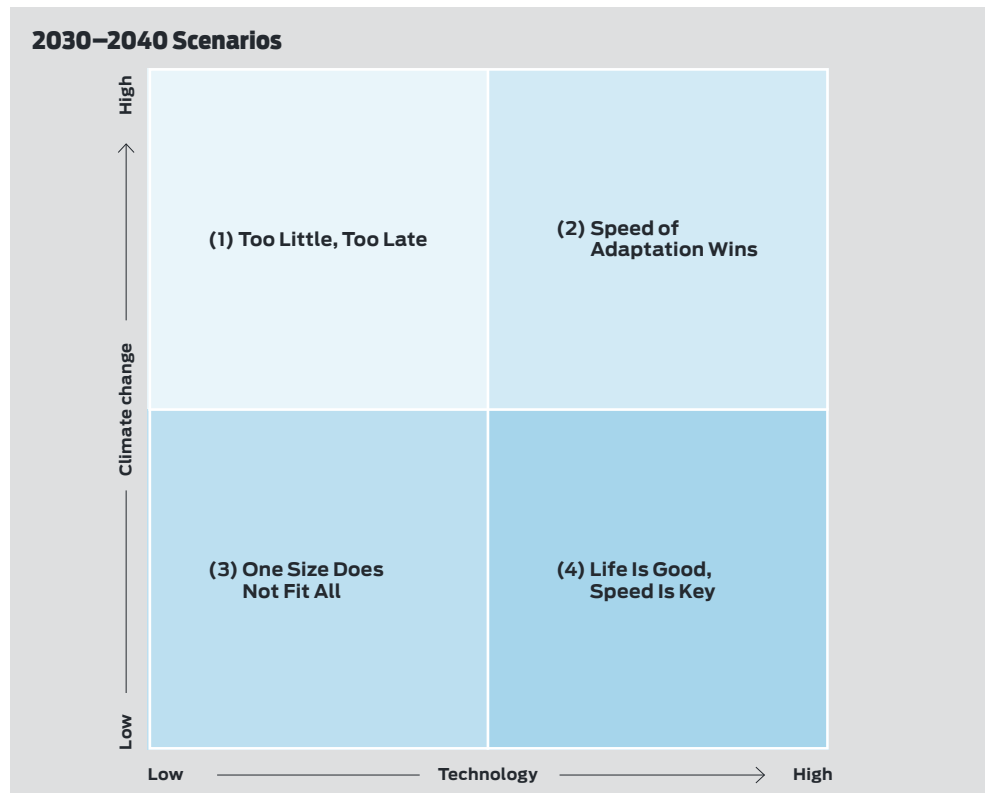
We recognize that individual countries' efforts to mitigate climate change and unexpected technological innovations introduce additional uncertainty into the range of outcomes for regulations and consumer behaviors. Because of today's highly uncertain context, we do not assign probabilities to scenarios nor plan to a probable scenario; rather, we examine the resilience of our strategies to differing futures and adjust accordingly. Therefore, these scenarios are not predictions of the future and do not represent forecasts.

To better understand the impact of the wide range of potential outcomes, we focus on four alternative long-term future transportation scenarios in the 2030 to 2040 timeframe, all of which are plausible and all of which could influence Ford's operating environment in markedly different ways. We categorize these scenarios as: (1) Too Little, Too Late, (2)

Speed of Adaptation Wins, (3) One Size Does Not Fit All, and (4) Life Is Good, Speed Is Key. Our scenarios broadly align with the climate and economic conditions represented in the [IEA World Energy Outlook 2019 Scenarios](#), as shown below. While the four scenarios in this report will not predict the future, they do help Ford prepare for it.

## CORRESPONDING IEA WORLD ENERGY OUTLOOK 2019 SCENARIOS

FORD SCENARIO	IEA WEO SCENARIO	DESCRIPTION
Too Little, Too Late Speed of Adaptation Wins	Stated Policies Scenario (Formerly New Policies Scenario)	<ul style="list-style-type: none"> <li>Global average temperature increase by 2100: 2.7–3.2°C</li> <li>Global energy CO<sub>2</sub> emissions plateau around 2045</li> <li>Oil \$100/bbl in 2040</li> <li>Carbon pricing in limited countries, sectors: ~\$40/ton CO<sub>2</sub> in 2040</li> </ul>
One Size Does Not Fit All Life Is Good, Speed Is Key	Sustainable Development Scenario	<ul style="list-style-type: none"> <li>Global average temperature increase by 2100: 1.65–1.8°C</li> <li>Energy-related CO<sub>2</sub> emissions decline rapidly, on-track for net-zero by 2070</li> <li>Oil \$59/bbl in 2040</li> <li>Broad carbon pricing: \$125 (selected developing economies) – \$140 (advanced economies)/ton CO<sub>2</sub> in 2040</li> </ul>



## CLIMATE CHANGE SCENARIO PLANNING CONTINUED

### (1) TOO LITTLE, TOO LATE



#### SCENARIO

**Environment:** Climate requires significant intervention but the technology is unavailable to respond. Investment in mitigation is limited as funds are continuously allocated to rebuilding from natural disasters.

**Social:** Global mobile lifestyles begin to fade and people stay closer to home where possible. Significant migration after repeated flooding or drought and fires. Cities become more overcrowded and refugee camps become increasingly permanent.

**Economy:** Economic growth and trade slows as countries have to focus on their own needs including disaster recovery, population relocation, food and water.

**Energy prices:** Highest in this scenario and across all forms of energy (fuel, electricity, etc.), which does not generate organic demand for alternative propulsion.

**Policy:** Global cooperation is limited. Climate accords have failed and not been replaced. Automotive industry identified to mitigate issues created by vehicle and manufacturing contributions to climate change. Requires local and individual creative solutions to reduce CO<sub>2</sub> emissions.

**Technology:** New technology solutions are not developed quickly enough, nor are they cost effective. Energy-management technology and solutions emerge slowly or in select markets.

#### INDUSTRY IMPLICATIONS

Mobility hampered by congestion, air pollution and severe weather. Significant increase in the availability of private solutions. Access restrictions based on occupancy.

City center requirements lead to mass electric vehicle adoption only in major urban centers. Limitations of technology and high cost keep all-electric vehicles from reaching mass-market adoption in suburban and rural areas.

Slow technical progress leads to high costs for critical autonomous vehicle components, resulting in high levels of human intervention and narrow geographic deployment.

Significant pressure on automotive manufacturers to be a part of the solution, although being able to do so while staying financially relevant will be a challenge. May result in unusual collaborations and partnerships.

#### FORD IMPLICATIONS

Vehicle solutions must be environmentally friendly (air quality and CO<sub>2</sub>) and simultaneously rugged enough to handle severe weather.

All-electric vehicles are required but are expensive. Low demand and lack of policy hinder their profitability. E-bikes and e-scooters satisfy the market for environmentally friendly solutions.

Smart Mobility does not reach full potential foreseen in 2020; autonomous vehicles are a niche market.

**ASSESSMENT:** Most difficult scenario to develop plans and strategies against as both economy and environment are challenging. Portfolio diversification, including vehicles, services and mobility solutions, is important to maintain resilience. Mobility and autonomous vehicle investments may not be recouped.

