



2022 Sustainability Report

**everybody in.**





## Our vision is of a world with zero crashes, zero emissions and zero congestion.

At General Motors (GM), we have an innovative spirit and a commitment to action that will help us contribute to our world’s changing needs. Our investments in research and development (R&D), design and engineering, manufacturing, our supply chain and a new electric vehicle (EV) customer experience that is designed to be best in the industry will drive us forward. These ingredients will also help contribute to a safer, more inclusive and more sustainable future.

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### Sustainability Report Supplement

This supplement contains our GRI, SASB and UN SDGs indices, our data center and additional information.

[gmsustainability.com](https://gmsustainability.com)



## About This Report

### Scope and Boundaries

GM is committed to publicly reporting on sustainability-related topics on an annual basis, discussing the opportunities and challenges that we encounter as we work to enhance our performance and conduct business responsibly.

This report has been prepared in reference to the Global Reporting Initiative (GRI) 2021 Standards and includes responses to the Sustainability Accounting Standards Board (SASB) framework. Responses to sustainability-related frameworks and standards can be found in the 2022 Sustainability Supplement, which is available for download at [gmsustainability.com](https://gmsustainability.com).

This report covers certain sustainability metrics and data for GM as of and during the year ended December 31, 2022, as applicable, unless otherwise stated. In instances where select information is provided from an earlier period or early 2023, that is noted in the report. In some instances, certain data from an earlier period that was previously published in other locations has been updated in this report. The report is limited to General Motors Company’s automotive operations conducted through certain of its consolidated subsidiaries. Unless otherwise stated, data related to GM Financial, our automotive financing services provider, and Cruise, our autonomous ride hail subsidiary, is not included in the report. In some instances, data has been included for operations in which GM’s interest is through joint ventures (JVs), including our automotive China JVs. In these instances, the inclusion of that data is noted. Dollar amounts presented within this report are stated in U.S. dollars. Certain amounts may not add due to rounding. The information included in this report is current at the time of publication (April 28, 2023).

We have engaged an independent third party to verify a selection of the greenhouse gas (GHG) and certain sustainability data for our global automotive operations presented in this report. The verification statements and applicable data assertions can be found in the 2022 Sustainability Supplement.

This report provides an overview of some of GM’s long-term goals and aspirations, and efforts in support of them. Some of the statements and data in this report are derived from other GM publications and links are provided to those documents. With respect to goals, commitments and aspirational or otherwise forward-looking statements in this report, actual results may differ, possibly materially. The report also includes certain numbers that are estimates or approximations and that may be based on assumptions. We believe that the estimates employed are appropriate and reasonable; however, due to inherent uncertainties in making estimates and assumptions, actual results could differ from the original estimates.

Solely for convenience, trademarks and trade names referred to in this report may appear without the ® or ™ symbols. Such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the right of the applicable licensor to these trademarks and trade names.

### Products Disclosure

In this report, depicted products and features may be simulated, preproduction or concepts and are subject to change. Certain products are not currently available or are subject to limited availability. For vehicle availability and feature use and limitations, including details relating to advanced safety and driver assistance features, consult the brand’s website and product Owner’s Manual.

### Forward-Looking Statements

**Cautionary Note on Forward-Looking Statements:** This report may include “forward-looking statements” within the meaning of the U.S. federal securities laws. Forward-looking statements are any statements other than statements of historical fact. Forward-looking statements represent our current judgment about possible future events. In making these statements, we rely upon assumptions and analysis based on our experience and perception of historical trends, current conditions and expected future developments, as well as other factors we consider appropriate under the circumstances. We believe these judgments are reasonable, but these statements are not guarantees of any future events or financial results. Our actual results may differ materially due to a variety of factors, many of which are described in our most recent Annual Report on Form 10-K and our other filings with the U.S. Securities and Exchange Commission. We caution readers not to place undue reliance on forward-looking statements. Forward-looking statements speak only as of the date they are made, and we undertake no obligation to update publicly or otherwise revise any forward-looking statements, whether as a result of new information, future events or other factors that affect the subject of these statements, except where we are expressly required to do so by law.

# About Us

## Why We Exist

Our diverse global team of employees is working hard to turn our purpose and vision into reality.

## Our Purpose

We pioneer the innovations that move and connect people to what matters.

## Our Vision

Zero crashes, zero emissions and zero congestion.



## How We Act

We aspire to be the world's most inclusive company and to conduct ourselves with fairness and transparency. These are the values and behaviors by which we measure ourselves.

**Our Core Values**  
Customers / Excellence  
Relationships / Seek Truth

**Our Behaviors**  
Be Inclusive / Think Customer /  
Innovate Now / Look Ahead /  
One Team / Be Bold / It's On Me /  
Win With Integrity



## Where We Focus

We have a passion for delivering world-class products and unrivalled customer experiences.



### Electrification

Our new Ultium platform can help put everyone in an electric vehicle (EV), driving the world closer to an all-electric future.



### Vehicle Safety

Research, technology and advocacy inform our holistic approach to engineering safety through a human lens.



### Path to Autonomous

We believe that autonomous vehicles (AVs) have enormous potential to benefit society through increased safety and access to transportation.



### Social Impact

We aspire to become the most inclusive company in the world and we will not stop until we get there.

## Who We Are

Headquartered in Detroit, Michigan, GM is a company with global scale and capabilities.



Operations in  
**29**  
countries



**154,000**  
global employees<sup>1</sup>



**Six**  
vehicle  
brands<sup>2</sup>



Customers on  
**six**  
continents

1 Approximate total. Excludes employees of DMAX Ltd, which was founded in 1999 as a joint venture and became a wholly owned subsidiary of GM in May 2022.

2 More information on the company and its subsidiaries, including OnStar, Cruise and BrightDrop, can be found at gm.com.

(Second image above) Preproduction model shown. Actual production model will vary. Model Year 2024 Blazer EV SS shown available Fall 2023.



# A Message From Mary Barra, Chair and Chief Executive Officer

When General Motors began the journey to an electric and autonomous future, our mission was to help create a better and safer future for all, guided by our vision of zero crashes, zero emissions and zero congestion.

Choice is important to our customers and they will see more than a dozen new EVs from our brands, including the Chevrolet Silverado, Blazer and Equinox EVs; Buick Electra E5 in China; and the first of our Cadillac CELESTIQ bespoke sedans, to name just a few. These distinctive and stylish vehicles join Ultium EVs already in their hands, like the GMC HUMMER EV, Cadillac LYRIQ and BrightDrop Zevo 600.

This industry-leading portfolio provides a wide variety of options for customers with a wide variety of needs. This is part of why 2023 will be a breakout year for GM.

Just as importantly, it means we will be in the most high-volume vehicle segments where we'll make the biggest impact and, in the case of the Equinox EV, with incredible affordability.

We are on track to produce 400,000 EVs in North America by mid-2024 and have built production capacity for 1 million units in North America in 2025—and we'll continue scaling from there.

We know EV customers want the freedom and confidence they can travel anywhere, anytime. That's why we are investing nearly \$750 million in home, workplace and public charging that will include more than 5,000 DC fast chargers in major metropolitan areas and along America's highways. We are also working with our dealers to install 40,000 Level 2 charging stations in communities across the United States and Canada.

To support this massive shift, we are working with our partners and suppliers to help secure a localized and sustainable supply chain, including three announced joint venture battery cell plants in the United States. Our first plant, in Ohio, is producing cells now, and a second plant in Tennessee will be operating by the end of the year. These facilities are creating exciting new jobs in our communities and supporting our EV acceleration.

We remain committed to eliminating tailpipe emissions from new U.S. light-duty vehicles by 2035. Last year, we went even further, securing enough renewable energy to power our U.S. facilities by 2025—25 years earlier than we originally shared. It's a huge step toward making our business carbon neutral by 2040.

At Cruise, the team will expand on last year's incredible progress as it continues to safely expand ride hail and related deliveries to more cities, and launch the Cruise Origin.

The brighter, more inclusive future we envision goes beyond our own walls. Last year, generous employees volunteered more than 158,000 hours in their communities and donated more than \$5 million to causes that stir their passions. GM provided another \$60 million to more than 400 U.S.-based nonprofits in education, road safety, community enrichment and climate initiatives.

I invite you to learn more about what we are doing in this report, which follows established GRI Standards that comparably and credibly measure and assess our impact in several areas.

I am proud to lead GM's talented and innovative team, intent on positively changing the world. Our commitments and investments reflect our sense of urgency to transform our vision into reality.

**Mary T. Barra**  
Chair and Chief Executive Officer



# A Message from Kristen Siemen, Chief Sustainability Officer

Our journey to a more sustainable, electric future has never been more important than it is today. We know climate change is an urgent priority, and we are advancing toward our bold goal to be carbon neutral in our global products and operations by 2040 so that we can be a part of the solution.

As chief sustainability officer, my priority has been to ensure our sustainability strategy connects to our business strategy—one that is focused on putting everyone in an EV. We know that it will take millions of new EVs hitting the road every year to reach the zero-emissions future we're striving for, and we're moving faster than ever.

GM is pursuing multiple aspects of what it takes to help put more people in EVs. We are rapidly building out our own battery, software, manufacturing and customer experience capabilities to make that a reality, while also laying the critical foundations for customer EV education and EV charging infrastructure.

At the same time, we're moving forward with our investments in renewable energy. In 2022, we announced that we've secured 100% of the renewable electricity needed to power our sites in the United States by 2025 and we continue to work toward our plan to secure enough renewable electricity to do so globally by 2035. Additionally, we joined the First Movers Coalition through commitments to low-carbon concrete, cement, aluminum and steel, signaling a firm market demand for a net-zero transition and our dedication to a more resilient and sustainable supply chain.

We've also prioritized developing a more resilient and sustainable supply chain for EV battery raw materials, and developing a battery recycling strategy that can grow with us. Through collaborations with global and domestic partners, we have secured sources for enough battery raw materials to meet our 2025 goal of having 1 million units of annual EV capacity in North America.

These are just a few of the many important steps we have taken in the last year to advance our business goals and our sustainability journey. Our sustainability strategy is weaved into our business strategy and both are focused on providing growth and long-term value.

Though I am confident that we will reach our most ambitious goals, I recognize that we cannot, and will not, achieve them alone. That's why we're continuing to pursue collaborative opportunities with stakeholders across the globe, including suppliers, dealers, policymakers, climate thought leaders and others. In fact, we have invited all Tier I suppliers to sign our Environmental, Social and Governance (ESG) Partnership Pledge to embrace sustainability in a holistic manner, focusing on ESG practices.

A shift this massive truly requires everybody in, working together toward a single goal—an all-electric future.

As we implement our sustainability strategy, we have an opportunity—and an obligation—to create a better future. The pursuit of a safe and sustainable world is a passionate movement within GM; one that's gaining momentum as our technologies reveal their increasingly profound potential. As a leader, engineer and mom, I am here to help break down barriers and advance our plans toward creating a world with zero emissions for generations to come.

We will continue along this journey, recognizing that it is on us to lead positive change and implement inclusive solutions that bring everyone along. Our sights are set on continuing to excite and inspire people about the road ahead and we know that our culture, strong values, robust strategies and proven execution will allow us to accelerate toward our vision of a more sustainable, electric future together.



**Kristen Siemen**

Vice President Sustainable Workplaces & Chief Sustainability Officer



# 2022 Report Highlights

Agreements in place to power

## 100%

of our electricity for our U.S. sites from renewable sources by 2025—25 years ahead of our initial target of 2050<sup>3</sup>



Provided

## \$60M

in grants to more than 400 U.S.-based nonprofits to help create inclusive solutions to social issues



Opened our first

## Ultium Cells

battery cell plant in Ohio, with a second plant opening in Tennessee in 2023 and a third in Michigan in 2024



Joined the

## First Movers Coalition

through commitments to low-carbon steel, aluminum, concrete and cement, signaling a firm market demand for a net-zero transition

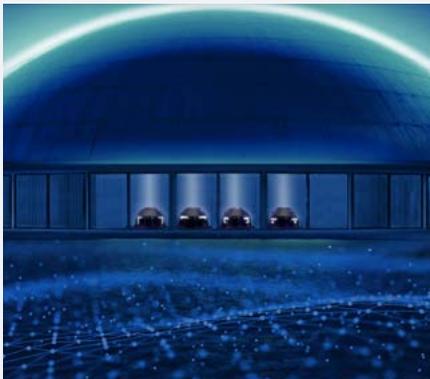


Published our

## first disclosures



for the Global Platform for Sustainable Natural Rubber (GPSNR) and Corporate Human Rights Benchmark (CHR). In the 2022 CHR, GM was placed in the top 10 out of 127 companies across three industries.



Secured all EV battery raw materials for

## 1M

units of North American capacity in 2025. Signed a number of agreements to build a more sustainable and resilient North America and free-trade-focused supply chain, including with Lithium Americas for lithium from the United States and POSCO for cathode-active material from Québec

Cruise became the first

## paid driverless ride-hailing service

in a major U.S. city when it launched in San Francisco, followed by commercial expansion into the Phoenix area and Austin



<sup>3</sup> Based on estimated forecasted global renewable energy sourced through currently executed agreements, subject to change depending on actual future electric usage in operations and actual future renewable generation.

# Awards and Recognition

Received the ENERGY STAR Sustained Excellence Award for the



## 11th

straight year

Listed in the DiversityInc

## Top 50

Companies for Diversity for the seventh successive year, ranking #36—two places up from 2021



Ranked

## #18

in the Environmental Protection Agency (EPA) Green Power Partnership list



Won the

## Environmental Initiatives Award

at the SEAL Business Sustainability Awards



Won the

## Sustainability Leadership Award

from the Business Intelligence Group



Named as the only original equipment manufacturer (OEM) automaker on Ethisphere's

## World's Most Ethical Companies®

list for the fourth year in a row



Received an A- on the

## CDP

Climate Change and Water Security questionnaires



Named on Fast Company's 2022

## Brands That Matter

list, which recognizes organizations leading on social action, sustainability and inclusivity



Ranked as a

## leading

OEM in North America in S&P's Dow Jones Sustainability Index (DJSI), and listed in the 2022 Yearbook

Member of Dow Jones Sustainability Indices  
Powered by the S&P Global CSA

Ranked

## 1st

in the Automobiles & Parts industry sector in the 2023 JUST 100 rankings





## Our Sustainability Strategy

Our sustainability strategy supports our vision of an all-electric future, our carbon neutral goal and our growth strategy, which we believe can lead to greater revenue and margins.

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“Our world is evolving in dynamic, complex and unexpected ways. To remain at the forefront of innovation, we must understand the future, embrace it and incorporate it into everything we do.”

**Katura Brown**  
Global Foresight & Trends Manager

# evolving.



# The External Landscape

Our sustainability strategy continues to evolve, informed by a range of external environmental, social and regulatory trends and pressures.