# CLIMATE CHANGE SCENARIO PLANNING CONTINUED

## (2) SPEED OF ADAPTATION WINS



### SCENARIO

**Environment:** Significant sea-level rise faster than previously predicted, drought, severe weather events increase globally. High tech used to develop mitigation and adaptation solutions. Droughts make water an expensive commodity. New and emerging solutions address resource constraints.

**Social:** Middle class constrained due to migration and pressure on urban areas. Disparity grows between countries as some invest in growth while others invest in climate recovery. Significant migration occurs as some countries cannot provide for basic needs.

**Economy:** Economy stable, driven by green technologies and solutions, but productivity slows due to costs of addressing mitigation actions. Growth limited in developing countries.

**Energy prices:** High due to increased risk of disruption across all production and distribution networks and rising costs of productivity.

**Policy:** Aligned global focus to address global warming, climate change. Government, industry and university collaborations form.

**Technology:** Urgency of need enables viability of alternate technology solutions. Energy-management technology and solutions emerge as cost effective and commonplace.

### INDUSTRY IMPLICATIONS

Significant investment in technology to stay ahead of curve. Revolutionary new technologies and players emerge. Innovative, diverse solutions required to meet global demand.

May see a shift in markets and megacities, resulting in a change from private ownership to shared or public solutions.

Strong technical progress leads to low-cost, all-electric vehicle solutions and ubiquitous all-electric vehicle adoption, including electric autonomous vehicles, in urban centers.

Climate impacts increase risk to supply chain, manufacturing, transportation and logistics.

### FORD IMPLICATIONS

Transportation and mobility solutions emerge beyond connected vehicles to connected cities.

Technology implementation accelerated. Fast followers may benefit from infrastructure deployment. Mix of solutions available globally.

Ability to move quickly to implement new technologies critical for success.

Mix of public and private, first-mile and last-mile solutions.

**ASSESSMENT:** Technology opportunities and environmental needs align to deliver diverse solution sets addressing climate change. Challenge in finding winners globally to achieve scale. Competition in the mobility space from public and private providers.



## CLIMATE CHANGE SCENARIO PLANNING CONTINUED

### (3) ONE SIZE DOES NOT FIT ALL



#### SCENARIO

**Environment:** Urbanization puts pressure on air quality and water resources at a local level but there are limited actions due to lack of urgency.

**Social:** Rise of megacities, still significant populations in suburban and rural areas. Middle class grows.

**Economy:** Global economic growth relatively stable, with typical cyclical swings in western markets; emerging markets continue to expand.

**Energy prices:** Oil and gas prices remain low by historical standards, providing limited incentive for innovation and customer adoption beyond policy-driven initiatives.

**Policy:** Global climate accords fall apart; local policies restrict vehicles from city centers for air quality. CO<sub>2</sub> mitigation policies lose momentum.

**Technology:** Evolutionary improvements in automation, digitization and robotics enhance productivity. Energy-management technology and solutions emerge slowly or in select markets.

#### INDUSTRY IMPLICATIONS

Congestion, air quality and quality of life are major urban issues.

All-electric vehicles considered key lever for automotive companies to contribute to climate change initiative

Growing consumer acceptance of all-electric vehicles.

Limited technology deployment and developing regulatory frameworks result in mixed fleets (drivered, driverless, all-electric and hybrid vehicles, etc.).

Targeted solutions required in response to emergence of internal combustion engine (ICE)-free or low-emission zones and commercial vehicle lanes.

#### FORD IMPLICATIONS

One size does not fit all. Need flexibility in products and services to meet a variety of regional requirements and customer needs.

Aligns with Ford Smart Mobility, autonomous vehicle and all-electric vehicle investment. Opportunity for Transportation Mobility Cloud as a solution.

Slow but growing market for electric vehicles including hybrids and plug-in hybrids. E-bikes and e-scooters satisfy the market for environmentally friendly solutions.

Challenges meeting regulatory and climate change requirements without mass-market all-electric vehicle adoption.

**ASSESSMENT:** Ford's strategy of maintaining our core vehicle business while growing Smart Mobility service is aligned with the diverse needs of "One Size Does Not Fit All." However, the diversity of solutions required to meet inconsistent global policies, requirements, infrastructure and consumer demand makes profitability challenging. Slow but growing electric vehicle adoption supports improvement of environmental footprint.



## CLIMATE CHANGE SCENARIO PLANNING CONTINUED

### (4) LIFE IS GOOD, SPEED IS KEY



#### SCENARIO

**Environment:** Local mitigation and resilience actions by individuals and communities. Circular economy booming.

**Social:** More local and personal environmental activism. People empowered to create solutions and opportunities.

**Economy:** Economy is strong, driven by new industries providing green solutions and technologies. Global opportunities expand in all markets as technologies are democratized.

**Energy prices:** Oil and gas prices remain low, but this is driven by declining demand as technology provides attractive alternative sources of energy and propulsion.

**Policy:** Social and political grassroots movements flourish. Local efforts are joined together to create global solutions.

**Technology:** Staggering changes with AI, robotics, battery technology and connected devices. Innovation rewarded. Advances in materials, lidar and AI. Carbon capture and energy-management technology and solutions minimize carbon-based energy consumption.

#### INDUSTRY IMPLICATIONS

Seamless coordination of private, semi-private and public transportation.

Battery advancements and cost reductions enable low-cost, all-electric transportation solutions in urban and suburban areas.

Accelerated autonomous vehicle deployment; technology advances enable low-cost autonomous vehicle transportation solutions in urban and suburban areas.

Innovation is ahead of climate change, allowing technology implementation to be driven by automotive manufacturers and consumer demand rather than climate and political initiatives.

#### FORD IMPLICATIONS

Requires multiple solutions for urban, suburban and rural applications. Need for customization. Actions driven by business case rather than addressing global crisis.

Connected vehicles and services take forefront; required to remain relevant.