## Vehicle Regulations

Legislation on vehicle emissions, fuel economy and safety is evolving, with varying standards being introduced at a local, regional and national level. GM and the [Environmental Defense Fund](#) have together recommended principles to guide the next generation of U.S. Environmental Protection Agency (EPA) vehicle emissions standards for Model Year 2027 and beyond. Focused on the shared vision of a zero-emissions, all-electric future, the proposals outline a challenging yet achievable framework that accelerates EV adoption and supports underserved and socially vulnerable communities.



## Supply Chain Constraints

As our business shifts toward EVs, we face new sourcing challenges related to the limited availability of certain key minerals. Additionally, certain key mineral supply chains are at a high risk for environmental and human rights concerns. We are exploring ways to create a North-America-focused supply chain, as well as ways to reuse and recycle battery materials to reduce the need for mining. We have made investments to contractually secure all battery raw materials to support our goal of 1 million units of EV capacity in North America in 2025. These include a long-term supply agreement with Livent, which will see the processing of battery-grade lithium hydroxide move from South America to North America. We also continue to conduct responsible sourcing audits and engage with our supply base, inviting Tier I suppliers to sign our Environmental, Social and Governance (ESG) Partnership Pledge, with a focus on carbon emissions, labor and human rights, ethics and sustainable procurement.



## Climate Change

Extreme weather events are increasing in frequency and severity, which can potentially impact local communities, the supply of raw materials and components, and vehicle production. In light of these changes, we continue to explore ways to reduce the carbon emissions of our operations and products, and take steps to increase the resilience of our business and our supply chain. Our facilities also depend on consistent water availability and quality, both of which are threatened by the effects of climate change. We are investigating and implementing water-conservation projects, both in water-scarce locations and those where future availability concerns are forecasted.



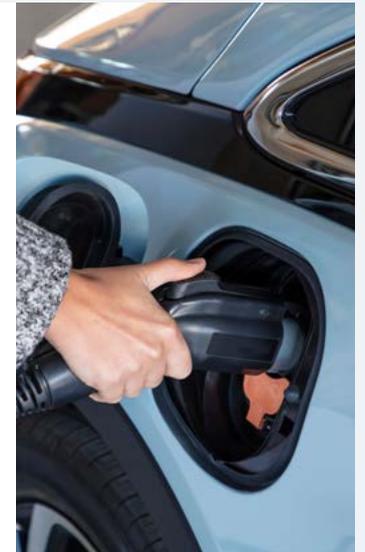
## Bringing Everyone Along

We understand that climate change does not impact every community equally. Moving society toward an all-electric future is a major undertaking that risks leaving some communities behind. In an attempt to bring everyone along on the journey, we continue to retrain and upskill our workforce so that they can make a successful transition. We also doubled our initial \$25 million commitment to invest in our Climate Fund, made in 2021, to \$50 million, to help support the future of work and increase access to EVs and charging infrastructure. Making capital investments and supporting philanthropic ventures in these areas will help support the transition to EVs and other sustainable technologies.



## Lower-Carbon Transportation

In support of our vision of zero crashes, zero emissions and zero congestion, we are making EVs more affordable and accessible, and developing tools and services that simplify the EV ownership process. We have also started to make mobility more accessible by commercializing zero-emissions driverless ride-hailing through Cruise, and last-mile delivery solutions through BrightDrop, in line with consumer and commercial demand for more sustainable transportation.



(First image above) Simulated model shown. Actual production model will vary. See dealer for availability details.



# Our Sustainability Journey

At GM, we are transforming the way we do things—from the materials we source and the way we manufacture to the products we deliver—and making progress toward our sustainability goals.



## Growing Through Innovation

At GM, we are always innovating. From pioneering the first electric starter to assisting drivers in emergencies with OnStar through our advanced software technologies, GM has always pushed the limits of engineering. Today, with Ultium as a driving force, we are enabling our EV strategy and our vision of zero emissions.

In change, we see opportunity. It is our chance to lead; to provide the vehicles of tomorrow that we believe our customers are looking for today; to use our expertise, scale and experience to help solve some of society's greatest challenges.



## Taking Environmental Action

We have ambitious climate goals and we are committed to achieving them. To reach our goal of carbon neutrality in global products and operations by 2040, we will continue to prioritize creating a broad portfolio of EVs and enhancing the sustainability of our supply chain. We cannot do it alone, but we will lead based on our strengths.



## Everybody In

Our role at GM is not just to direct our own company's transformation; it is also to bring everybody in on the journey to a safer, all-electric future, including our workforce and the communities in which we live and work. We are on a path to prove that technology and collaboration, driven by purpose, can help change the world.



## Driving Responsible Governance

Leading with integrity is an essential part of working toward an all-electric future that is better for people and the environment. As GM drives impactful change by bringing EVs, mobility and connectivity to the next level, we have processes and policies in place to help guide responsible, ethical action.

## Investing in an Electric Future

We plan to make a number of strategic investments to help us progress toward our vision of a more sustainable future. These include:

- Announced investments of \$11.7 billion across 14 sites in North America to support [EV manufacturing](#)
- Anticipated total annual capital spending and investments in battery cell manufacturing joint ventures of \$11–\$13 billion through 2025
- Planned investments of nearly \$750 million in home, workplace and public charging infrastructure in the United States and Canada
- Signed agreements to build a more sustainable and resilient supply chain focused on North America and free trade partners, including a \$650 million equity investment and supply agreement with Lithium Americas to develop the Thacker Pass lithium mine in Nevada

## Sustainable Finance Framework

We have created a [Sustainable Finance Framework](#) to further align our financing activities with our sustainability strategy and commitments, thereby bringing us closer to achieving our vision.

Proceeds from future issuances under the framework may be used to fund projects supporting clean transportation or socioeconomic advancement and empowerment.

Under this framework, we issued \$2.25 billion of investment-grade green bonds, our first capital markets activity that specifically supports our EV strategy. Our first Sustainable Finance Report will be published later in 2023 and will discuss the allocation of proceeds and certain estimated impacts of investments from our inaugural green bond issuance.



“The overlap of my personal purpose and the company’s purpose is the reason I love what I do. We make innovations come to life and impact people’s lives.”