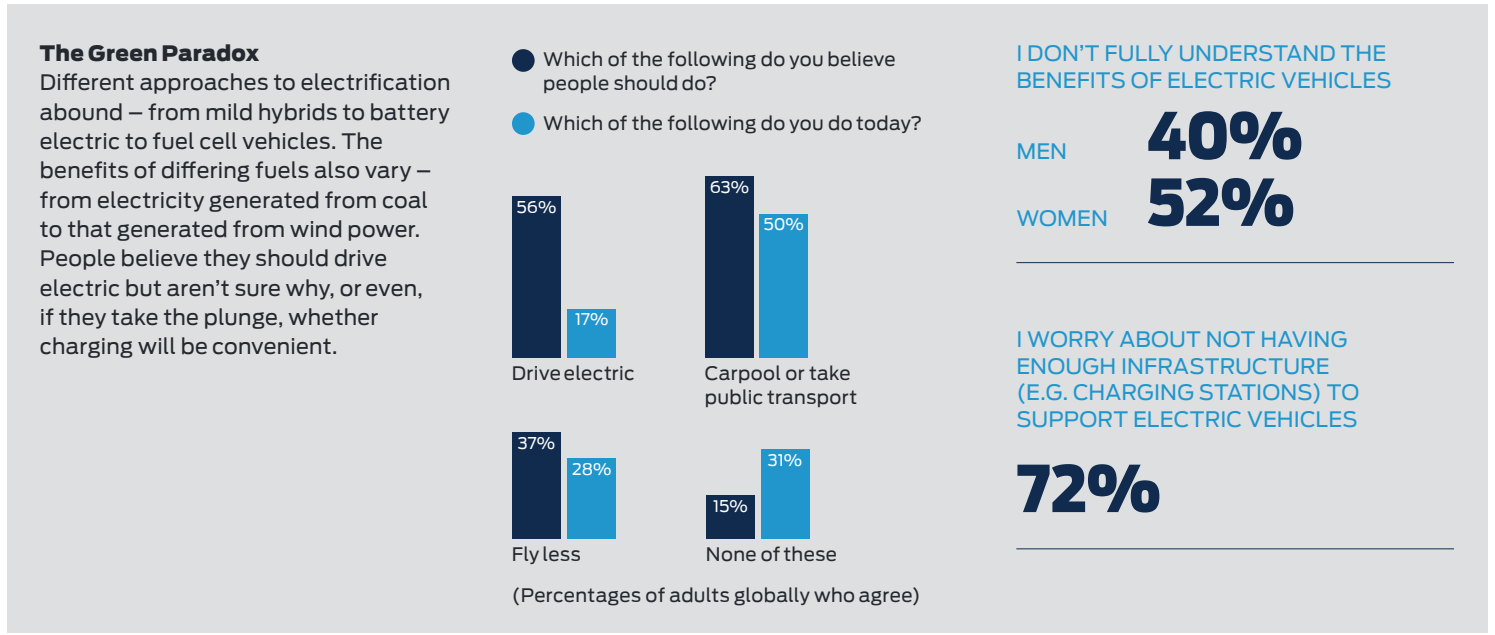
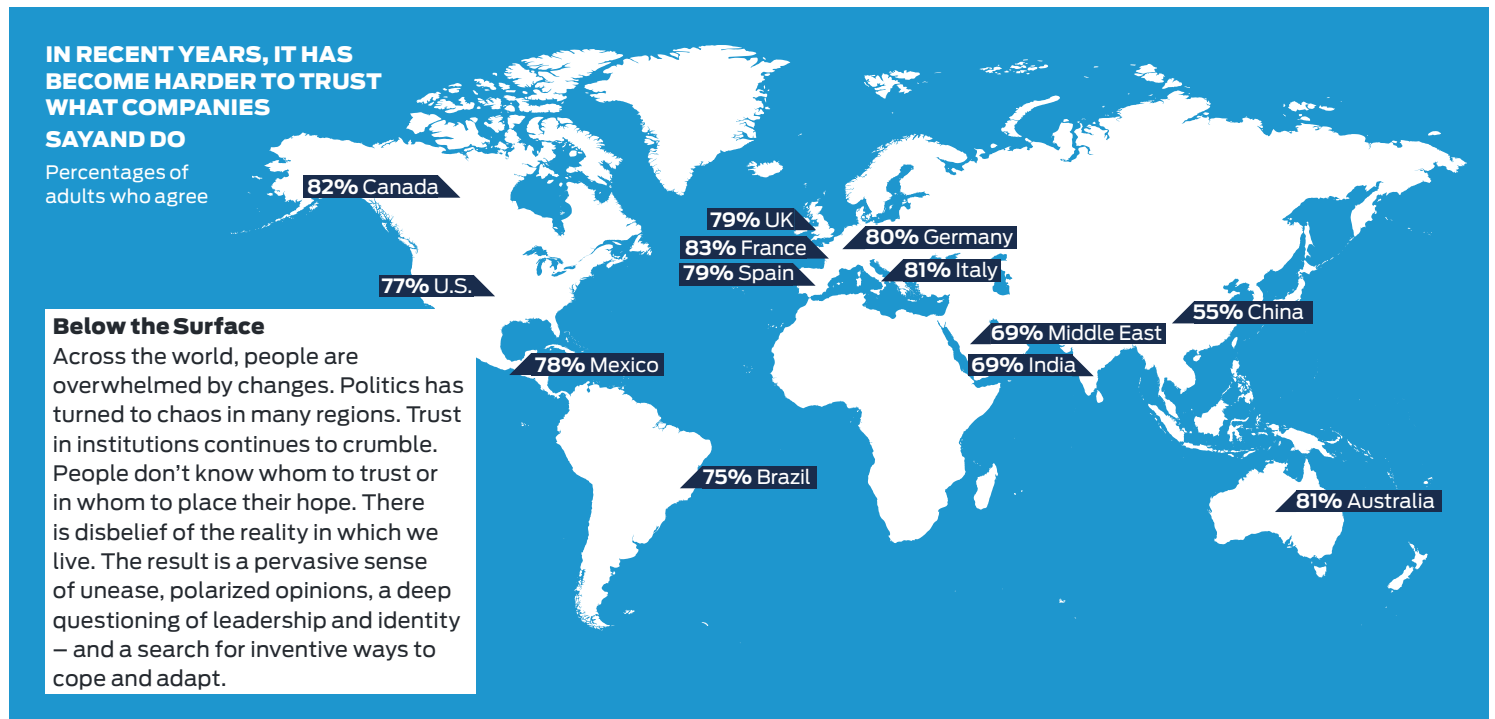
Changing transportation models transform business models. Must provide mobility services to compete with popular public and private transportation options. All-electric vehicle demand by consumers and private mobility providers increases.

**ASSESSMENT:** Technology enables solutions. Investments in electrification, autonomy and Smart Mobility pay off. Opportunities with customization, connected and new business models. Conventional vehicle business declines and mobility solutions face competition from numerous players in the sector.

# CLIMATE CHANGE SCENARIO PLANNING CONTINUED

## TREND ANALYSIS

We also have considered two trends outlined in our 2020 Trend Report, *Below the Surface* and *the Green Paradox*, and their effect in the scenarios. These trends were identified based on over 10,000 online interviews across 14 countries, and were conducted under the direction of Harris Insights & Analytics.



## CLIMATE CHANGE SCENARIO PLANNING CONTINUED

These trends would likely have the greatest effect in our low-technology scenarios, where there would be a variety of electrified solutions (mild hybrids, hybrids, plug-in hybrids, battery electric and fuel cell vehicles). In such an environment, confusion between the options and trust in companies to provide the right solutions would be of greater importance than in an environment where one technology, because of technology breakthroughs, is likely to become predominant. Because of this, we considered the effects of these trends would be most challenging to overcome in the “Too Little, Too Late” and “One Size Does Not Fit All” scenarios.

### SCENARIO TREND OVERLAY

	TOO LITTLE, TOO LATE	ONE SIZE DOES NOT FIT ALL	SPEED OF ADAPTATION WINS	LIFE IS GOOD, SPEED IS KEY
Degree of Electrification	Variety of higher-cost electrified solutions		Low-cost electric solution	
TREND	EFFECT OF TREND ON SCENARIO			
Below the Surface	Pronounced		Low	
Green Paradox				

# BUSINESS STRATEGY FOR A CHANGING WORLD

Our leaders and experts evaluated each scenario and trend against our corporate strategies to assess our resilience to climate change and to confirm we are robust for potential futures. We identified seven key themes that emerged as critical to our success: Vehicles; Services/ Experience; Mobility; Facilities/Supply Chain; Research; Culture; and Policy Engagement. Our approach to these themes was discussed in our first report. Based on stakeholder input, this second report expands on trust, our technology and electrification plan, charging infrastructure, facility physical risk analysis, and pursuing a market-based policy solution.