**Mohammad Ehaab**  
Manager, Innovation 2<sup>x</sup>

**\$2.25B of investment-grade green bonds issued pursuant to our Sustainable Finance Framework**

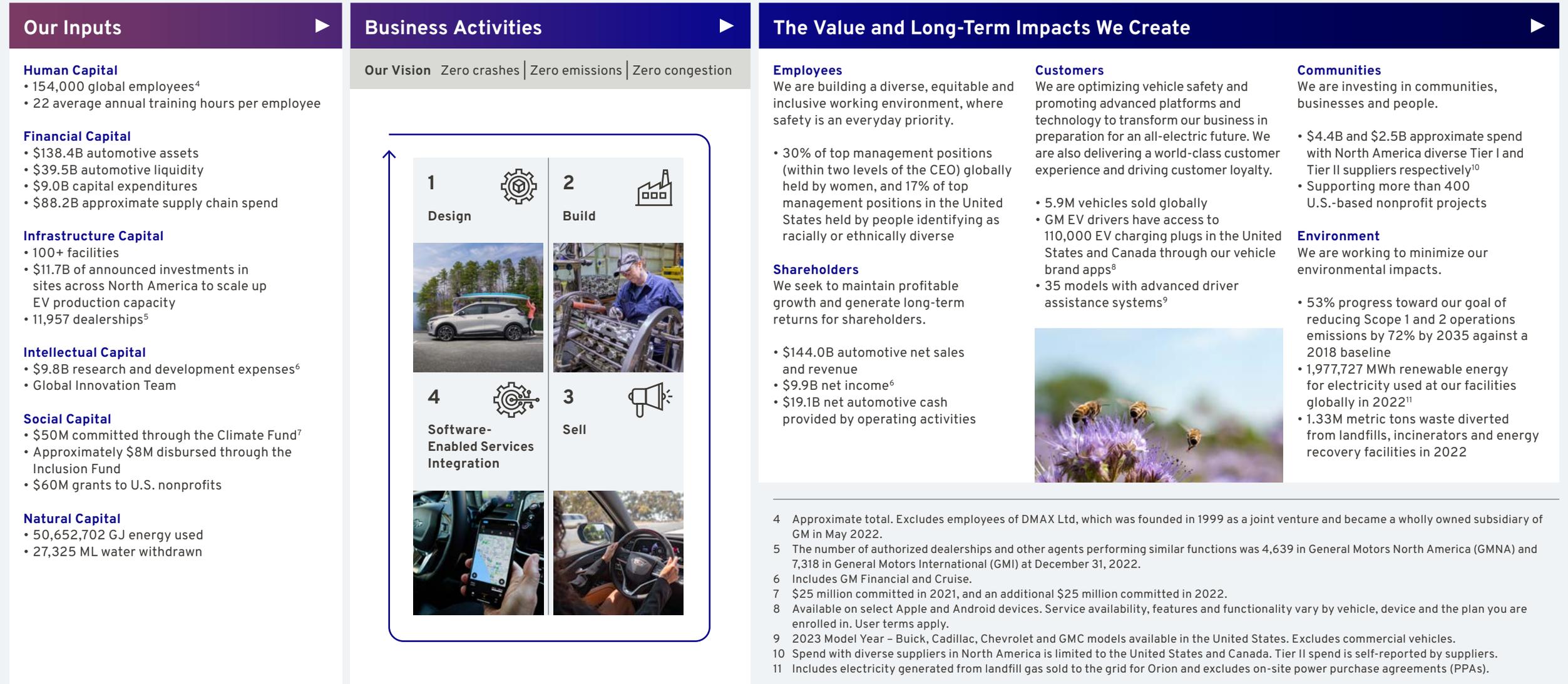


# How GM Creates Value

Our Purpose is the foundation for creating long-term value for all our stakeholders. We use our core business strengths to find new opportunities that solve challenges for individuals, partners and

society at large. The needs, preferences and expectations of our customers guide the decisions we make.

## 2022 Value Creation Model



4 Approximate total. Excludes employees of DMAX Ltd, which was founded in 1999 as a joint venture and became a wholly owned subsidiary of GM in May 2022.

5 The number of authorized dealerships and other agents performing similar functions was 4,639 in General Motors North America (GMNA) and 7,318 in General Motors International (GMI) at December 31, 2022.

6 Includes GM Financial and Cruise.

7 \$25 million committed in 2021, and an additional \$25 million committed in 2022.

8 Available on select Apple and Android devices. Service availability, features and functionality vary by vehicle, device and the plan you are enrolled in. User terms apply.

9 2023 Model Year – Buick, Cadillac, Chevrolet and GMC models available in the United States. Excludes commercial vehicles.

10 Spend with diverse suppliers in North America is limited to the United States and Canada. Tier II spend is self-reported by suppliers.

11 Includes electricity generated from landfill gas sold to the grid for Orion and excludes on-site power purchase agreements (PPAs).

# Assessing Priorities

To prioritize the sustainability topics we address, we engage with our stakeholders through a formal assessment process. This helps us understand the topics that are most relevant to them and to our business, and that offer the greatest opportunity for GM to create shared value.



We performed our most recent Sustainability Priority Assessment in 2021, and plan to conduct similar assessments every two years, taking emerging sustainability issues, global events and other trends into consideration.

In collaboration with a third party, we undertook a four-part process aligned with the [GRI materiality principle](#) for sustainability reporting.

## Our Four-Part Process

**1**

Identify sustainability topics relevant to GM and the automotive industry

**2**

Understand stakeholder perspectives

- Survey GM employees
- Interview internal and external stakeholders
- Regularly engage with our shareholders

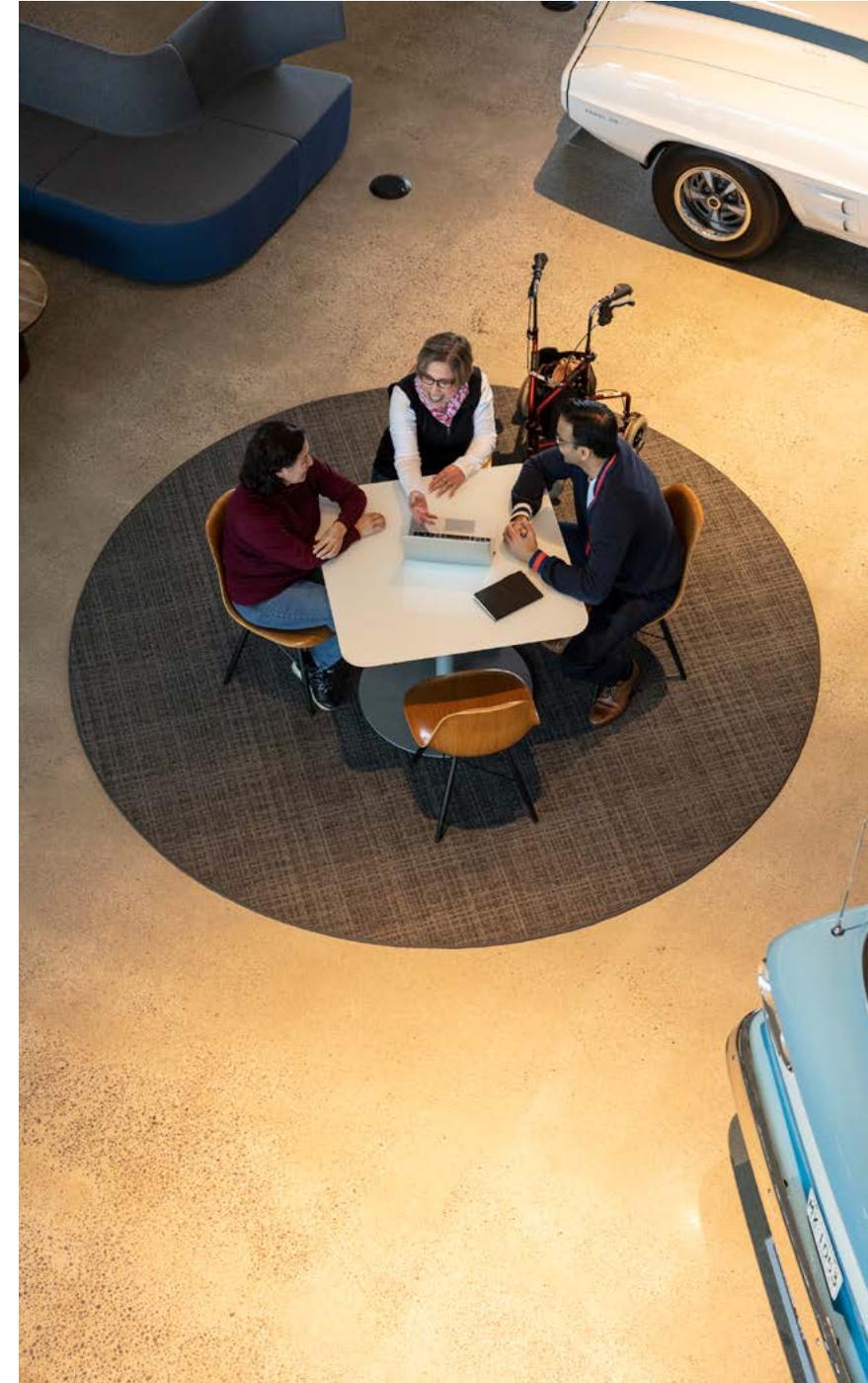
**3**

Score and prioritize the topics based on quantitative and qualitative inputs

**4**

Develop a tiered priority matrix (see [page 13](#))

(Left) Preproduction model shown. Actual production model may vary. Model Year 2024 Chevrolet Blazer EV available Summer 2023.