# TRUST

Trust in institutions and brands is declining. Without the bedrock of trust, people feel increased anxiety. As people grapple with these feelings, they're wrestling with accountability – what they expect from peers and brands – too. We believe that trust in our brand comes from acting with integrity and transparency, and that trust will help us collaborate with stakeholders to develop and implement further climate-friendly solutions.

An example of how we are building trust is our work on GHG and the California framework. As it became clear that One National Program was dissolving, Ford entered into discussions with the California Air Resources Board (CARB) on a plan for light-duty greenhouse gas reductions that is consistent with our common vision. The result will be a voluntary agreement, expected to be signed in summer 2020, providing for nationwide motor vehicle GHG reductions more stringent than those required by federal regulations. At this writing, BMW, Honda, VW and Volvo are planning to execute similar agreements. Rather than pursuing federal litigation seeking to eliminate California's right to regulate GHG emissions under the Clean Air

Act, Ford is advocating for a solution that recognizes California's important role in shaping GHG reduction policies. We believe this path forward is best for customers, the environment, and the short- and long-term health of the industry.

Additionally, we are building trust through our response to the COVID-19 pandemic. Ford is helping address virus-related needs including: deferred payments on new vehicles in the U.S.; production of ambulances by JMC (a Ford joint venture partner in China); and engineering and making face masks and shields, gowns, respirators and ventilators with partners (3M, UAW and GE Healthcare).



# PRODUCTS, SERVICES AND EXPERIENCES

To reduce the GHG emissions associated with mobility, we are committed globally to using more efficient technologies in our products and services.

## OUR TECHNOLOGY MIGRATION PLAN

Reducing vehicle carbon emissions is challenging. Over the past decade, consumer preferences have shifted away

from cars, and toward trucks and SUVs, as fuel prices have remained low. For the foreseeable future, ICE vehicles will continue to play a role in most markets. However, traditionally powered vehicles will be displaced by electric and other low-emission options as technologies and infrastructure develop, and as some countries and cities place restrictions on ICE vehicles.

Ford is investing over \$11.5 billion in electrified vehicles to substantially increase the number of these products we offer around the world. Our technology migration plan includes increasing hybrid, plug-in hybrid, and full-battery electric vehicles in the now and near timeframes; the development of hydrogen fuel cells and ongoing improvements to ICE technology.

### GLOBAL TECHNOLOGY MIGRATION PLAN

	NOW (2020–2021)	NEAR (2022–2026)	FAR (2027+)
<b>Policy</b>	<ul style="list-style-type: none"> <li>Part of the Climate Leadership Council (CLC) which is advocating for a specific carbon fee and dividend solution</li> <li>Part of the CEO Climate Dialogue advocating that the President and Congress put in place a long-term federal policy to protect against the worst impacts of climate change</li> <li>Progress cross-industry and government discussions to increase the min. octane rating</li> </ul>	<ul style="list-style-type: none"> <li>Continue to highlight the need for a comprehensive market-based solution to climate change through CLC and the CEO Climate Dialogue</li> <li>Engage in cross-sector GHG mitigation discussions</li> </ul>	<ul style="list-style-type: none"> <li>Continue to highlight the need for a comprehensive market-based solutions where needed</li> <li>Engage in cross-sector GHG mitigation projects</li> <li>Advance progress toward carbon neutrality by integrating vehicle technologies, low carbon/renewable fuels and smart mobility solutions</li> </ul>
<b>Electrification</b>	<ul style="list-style-type: none"> <li>Launch targeted EPA-estimated 300-mile range, all-electric Mustang Mach-E SUV<sup>1</sup></li> <li>Launch all-new, rear-wheel drive hybrid F-150</li> <li>Launch Electrification Lifestyle customer solutions</li> <li>Develop all-electric F-150 and global commercial vehicles (Transit PHEV)</li> </ul>	<ul style="list-style-type: none"> <li>Launch all-electric F-150 and global commercial van</li> <li>Launch all-electric flexible vehicle architecture</li> <li>Make hybrids and plug-in hybrids available in more than 50 percent of nameplates</li> <li>Expand access to global charging infrastructure</li> <li>Develop next generation Electrification Lifestyle customer solutions</li> <li>Develop Transit BEV (model year 2022) and F-150 BEV</li> <li>Expand EV infrastructure via IONITY in Europe</li> </ul>	<ul style="list-style-type: none"> <li>Expand Electrification Lifestyle customer solutions</li> <li>Integrate Transportation Mobility Cloud and electrified vehicle ecosystem to maximize customer value and environmental benefits</li> </ul>
<b>Hydrogen Fuel Cell Vehicles</b>	<ul style="list-style-type: none"> <li>Research and development of fuel cell technology and its integration into vehicles</li> </ul>	<ul style="list-style-type: none"> <li>Limited deployment of test fleets as appropriate for market conditions</li> <li>Continued research and development</li> </ul>	<ul style="list-style-type: none"> <li>First commercial fuel cell vehicle applications</li> </ul>
<b>Internal Combustion Engine (ICE)</b>	<ul style="list-style-type: none"> <li>Make EcoBoost<sup>®</sup> engines widely available</li> <li>Continued introduction of advanced engine/after-treatment technology to reduce emissions</li> </ul>	<ul style="list-style-type: none"> <li>Develop advanced, high-value technologies to further improve gasoline engine/EcoBoost<sup>®</sup> and diesel engine/Ford EcoBlue powertrain efficiency and performance</li> <li>Expand and optimize gasoline engine/EcoBoost<sup>®</sup> and diesel engine/Ford EcoBlue technologies in conjunction with electrified and alternative fuel applications and improved fuel properties</li> <li>Identify and develop new and innovative solutions to meet future local air quality vehicle tailpipe emission standards, while meeting customer attribute needs</li> </ul>	<ul style="list-style-type: none"> <li>Continue optimizing engine technologies and improving engine efficiency for electrified applications</li> <li>Identify and incorporate advanced technologies that are compatible and synergistic with low-carbon/renewable fuels</li> <li>Incorporate powertrain system technology solutions balancing continued reductions in criteria and particulate emissions along with CO<sub>2</sub>/fuel economy improvements</li> </ul>
<b>Alternative Fuels</b>	<ul style="list-style-type: none"> <li>Develop spark ignition and compression ignition technologies compatible with low-carbon/renewable fuels</li> <li>Offer flex-fuel vehicles (FFVs)</li> <li>Make CNG-prepared engines available where demand exists</li> </ul>	<ul style="list-style-type: none"> <li>Improve vehicle and powertrain capability to leverage renewable fuels</li> <li>Expand vehicle capability for renewable fuels</li> </ul>	<ul style="list-style-type: none"> <li>Evolve technologies in response to progress in low-carbon/renewable fuels</li> </ul>
<b>Energy Management, Electrical Architecture and Efficiency</b>	<ul style="list-style-type: none"> <li>Migrate battery management systems globally</li> <li>Management, Electrical Architecture and Efficiency</li> <li>Make electric power steering widely available</li> <li>Make ongoing aerodynamic improvements</li> </ul>	<ul style="list-style-type: none"> <li>Further develop intelligent energy management technologies</li> <li>Deploy advanced energy efficient climate system technologies for BEV</li> <li>Incorporate additional aerodynamic improvements</li> </ul>	<ul style="list-style-type: none"> <li>Leverage connectivity and advanced driver assistance systems for optimized energy management</li> </ul>
<b>Weight Reduction</b>	<ul style="list-style-type: none"> <li>Develop advanced lightweight materials and associated manufacturing processes for significant weight reduction</li> </ul>	<ul style="list-style-type: none"> <li>Optimize vehicle systems for weight and introduce new materials and designs for further weight reduction</li> </ul>	<ul style="list-style-type: none"> <li>Continued focus on weight reduction using advanced materials and processes</li> </ul>
<b>Mobility Solutions</b>	<ul style="list-style-type: none"> <li>Develop self-driving vehicles, connected vehicles (CVs) and smart mobility technologies</li> <li>Invest in e-scooter sharing for first- and last-mile journeys</li> <li>Roll-out e-scooter business Spin in U.S. and Europe</li> </ul>	<ul style="list-style-type: none"> <li>Introduce advanced self-driving vehicles, CVs and smart mobility technologies</li> <li>Extend sharing in regions</li> <li>Extend FordPass functionalities including parking finder, etc.</li> <li>Roll out intermodal platforms</li> </ul>	<ul style="list-style-type: none"> <li>Advance progress toward carbon neutrality by integrating vehicle technologies, low carbon/renewable fuels and smart mobility solutions</li> <li>Devise City of Tomorrow solutions</li> </ul>
<b>Transmission and Driveline</b>	<ul style="list-style-type: none"> <li>Expand 8- and 10-speed variants to replace 6-speed automatic transmissions</li> </ul>	<ul style="list-style-type: none"> <li>Make advanced conventional driveline technologies widely available</li> <li>Increased advancements in engine, transmission and driveline systems optimization</li> <li>Develop new dedicated electrified transmission and driveline technologies across all platforms and powertrain configurations</li> <li>Start full integration of transmission/driveline with an electrical drive system for hybrid and EVs</li> </ul>	<ul style="list-style-type: none"> <li>Expand the functionality of transmission and driveline technologies in support of next-generation electrified and self-driving vehicles</li> <li>Expand full integration of transmission/driveline with an electrical drive system for hybrid and EVs</li> </ul>

<sup>1</sup> Based on full charge when configured with optional extended range battery and RWD. Actual range varies with conditions such as external elements, driving behaviors, vehicle maintenance and lithium-ion battery age. Final EPA-estimated ratings are available in the 2020 calendar year.

## PRODUCTS, SERVICES AND EXPERIENCES CONTINUED

### OUR ELECTRIFICATION PLAN

Ford believes in a holistic approach to electrification by providing hybrids, plug-in hybrids and all-electric versions of our most popular vehicles based on customer needs and preferences. We understand what drives electric vehicle profitability, and our increased investment is enabling us to achieve scale in China, Europe and North America. We are focused on building a profitable electric vehicle portfolio by leveraging our strongest nameplates.

To be able to take advantage of our electrified product plan, confusion regarding the benefits of electric vehicles needs to be addressed with customers. We believe offering superior products, using a strong brand and with compelling advertising, goes a long way in doing this.

### MUSTANG MACH-E

When it arrives in late 2020, Ford will be expanding the Mustang family with the Mustang Mach-E, an all-new, all-electric SUV born of the same all-American ideals that inspired the best-selling sports coupe in the world.



















Mustang Mach-E will be available with standard- and extended-range battery options with either rear-wheel drive or all-wheel drive. Equipped with an extended-range battery and rear-wheel drive, Mach-E has a targeted EPA-estimated range of at least 300 miles.

“The Mustang Mach-E wholeheartedly rejects the notion that electric vehicles are only good at reducing gas consumption,” said Hau Thai-Tang, Ford’s Chief Product Development and Purchasing Officer. “People want a car that’s thrilling to drive, that looks gorgeous and that can easily adapt to their lifestyle – and the Mustang Mach-E delivers all of these in unmatched style.”

With the Mach-E we believe we have a superior product combined with a strong brand, which we are supporting with an advertising campaign featuring Idris Elba.

This combination will bring people to showrooms to experience the vehicle.

**Announced Ford Global Electrified Line-Up**

Full Hybrid	Plug-In Hybrid	All-Electric
 Mondeo  Escape/Kuga	 Mondeo  Escape/Kuga	 Mustang Mach-E  Territory
 Explorer  F-150	 Explorer  Tourneo Custom	 Transit  F-150
 Corsair  Aviator	 Territory  Aviator  Corsair	 New Model on VW Platform

Additional, unannounced products are planned





## PRODUCTS, SERVICES AND EXPERIENCES CONTINUED

Ford has more than 2,100 EV-certified dealers and more than 3,500 EV-trained technicians to support customers nationwide. Our dealers will be able to showcase the Mach-E as:

- Silent, not requiring gas, and having zero emissions
- Fun to drive (the GT version is targeting 0 to 60 mph in under 4 seconds, making it faster off the line than a Porsche Macan Turbo)
- Having SUV size and proportions, comfortably seating five adults with plenty of space for cargo

We believe this strategy will help clarify and reduce confusion about electrified vehicles.

### THE ALL-ELECTRIC TRANSIT

The best-selling cargo van in the world – Ford Transit – will have an all-electric version for the U.S. and Canada in the 2022 model year, helping businesses achieve sustainability goals and lower the cost of ownership. Built in the U.S., it will provide customers a variety of configurations including cargo van, cutaway and chassis cab, as well as three roof heights and three body lengths.

Smart technology built into the vehicle will help optimize fleet efficiency and reduce waste, as well as improve driver behavior by providing insights into operator performance. Fleets can leverage data collected through Ford Telematics™. Managers can use Ford Data Services™ tools like live map GPS tracking, geofencing and vehicle diagnostics to see key performance indicators at a glance for vehicle and driver.

Customers will have the backing of the company's electric vehicle-certified dealer network of more than 730 commercial vehicle centers across the U.S. and Canada. All-electric powertrains mean significantly less scheduled maintenance than ICEs, plus lower operating costs.

### CHARGING INFRASTRUCTURE

The Ford all-electric vehicle charging strategy features comprehensive at-home charging options and the nation's largest network of public charging stations, including DC fast charging. With both at-home and on-the-go charging supported by the FordPass app and in-vehicle screen, many customer hesitations surrounding electric vehicle ownership are being addressed.

“AMONG PEOPLE WHO ALREADY OWN OR WANT TO PURCHASE ELECTRIC VEHICLES AND PLUG-IN HYBRIDS, 48 PERCENT SAY THAT A LACK OF CHARGING STATIONS IS ONE OF THEIR MAIN CONCERNS. BY OFFERING INDUSTRY-LEADING CHARGING ACCESS WE ARE DISMANTLING THOSE BARRIERS, ALLOWING MORE CUSTOMERS TO CONFIDENTLY ENJOY THE BENEFITS OF OWNING AN ELECTRIC VEHICLE.”