## Themes and Perspectives

The placing of priorities into three categories reflects the range of different stakeholder perspectives. The 2021 assessment identified six topics as “highest priority” and therefore urgent for the company to manage. Some topics were not deemed as urgent because stakeholders and management view them as a GM strength today. For example, we have been working on operational waste, water and energy since 2010 and have robust management systems with a track record of good performance in these areas. Other “priorities” are seen more as emerging issues that could grow in importance over time.

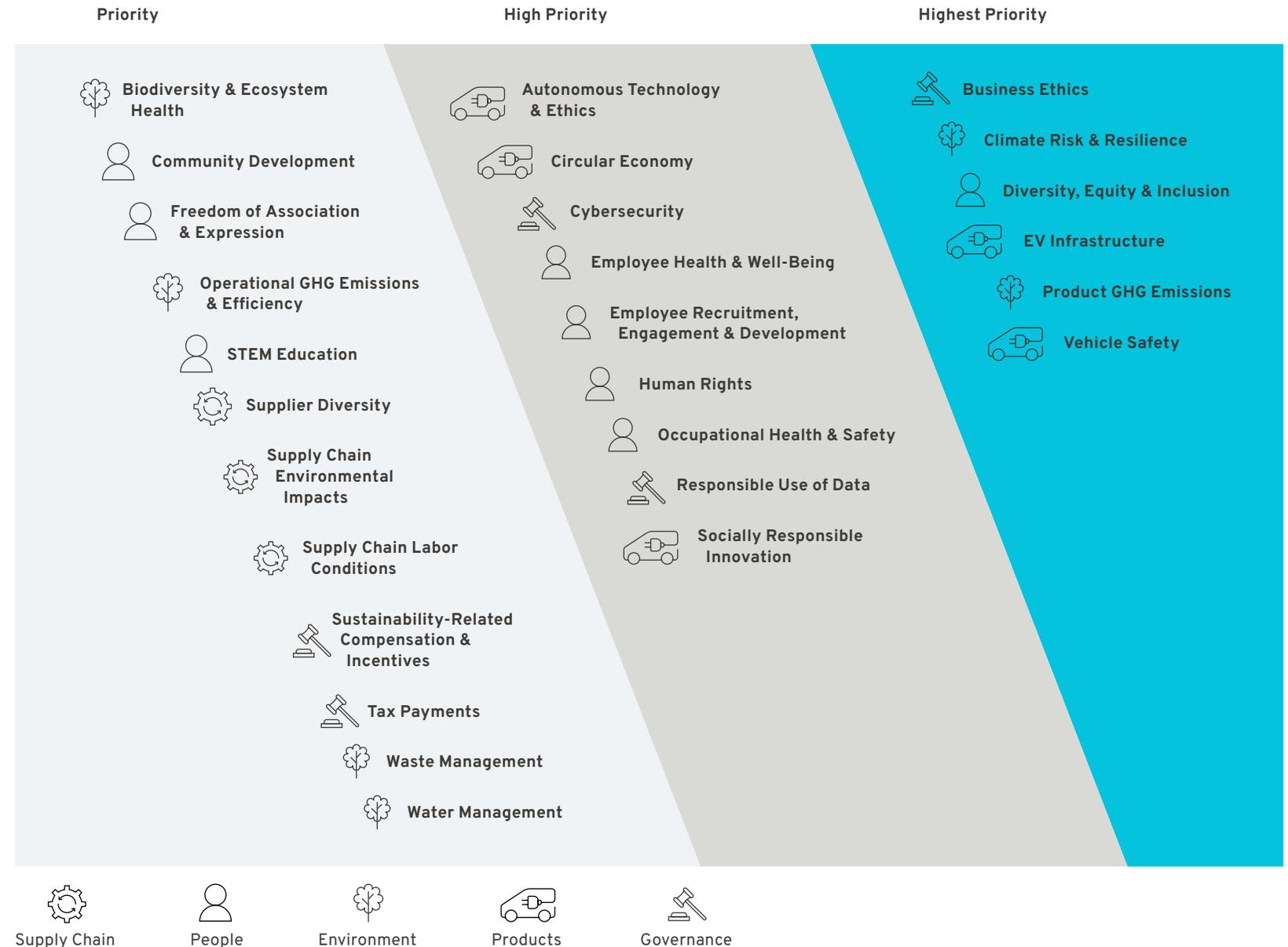
Through both the qualitative and quantitative inputs, several stakeholder themes emerged:

- The safety of employees and vehicles remains a top priority and a strength for GM.
- A changing employee and customer landscape calls for GM to focus on a transition to an all-electric future that brings everyone along.
- Both internal and external stakeholders support the company’s vision of a world with zero crashes, zero emissions and zero congestion.
- There is an imperative for standardizing the EV ecosystem, underscoring priorities such as product GHG emissions and EV infrastructure.
- Responsible innovation should occur across the value chain as new advanced technologies create business opportunities.



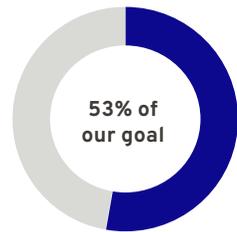
## Sustainability Priority Matrix

Topics are listed in alphabetical order within each priority category and do not represent specific ranking within the category.



# Progress Toward Our Goals

We are on track to meet our sustainability goals and are proud of the progress we are making. The below graphs show the progress we have made toward our sustainability goals to date.



Reducing Scope 1 and 2 operations emissions by 72% by 2035 against a 2018 baseline

We plan to achieve these goals by improving the efficiency of our operations and increasing our use of renewable power for electricity. Energy intensity consists of base energy used and variable energy (production volume). With the investments in new plants and retooling of plants for EV production, there will be several opportunities to improve the energy intensity of our operations. One challenge in achieving these goals is finding alternatives to natural gas for the paint ovens in our plants, and heating our manufacturing and nonmanufacturing facilities.

[Operational Energy Efficiency](#)



Reducing energy intensity in our operations by 35% by 2035 against a 2010 baseline



Power 100% of our electricity for our U.S. sites from renewable sources by 2025

Although we now have the agreements in place to meet our goal to source 100% of our electricity for all our U.S. sites from renewable energy by 2025,<sup>12</sup> we will continue to support the growth of renewable power generation through direct investments, on-site power generation, green tariffs and power purchase agreements.

[The Transition to Renewable Energy](#)



Reducing Scope 3 GHG emissions from the use of sold products of light-duty vehicles by 51% per vehicle kilometer by 2035 against a 2018 baseline

We remain focused on accelerating the transition from internal combustion engine (ICE) vehicles and offering EVs across a range of price points and segments. We are on track to produce 400,000 EVs in North America by mid-2024 and have contractually secured all battery raw materials to support our goal of having 1 million units of EV capacity in North America in 2025. Our investments in EV and battery cell manufacturing will allow us to rapidly scale our EV production footprint, leading to tangible progress toward this goal.

[An All-Electric Future](#)

[Transforming Our Manufacturing Footprint](#)



Eliminating tailpipe emissions from new U.S. light-duty vehicles by 2035



Reducing water intensity by 35% by 2035 against a 2010 baseline

We will achieve this goal by addressing our highest water consumption areas, which include our paint shops and cooling towers. We will design water-saving measures into new processes and retrofit existing technology during facility upgrades.