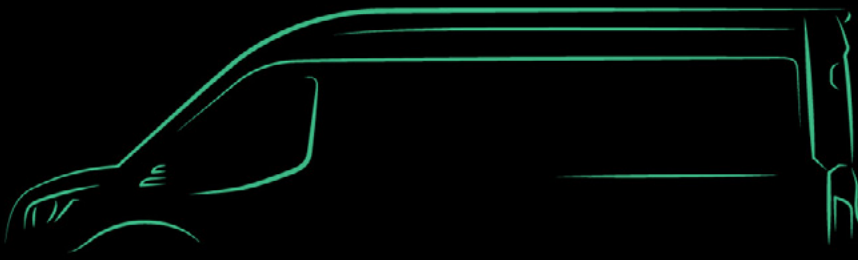
**TED CANNIS**, FORD DIRECTOR OF GLOBAL ELECTRIFICATION

To make life easier, Ford has teamed up with Amazon Home Services to offer installation of home charging setups. On the road, Ford is providing two years of complimentary access to North America's largest network – the FordPass Charging Network – for easy and convenient pay-as-you-drive charging. The FordPass Charging Network includes more than 12,000 charging stations with more than 35,000 plugs. Ford, BMW, Daimler and VW are also part of the IONITY joint venture that is implementing approximately 400 fast-charging stations across major European thoroughfares.

### HOME ENERGY MANAGEMENT

The ReNEW House is on the campus of Purdue University and is an example of one of the energy-management systems. It's a 1920s vintage home retrofitted into a net-zero energy, water and zero-waste-to-landfill structure upfitted with energy-efficient technologies. In 2017 Ford teamed up with Whirlpool Corporation, Duke Energy, BTCPower, and Webasto to add a Focus electric vehicle into the mix to demonstrate how an electric vehicle would dramatically lower the household's carbon footprint and energy costs. In 2020, we are continuing our engagement to showcase vehicle-to-home or grid connection that can provide backup during power outages, allowing for continued use of the home.

THE ALL-ELECTRIC FORD TRANSIT IS COMING



# OPERATIONS: FORD FACILITIES AND SUPPLIERS

**We're rethinking the way we use energy at our manufacturing facilities and other sites, to help address climate change. As well as using energy more efficiently, we are increasing our use of power from renewable sources, reducing the GHG emissions from our operations and making our transport more fuel efficient.**

## New Central Energy Plant

*Our new state-of-the-art Central Energy Plant, located on the Research and Engineering campus in Dearborn, Michigan, will use significantly less energy and dramatically reduce the company's carbon footprint.*

*The plant will use 10 times less natural gas than a traditional boiler facility, by producing steam as a by-product of the facility's turbines. Advanced chiller technology will also contribute to a 35 percent reduction in energy use, while an insulated 5.3-million-gallon thermal energy tank will increase energy efficiency and reduce the facility's peak electricity use by 250 percent.*

*Completed in late 2019, the Central Energy Plant will be certified Leadership in Energy and Environmental Design (LEED) Gold for its environmentally conscious design and operation.*



We have set an aspirational goal to achieve 100 percent locally sourced renewable energy for all manufacturing plants globally, without the use of credits, by 2035. This involves a mix of procurement and generation of wind and solar power.

Ford supports the implementation of renewable energy where the project can be tied to the manufacturing facility, either directly or through the local distribution utility; we believe this supports local jobs, improves the local environment and adds resiliency to the local grid.

Our Michigan Assembly Plant and Dearborn Truck Plant, as well as several new buildings on our Research and Engineering and Corktown campuses will be powered by 100 percent renewable energy by January 2021, using locally sourced wind energy through DTE Energy's MIGreenPower program.

## PHYSICAL RISK

Because Ford operates plants and has suppliers located around the world, we work to keep these facilities operational after severe weather events, both for the sake of business continuity and to maintain the livelihood of our employees. We also work to minimize water usage to ensure community access to water.

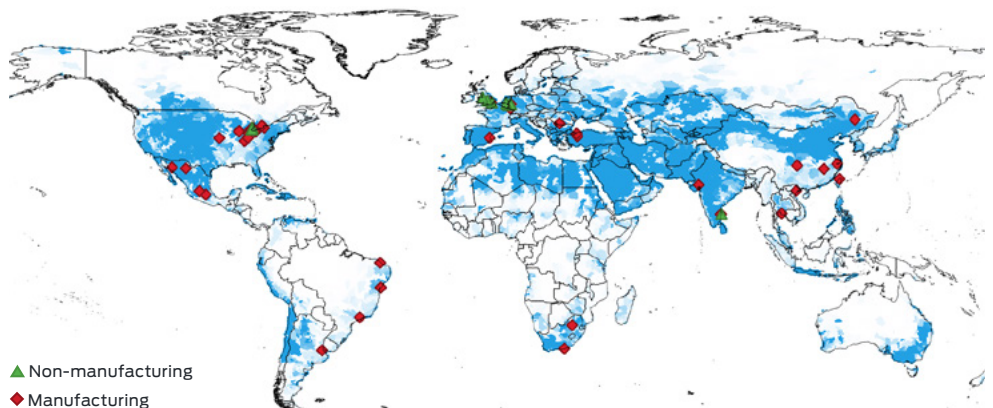
Every year, we assess business continuity and resumption plans for our facilities and suppliers as a part of our risk management process. Business continuity plans include climate-related risks to our facilities, such as shifting patterns of extreme weather. We have taken actions to reduce these risks, including risks to the energy supplies we need to operate our manufacturing facilities.

Additionally, this year Ford is working with Trucost to analyze over 70 of our manufacturing and non-manufacturing sites across 17 countries. Trucost analyzes exposure of facilities to the physical impacts of climate change using:

- Physical risk indicators including heatwaves, cold waves, droughts, cyclones, wildfires, and river and coastal flooding
- Low (less than 2°C), moderate (greater than 2°C) and high (greater than 4°C) future climate change scenarios
- Estimated impacts in 2025, 2030 and 2050 timeframes

Based on Trucost's analysis, the most significant climate-related risk for Ford is water stress, with Ford plants in India, China, South Africa and Mexico among those identified most affected. Flooding and cyclones/typhoons are also high risks for some sites in Asia.

## WATER STRESS (2050)



## OPERATIONS: FORD FACILITIES AND SUPPLIERS CONTINUED

For many years, Ford has acted to reduce water consumption, focusing on freshwater use by facilities in water-stressed areas. Freshwater is the main source of drinking water and is recognized as essential for human life and well-being in the Global Reporting Initiative's (GRI) Standard 303. The GRI defines freshwater as surface water, but our definition is broader, including both surface water and groundwater. Our goal is to minimize our use of freshwater while aiming for a goal of zero – or even positive – impact on freshwater sources in the future.

Depending on location, we use various water sources in our operations. But in the long term, we are committed to phasing out the use of freshwater. We will achieve this by installing additional non-water-based technologies, increasing recycling and reuse, and relying more on alternative sources such as other companies' treated wastewater. Water reuse and recycling is occurring at plants around the world, with a focus on plants in water-stressed areas:

- At our Cuautitlán Assembly and Irapuato Transmission Plants in Mexico, externally sourced non-potable water is used
- At our Chennai Assembly and Engine Plants in India, we utilize wastewater from our own site and treated wastewater from the local supplier park to feed our recycling system
- In China and South Africa, treated wastewater-recycling systems have been installed at several of our plants

We also utilize novel technology to reduce water use, such as porous paving at our Cuautitlán Assembly Plant in Mexico. This porous paving allows rainwater to recharge the underlying groundwater, instead of running off an impervious surface. At many of our powertrain manufacturing plants globally, we use Minimum Quantity Lubrication (MQL) or "near dry" machining, which saves significant amounts of water compared to traditional wet machining,

In addition to our ongoing efforts, Ford will utilize the Trucost analysis to help prioritize further adaptation actions.

### SUPPLIERS

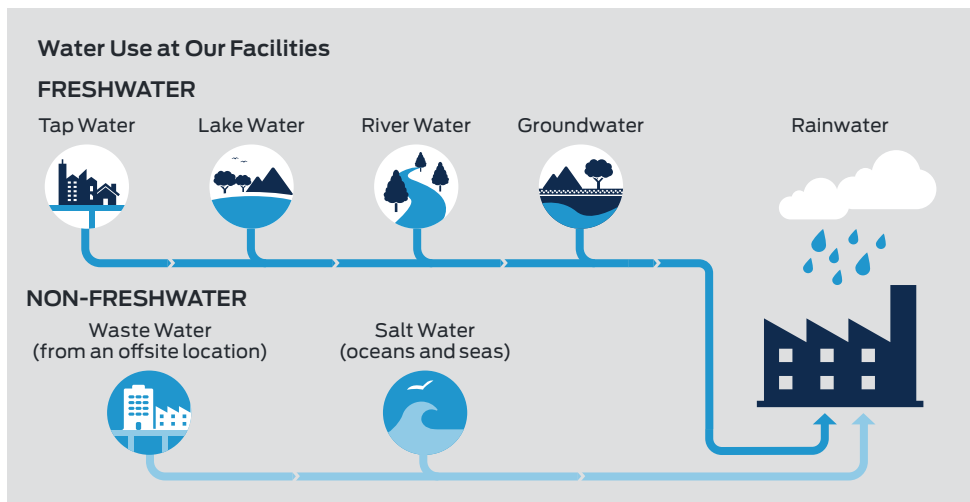
As well as directly managing the impacts of our own facilities, we have a duty to help our suppliers reduce their environmental footprint. To better understand our suppliers' GHG emissions and water use, we survey a selection of them every year, using the CDP Supply Chain program's Climate Change and Water Security questionnaires. These two surveys provide us with qualitative and quantitative information about how our production suppliers, as well as indirect suppliers of logistics and information technology services, manage environmental risks and maximize opportunities. The selection of suppliers is based on their emissions or water intensity, their geographic footprint and the strategic nature of their relationship with Ford.

### BUILDING SUPPLIER CAPABILITY THROUGH PACE

Our supply chain sustainability program, Partnership for A Cleaner Environment (PACE), is designed to reduce the overall environmental impact of Ford's key supply chain partners. The PACE program enables us to share the best practice examples we've implemented across our business with 50 strategic suppliers so that their benefits can be replicated. We encourage our Tier 1 suppliers to cascade the information through their own supply chains.

For example, PACE participants expect to save an estimated 470 million gallons of water in their operations from 2019 to 2030, according to data collected in 2020. This will be achieved through efficiency-improvement projects such as recycling cooling water and considering life cycle costing when replacing water-using equipment.

In addition to the full PACE program, Ford launched a new streamlined version in 2019, FastPACE, in the Asia Pacific region. With the success of participating FastPACE suppliers completing the Excel-based toolkit, which included hundreds of leading practices and actions to address air emissions, energy and water use, we plan to continue and expand the program. Both programs encourage suppliers to set and report progress toward long-term reduction targets.





## OPERATIONS: FORD FACILITIES AND SUPPLIERS CONTINUED

### PACE: One Step at a Time



### Honoring Supplier Excellence

At our 21st annual World Excellence Awards, held in May 2019, 53 suppliers from around the world received accolades for outstanding performance in the fields of safety, quality, sustainability, diversity and smart technology. Five supply chain partners also received Special Recognition awards.



## 21st World Excellence Awards

 <p><b>QUALITY</b></p> <p>Samvardhana Motherson Reflectec Gebr Röchling KG Denso Corporation Goodyear Tire &amp; Rubber Co.</p>	 <p><b>SUSTAINABILITY</b></p> <p>American Axle &amp; Manufacturing Flex-N-Gate IBM Pirelli SPA</p>	 <p><b>SAFE</b></p> <p>Aptiv PLC Symantec Mando Corporation</p>	 <p><b>SMART</b></p> <p>AK Steel Cooper Standard Sharp Corporation NGK</p>
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# PUBLIC POLICY

Ford participates openly and transparently in the political process, to support local, regional, national and international policies that are economically, environmentally and socially sustainable for our company, our customers and their communities. We share our expertise and add our perspective to the policy-making process through our Government Affairs offices around the world

To leverage our resources more effectively on priority issues, we work with numerous external partners through a broad range of partnerships, coalitions, industry groups and trade associations. This helps us develop and promote policies that could benefit our company, our industry and society as a whole. And when our views do not align with those of the associations to which we belong, we reserve the right to make our own position clear.

More and more companies are embracing the issue of addressing climate change in a meaningful way. Our strategy within the various coalitions is to build momentum around a comprehensive, market-based solution and demonstrate leadership by our actions. We believe there is strength and value in using our memberships to move various organizations to more climate-positive positions.

## CLIMATE LEADERSHIP COUNCIL

Ford joined the Climate Leadership Council (CLC), in 2019. The CLC is an international policy institute founded in collaboration with business, opinion and environmental leaders to promote a carbon dividends framework as the most cost-effective, equitable and politically viable climate solution. If its plan is enacted into law, U.S. CO<sub>2</sub> emissions would be cut in half by 2035 and families would receive a carbon dividend of approximately \$2,000 per year. The CLC is advocating for a specific carbon fee and dividend solution with the following elements:

- A gradually increasing carbon fee (starting at \$40 per ton and increasing every year at 5 percent above inflation)
- Carbon dividends for all Americans (approximate \$2,000 dividend in the first year)
- Regulatory simplification (but vehicle fuel economy and GHG programs continue)
- Border carbon adjustment

Ford is actively engaged in educating members of the U.S. Congress, on both sides of the aisle, that there is a growing group of businesses and NGOs working toward meaningful solutions to climate change. Successful climate change policy will require substantial reductions in GHG emissions in a relatively short period of time. In order to achieve these goals, Ford believes that comprehensive, industry-wide policies that both protect our environment and promote technology innovation are critical. In addition, a carbon border adjustment will encourage other countries to implement similar policies and level the playing field for U.S. manufacturers.