[Water](#)



Diverting more than 90% of our total operational waste from landfills, incinerators and energy recovery facilities by 2025

The waste program covers solid, containerized and hazardous waste generated by our operations. These efforts drive innovations that provide the greatest benefit to the environment.

[Waste](#)

12 Based on estimated forecasted global renewable energy sourced through currently executed agreements, subject to change depending on actual future electric usage in operations and actual future renewable generation.

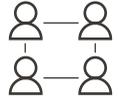
# Our Priorities

The topic areas in this report reflect the priorities identified through our Sustainability Priority Assessment. The table shows the alignment between our priorities and our topic areas, and

summarizes the strategies and actions that are enabling us to work toward a more sustainable world.

Topic Area	Priority Areas	Strategies and Actions		
<p><b>Innovation</b></p> 	<p>Autonomous Technology &amp; Ethics</p> <p>Climate Risk &amp; Resilience</p> <p>EV Infrastructure</p>	<ul style="list-style-type: none"> <li>• Leading in the commercialization of AV technology with Cruise, which became the first paid driverless ride-hailing service in a major U.S. city when it launched in San Francisco</li> <li>• Expanding our EV portfolio with a focus on our Ultium platform technology</li> </ul>	<ul style="list-style-type: none"> <li>• Developing urban, last-mile delivery solutions through BrightDrop electric vans and eCarts designed to help reduce carbon emissions and urban congestion</li> <li>• Launching GM Energy LLC in the United States, a new business unit that plans to provide connected energy management solutions for residential, commercial and EV customers</li> </ul>	<ul style="list-style-type: none"> <li>• Leveraging our HYDROTEC fuel cell platform to transform a variety of transportation modes into all-electric products</li> <li>• Investing nearly \$750 million in home, workplace and public charging infrastructure in the United States and Canada</li> </ul>
<p><b>Environment</b></p> 	<p>Biodiversity &amp; Ecosystem Health</p> <p>Circular Economy</p> <p>Climate Risk &amp; Resilience</p> <p>Operational GHG Emissions &amp; Efficiency</p> <p>Product GHG Emissions</p> <p>Supply Chain Environmental Impacts</p> <p>Waste Management</p> <p>Water Management</p>	<ul style="list-style-type: none"> <li>• Collaborating with strategic organizations on biodiversity and ecosystem health</li> <li>• Aiming to reduce the carbon footprint of sourced materials in new GM vehicles by using materials made with innovative new processes</li> <li>• Joined the First Movers Coalition through commitments to low-carbon steel, aluminum, concrete and cement, signaling a firm market demand for a net-zero transition</li> <li>• Working to achieve carbon neutrality in global products and operations by 2040</li> </ul>	<ul style="list-style-type: none"> <li>• Planning to eliminate tailpipe emissions from new U.S. light-duty vehicles by 2035</li> <li>• Planning to rapidly scale our annual capacity to 1 million EVs for North America and more than 2 million EVs globally in 2025</li> <li>• Opened our first Ultium Cells battery cell plant in Ohio, with a second plant opening in Tennessee in 2023 and a third in Michigan in 2024</li> </ul>	<ul style="list-style-type: none"> <li>• Implementing projects that design out waste, and improve reuse and recycling at a local, regional and national level</li> <li>• Designing water-saving measures into processes and technology during facility upgrades, focusing on areas of high consumption such as paint shops and cooling towers</li> </ul>

## Our Priorities

Topic Area	Priority Areas	Strategies and Actions		
<p><b>Social</b></p> 	<ul style="list-style-type: none"> <li>Climate Risk &amp; Resilience</li> <li>Community Development</li> <li>Diversity, Equity &amp; Inclusion</li> <li>Employee Health &amp; Well-Being</li> <li>Human Rights</li> <li>Occupational Health &amp; Safety</li> <li>STEM Education</li> <li>Supplier Diversity</li> <li>Supply Chain Labor Conditions</li> <li>Vehicle Safety</li> </ul>	<ul style="list-style-type: none"> <li>Using our Climate Action Framework to help guide our actions as our industry and company undergo a fundamental shift in mobility</li> <li>Pursuing an all-electric future by training our workforce, creating new career paths, supporting diverse suppliers and helping community members develop new skills</li> <li>Building diversity, equity and inclusion (DEI) maturity across the business by engaging with leaders and employees through our unconscious bias workshops, Inclusive Leadership Coaching and 12 Employee Resource Groups (ERGs)</li> <li>Forming a new ERG, GM Generations, to break down generational stereotypes and bias through cross-generational sharing and teamwork</li> <li>Expanding benefits for our employees and adding benefits for domestic partners in 2022</li> </ul>	<ul style="list-style-type: none"> <li>Updating our Human Rights Policy to reflect new provisions in the International Labour Organization's (ILO) Conventions regarding safe and healthy working environments, a commitment we expect our suppliers to share, as detailed in this policy and the Supplier Code of Conduct</li> <li>Participating in programs such as the Responsible Business Alliance (RBA), the Responsible Minerals Initiative (RMI), the Initiative for Responsible Mining Assurance (IRMA), the Responsible Sourcing Coalition (RESCO) and the Global Platform for Sustainable Natural Rubber (GPSNR)</li> <li>Continuing to invite our Tier I suppliers to sign our ESG Partnership Pledge, which focuses on commitments to ESG topics</li> </ul>	<ul style="list-style-type: none"> <li>Continually developing a pipeline of safety and driver assistance features, such as Rear Cross Traffic Braking and Automatic Emergency Braking, which can avoid or reduce the harm caused by striking the rear end of a vehicle ahead</li> <li>Expanding our EV first responder training efforts in the United States and Canada, with a focus on how to safely approach and address emergencies involving EVs</li> </ul>
<p><b>Governance</b></p> 	<ul style="list-style-type: none"> <li>Business Ethics</li> <li>Cybersecurity</li> <li>Responsible Use of Data</li> <li>Sustainability-Related Compensation &amp; Incentives</li> </ul>	<ul style="list-style-type: none"> <li>Integrating ESG responsibilities across Board committees</li> <li>Fostering our ethical performance culture through our refreshed Code of Conduct, Winning with Integrity</li> <li>Maintaining our ethics and compliance program, overseen by the Board's Audit Committee with support from the Global Ethics and Compliance Center (GECC)</li> </ul>	<ul style="list-style-type: none"> <li>Enabling employees to report concerns using the independent GM Awareline and protecting them through Speak Up!, our Non-Retaliation Policy</li> <li>Incorporating robust cybersecurity and privacy protection policies and procedures as critical enablers of our digital transformation</li> </ul>	<ul style="list-style-type: none"> <li>Adopting EV performance measures (including EV volume, launch timing and launch quality) for our long-term incentive plan to further align our executive compensation programs with our all-electric future and placing additional focus on GM's growth and ESG performance</li> <li>Being the first automaker to publicly support clean energy tax credit legislation, which incentivizes domestic production and sourcing of EVs and their components</li> </ul>



## Innovation

We focus on what matters: safety, accessibility, affordability and profitability. Our innovations around electrification and mobility include electric vehicles (EVs) and charging infrastructure, self-driving ride-hailing services and low-carbon delivery vehicles. This is the future and we are leading the charge.

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“I’ve seen many changes over my two decades with GM. I’ve seen the plant transform to manufacture EVs, and what our future looks like with electric truck assembly. Adapting to change, and ultimately innovation, is key to our success.”