## CEO CLIMATE DIALOGUE

CEO Climate Dialogue is "principle-based" and not wedded to a specific solution (e.g. carbon tax, cap and trade). It advocates that the President and Congress put in place a long-term federal policy as soon as possible to protect against the worst impacts of climate change. This includes adopting legislation aligned with the following six guiding principles:

- Significantly reduce U.S. GHG emissions: 80 percent or more by 2050
- Effective: policies must focus on emission-reduction outcomes, not specific resources or technologies
- Market-based: an economy-wide price on carbon via carbon fee or cap and trade
- Durable and responsive: well-designed and stable policies that deliver predictable results
- Do no harm: policies must support the competitiveness of the U.S. economy.
- Promote equity: provide transparency and promote affordability while distributing costs and benefits in a way that promotes equity

Ford is proud to be the first automaker to join the CEO Climate Dialogue, and we look forward to hearing from partners as we work with lawmakers to shape climate policy. Ford continues to highlight the need for a comprehensive market-based solution. We believe this type of solution will be necessary to achieve the reductions needed for a net-zero carbon emissions future by 2050. Ford has participated in multiple outreach initiatives with senior-level executives and Government Relations staff.

## TRANSPARENCY

We continue to strive to improve our efforts in transparency to help build trust, and are pleased that Ford was rated as one of the most-improved companies in CPA-Zicklin's 2019 political accountability report for our transparency and disclosure on political spending. Information on Ford U.S. political activity can be found [here](#).

CLIMATE  
LEADERSHIP  
COUNCIL

CEO Climate Dialogue

# CONCLUSION

Ford aspires to achieve global carbon neutrality no later than 2050 to help limit global temperature increase in keeping with the goals outlined in the Paris Climate Agreement. Our scenario development process is critical to help identify risks and opportunities as we work toward this goal, allowing Ford leaders and subject matter experts to discuss associated challenges. Even with the most positive scenarios, there are challenges with customer adoption of sustainable solutions.

The scenario analysis process impressed upon us the importance of maintaining flexibility in offering diverse solutions that allow us to be responsive to the changing needs of consumers. Overall, based on the analysis of the scenarios against our strategies, we believe we are investing in the appropriate technologies, products, services and experiences to be resilient for three of the four climate change scenarios.

Ford, along with most industry, faces the greatest risk in the *Too Little, Too Late* scenario, in which climate requires significant intervention but the technology to respond is unavailable, economic growth is slow, and global policy cooperation is limited.

In this scenario:

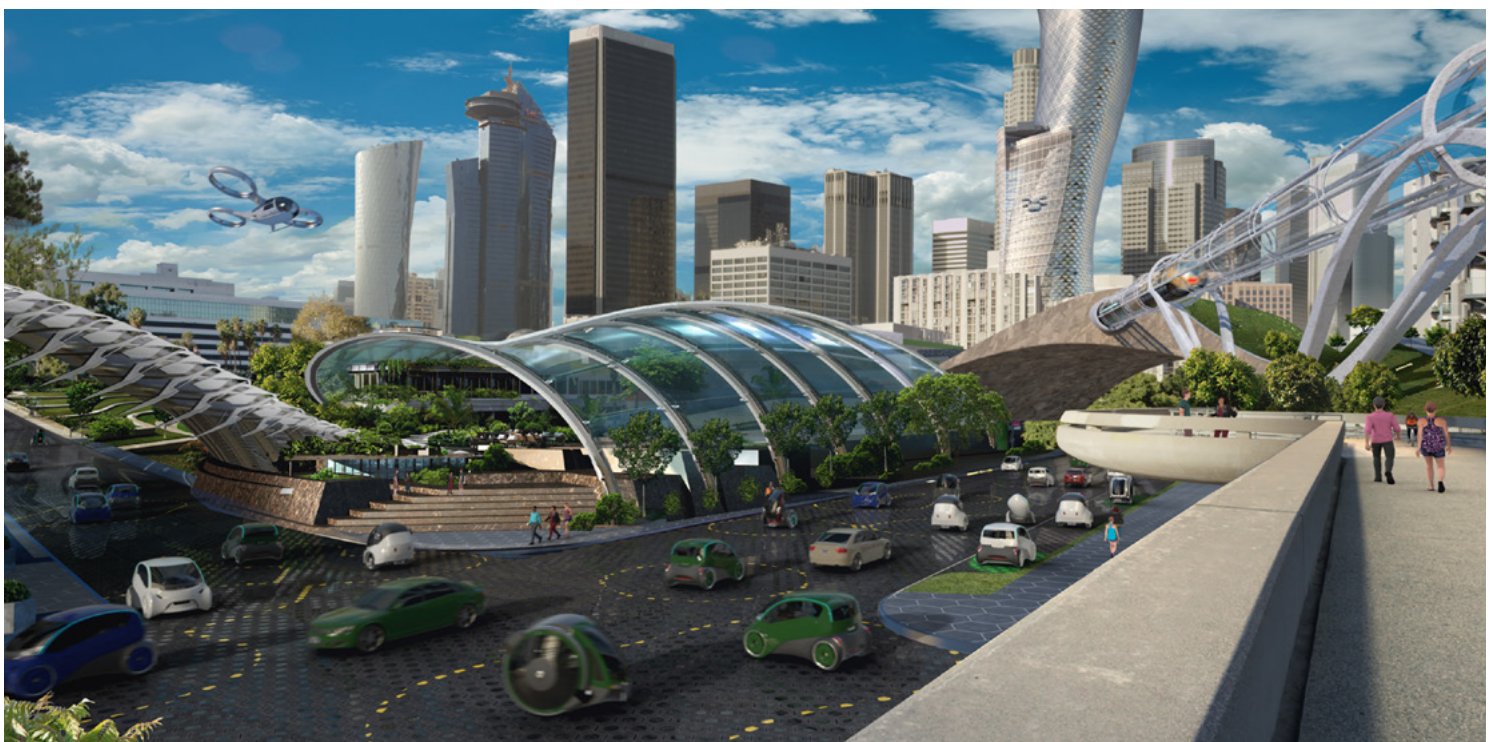
- The cost of available technologies to reduce CO<sub>2</sub> is high, leading to lower consumer acceptance
- Engineering and financial resources are required to deploy new technologies while maintaining existing ones across a range of products
- There is increased work stoppage of production at Ford's or its suppliers' facilities as a result of climate-related natural disasters

In this scenario, a significant disruption to our production schedule and lower volumes of high-cost products could have a substantial adverse effect on our financial condition.

A major shortcoming with this scenario is the lack of a market-driven, comprehensive carbon-pricing solution. For this reason, Ford is sharpening our focus on working toward developing meaningful, market-driven policy solutions focused on carbon pricing such as a carbon fee and/or cap and trade, to address climate change with urgency so such a scenario will not materialize.

This is Ford's second Climate Change Scenario Report, and we are continuing to learn through this effort. We understand that this scenario report is only valuable if its findings are integrated into our actions. This is accomplished through our Enterprise Risk Management process and is overseen by the Sustainability and Innovation Committee of our Board of Directors. This process enables us to continually monitor the ever-changing global business environment for risks and opportunities, and uses the resulting analysis to inform our strategies as needed. It also creates accountability for setting, tracking and reporting progress against our goals and objectives, revenue targets, other financial indicators and stakeholder satisfaction measures.

Although we cannot suppress climate change through our actions alone, we are committed to doing our part. We will also support the needed actions of other companies, governments, and stakeholders so that collectively, we can meet the challenge of climate change.







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