**Wilfredo Romero**  
Body Shop Team Member

# ever-changing.



# Advancing Electrification and Autonomy

Our transition to EVs and autonomous vehicles (AVs) is a critical part of our growth strategy. As we continue on this journey, we remain committed to developing the technology and infrastructure for a safer, cleaner tomorrow.

## Accelerating Our EV Momentum

As we prepare for an [all-electric future](#), we continue to expand our portfolio across several segments, including affordable and accessible EVs, luxury models and software-defined vehicles, with a focus on building trust and understanding among our customers. This involves:

- Rolling out a comprehensive [portfolio of EVs](#)
- Building a robust [charging network](#)
- [Integrating autonomy, ride-hailing and electrification](#) into a single vehicle
- Creating new [electric delivery solutions](#)



In the next three years, GM plans to move aggressively toward EV leadership as EV adoption is expected to approach 20% of U.S. industry sales in 2025. By then, we will have EVs in one-third of vehicle segments, representing nearly 70% of the U.S. industry by volume, and we will continue to grow from there. To achieve this, we are planning to rapidly scale our annual capacity to 1 million EVs for North America and more than 2 million EVs globally in 2025.

Until now, we have focused on building platforms including Ultium and Ultifi. The next phase of our strategy, which we anticipate running until 2025, will see rapid growth in volume on these platforms, which will provide the scale necessary to significantly bring down costs. In the third phase, we expect to see even more volume and margin growth, as well as contributions from our high-margin software businesses.



## Leveraging the Ultium Platform

We have more than 100 years of manufacturing expertise and over a decade of advanced lithium-ion battery research and development behind us. Our EV strategy is built on a flexible global platform, which centers on the [Ultium propulsion architecture](#).

Crucially, Ultium is not constrained by any one chemistry or even cell form factor, which will become even more important as we grow our EV lineup. We use energy-dense, NCMA (nickel, cobalt, manganese, aluminum) pouch cells in the United States, which are currently produced by Ultium Cells Holdings LLC, an equally owned joint venture with LG Energy Solution. In China, our Ultium vehicles—using the same packs and modules—are powered by nickel-rich and lithium iron phosphate (LFP) cells that are better suited to the needs of the local market.

(Left) Preproduction model shown. Actual production model may vary. Model Year 2024 Chevrolet Equinox EV available Fall 2023.

By managing the early stages of our supply chain through vertical integration, we are planning to accelerate the production of our technology while reducing costs. Read about our relationships with key suppliers to [secure critical materials for our batteries](#) and learn more about how we [refurbish, recycle or reuse](#) the batteries returned to us.

## Recovering Waste Energy From EV Batteries

In 2022, we announced a patented heat pump that recovers waste energy from EV batteries to power heating and propulsion, while providing up to 10% more range.<sup>13</sup> Ultium’s energy recovery technology reduces the need to power heating and other functions from energy stored in the battery, potentially allowing more power and range than vehicles with similarly sized batteries without such capabilities. With its active heating capabilities, Ultium vehicles can also potentially charge more efficiently by warming up the batteries before charging.

## Hydrogen Fuel Cells: The Potential to Electrify Everything

GM’s hydrogen fuel cell technology, HYDROTEC, allows us to extend electrification technologies to more industries and a broader range of applications, from transportation to mobile power generation. Fuel cell-enabled mobile power generation can help users provide fast charging at remote worksites and outdoor events, and can also deliver backup electricity during disruptions.

Our focus on transportation modes includes work to make medium- and heavy-duty trucks more efficient while reducing carbon emissions. We are collaborating with the U.S. Department of Energy on its SuperTruck 3 program, supported by a \$26 million grant that we will match over a five-year period.

<sup>13</sup> Actual range will vary based on several factors including temperature, terrain, battery age, loading, use and maintenance.



## Going Beyond GM Vehicles

The modular and flexible nature of our Ultium and HYDROTEC technologies means they could pave the way for a range of zero-emission products beyond our own vehicles.

- GM is utilizing its Ultium platform to develop electrification solutions for many non-automotive applications, including airport ground support, personal all-terrain vehicles (ATVs), industrial equipment, delivery vehicles and farm equipment.
- GM and Wabtec Corporation are developing battery technology for Wabtec locomotives for orders from Class 1 and international railroad operators, and are exploring concepts for hydrogen fuel cell-powered locomotives.
- GM and Liebherr Aerospace are exploring how hydrogen fuel cells could provide auxiliary electrical power in commercial aircraft.
- With Lockheed Martin, GM is co-developing a Lunar Mobility Vehicle for exploring the lunar surface.
- We have entered a new joint development agreement with Nel Hydrogen U.S., a subsidiary of Nel ASA, to help accelerate the industrialization of its proton exchange membrane (PEM) electrolyzer platform, to enable more cost-competitive sources of renewable hydrogen.



“My job means moving the world, literally and figuratively, in the direction of zero emissions. I see a world with a bright future, based on the technologies we are commercializing.”

**Anil Bika**

Engineering & Business Operations Manager – Global HYDROTEC, BEV2, Innovation & Defense

## Pure Watercraft

GM acquired a 25% ownership stake in Pure Watercraft, a Seattle-based company that specializes in all-electric boating solutions. The collaboration advances a shared vision to expand zero-emissions mobility and reflects the holistic approach necessary for widespread EV adoption.

The Pure Outboard from Pure Watercraft uses groundbreaking efficiency to benefit a boat’s performance while reducing environmental pollution. It also boasts much lower operating costs and maintenance than traditional marine propulsion systems.



“GM’s stake in Pure Watercraft represents another exciting opportunity to extend zero-emissions transportation beyond automotive applications. Building upon GM’s existing efforts to strategically deploy our technology across the rail, truck and aerospace industries, our combined expertise should result in future zero-emissions marine product offerings, providing consumers with more choice.”

**Dan Nicholson**

Vice President, Strategic Technology Initiatives

## GM Defense

With defense and government markets moving toward electric, autonomous and connected fleets, [GM Defense LLC](#)—a wholly owned subsidiary of GM—is helping lead this major transformation. GM Defense is leveraging GM’s world-class manufacturing capabilities and global supply chain, to deliver customized solutions for global defense and government customers. The business plans to help the U.S. Department of Defense meet its climate strategy goals and use tactical electrification to enhance its capability.

GM Defense has recently won two contracts that advance the U.S. military’s transition to a more electric future:

- Through the [Jumpstart for Advanced Battery Standardization contract](#), the business is leveraging the Ultium platform to deliver an advanced battery pack prototype. This will help standardize battery technology across U.S. Department of Defense platforms.
- Under a [separate contract](#), the business provided a commercial GMC HUMMER EV for analysis as the U.S. Army seeks to leverage battery electric vehicle (BEV) technology to reduce its reliance on fossil fuels.

GM Defense has been showcasing EV capabilities in light military vehicles with its All-Electric Military Concept Vehicle since May 2021. Soldiers’ feedback on the concept vehicle, developed and built in only 12 weeks, will inform future electric solutions. The vehicle combines attributes of the proven Infantry Squad Vehicle with GM’s commercially available battery electric technology. Understanding the need for a gradual transition to all-electric solutions for defense and government customers, the business is also developing a Tactical Series Hybrid Concept Vehicle for 2023.

Beyond hybrid and all-electric solutions, GM Defense also leverages GM’s experience in fuel cell technology for military applications. The business has been demonstrating how mobile and fixed fuel cell power systems can be used to charge and extend the range of EVs, supply worksites, data centers and flight lines, and provide emergency power during crises.



**“As a current Army Reservist, I understand the importance of delivering cutting-edge technology to support our military with first-time safety and quality in mind. I am proud to have been part of GM Defense, disrupting the future of military mobility.”**

### Jhansi Nalla

Former Assistant Program Manager, GM Defense; Engineering Group Manager—SDV Systems Engineering and Program; Veteran’s ERG DEI & Mentorship Lead





## Our Growing EV Portfolio

### U.S. EV Models

We are building an entire portfolio of purpose-built EVs designed to serve the widest market at affordable price points, and we plan to offer nine models for sale in 2023 in popular segments across

Cadillac, GMC and Chevrolet. The Chevrolet Bolt EV and Bolt EUV (electric utility vehicle) are already among the most affordable EVs on the market.<sup>14</sup> Looking ahead, Buick and Cadillac are planning for an all-EV portfolio in North America by the end of the decade.

#### 2022 BrightDrop Zevo 600

This all-electric cargo van, built with safety, efficiency and driver comfort in mind, is designed to deliver goods and services over long ranges.



#### 2023 Cadillac LYRIQ

The all-electric LYRIQ is a fully electric high-performance luxury SUV with an Environmental Protection Agency (EPA)-estimated, rear-wheel drive model range of 312 miles<sup>15</sup> on a full charge. It will also offer Super Cruise, the first true hands-free driver assistance technology.



#### 2023 Chevrolet Bolt EV and EUV

The Bolt is the most affordable EV in America.<sup>14</sup> 2023 Bolt EV and EUV have an EPA-estimated range of 259 miles<sup>15</sup> and 247 miles<sup>15</sup> respectively on a full charge.



#### GMC HUMMER EV 2023 Pickup and 2024 SUV

The world's first all-electric supertrucks have fast-charging capability and are available with a 350+ mile range<sup>16</sup> for the pickup and 300+ mile range<sup>16</sup> for the SUV.



#### 2024 Chevrolet Equinox EV

The Equinox EV is expected to be one of the most affordable EVs in its class and will offer up to a GM-estimated 300 miles of range on a full charge.<sup>17</sup>



#### 2024 Chevrolet Silverado EV

Chevrolet's first all-electric Silverado will offer customers a GM-estimated range of up to 400 miles on a full charge, along with four-wheel steer, a multi-flex midgate and Super Cruise with trailering driver assistance technology on the Silverado EV First Edition RST.<sup>18</sup>



#### 2024 Chevrolet Blazer EV

The Blazer EV has the capability of an SUV with the standout styling of a sports car and will be available as an all-electric SUV in summer 2023.



#### 2024 Cadillac CELESTIQ

The CELESTIQ is an ultra-luxury, custom commissioned EV that will be personalized to every owner and hand built in limited volume. This luxury sedan offers all-wheel drive, four-wheel steering and a Smart Glass roof that allows each occupant to set their own experience. The vehicle's interior also incorporates socially conscious contemporary materials.



#### 2024 GMC Sierra EV Denali Edition 1

With fast-charging capability and a GM-estimated range of up to 400 miles<sup>19</sup> on a full charge, the all-electric Sierra EV Denali Edition 1 electric truck comes with Super Cruise driver assistance technology. Available early 2024.



14 Based on comparison of starting-at manufacturer's suggested retail price (MSRP) of the 2023 Chevrolet Bolt EV 1LT and EUV LT with that of competing EVs.

15 EPA estimated. Actual range will vary based on several factors, including temperature, terrain, battery age, loading, use and maintenance.

16 GM-estimated. Actual range will vary based on several factors, including temperature, terrain, battery age, loading, use and maintenance. For the GMC Hummer EV 2023 Pickup, available on EV3X based on a full charge. For the GMC EV 2024 SUV, standard on Edition 1 (not equipped with Extreme Off-Road Package), EV3X, and EV2x, and available on EV2 based on a full charge.

17 GM-estimated range is based on current capability of analytical projection consistent with SAE J1634 revision 2017-MCT. GM-estimated range is based on a vehicle with a full charge. Actual range will vary based on several factors, including temperature, terrain, battery age, loading, use and maintenance. Performance targets, estimates and capability specifications based on computer-aided analysis and simulation using virtual engineering tools. EPA estimates not yet available.

18 First-edition Silverado EV RST GM-estimated range on a full charge based on current capability of analytical projection consistent with SAE J1634 revision 2017-MCT. Actual range may vary based on several factors, including temperature, terrain, battery age, loading, use and maintenance. EPA estimates not yet available.

19 GM-estimated range on a full charge based on current capability of analytical projection consistent with SAE J1634 revision 2017-MCT. Actual range may vary based on several factors, including temperature, terrain, battery age, loading, use and maintenance.

## China EV Models

Leveraging our strong global expertise and growing local capabilities, we will provide a diverse EV portfolio in China<sup>20, 21</sup>

to support a zero-emissions future. Beginning with the Cadillac LYRIQ, more than 15 Ultium-based models across Cadillac, Chevrolet and Buick are planned for rollout in China by 2025.

Meanwhile, SAIC-GM-Wuling's Global Small Electric Vehicle (GSEV) platform has become complementary to Ultium, enabling GM to build an EV for a range of price points and lifestyles in the world's most dynamic vehicle market.

### Chevrolet Menlo

The sporty-looking Menlo sedan is Chevrolet's first all-electric vehicle in China. The 2022 Menlo EV has an extended NEDC<sup>22</sup>-estimated range of up to 518 kilometers on a single charge.



### Buick VELITE 6 EV

Tailored for mainstream EV buyers, the VELITE 6 has a range of up to 518 kilometers on a full charge under China Light-Duty Vehicle Test Cycle (CLTC) conditions and delivers a smooth and dynamic driving experience with great energy efficiency.



### Baojun KiWi EV

The KiWi EV is SAIC-GM-Wuling's one-of-a-kind, all-electric mini under its Baojun brand. It provides two EV range options, with a maximum of 305 kilometers under CLTC conditions. The 2023 KiWi comes standard with DC fast charging, two 10.25-inch screens and supports over-the-air (OTA) updates.



### Wuling Hong Guang MINIEV Family

The Wuling Hong Guang MINIEV family includes the special variants of Macaron, Gameboy and Cabrio, China's first convertible EV. Different EV range options are offered between 120 and 300 kilometers. As of January 2023, it has been the best-selling EV in China for 28 consecutive months since its launch.



### 2023 Wuling Bin Guo

The Bin Guo EV is SAIC-GM-Wuling's first five-door, all-electric hatchback. It will be available in the first quarter of 2023, with EV range options of 203 kilometers and 333 kilometers under CLTC conditions.



### 2023 Buick Electra E5

The large five-seat electric SUV, available in 2023, is the first Buick EV developed on the Ultium platform. It features Buick's all-new EV design, along with the latest Virtual Cockpit System and Super Cruise driver assistance technology that is designed to provide a safe, reliable and intelligent EV experience.



### 2023 Cadillac LYRIQ

The available LYRIQ all-wheel-drive model offers an all-new sports exterior package and an additional drive unit for a distinct persona and enhanced driving dynamics. With GM's state-of-the-art Ultium platform at its core, it delivers an EV range of over 600 kilometers under CLTC conditions.



### 2023 Baojun Yep

SAIC-GM-Wuling's first all-electric SUV, the Yep, will be available in the first half of 2023. It offers an electric driving range of 303 km under CLTC conditions. The rear-wheel-drive model will bring a new choice of travel that is more personal and more fun.



<sup>20</sup> Vehicle pictures shown are simulated models. Actual vehicle specifications and features may vary on production models and are subject to further explanation by the manufacturers of respective EV models.

<sup>21</sup> The respective EV range and charging time of China EV models quoted above is based on publicly available information. The manufacturer of respective China EV models retains the right to provide further explanation.

<sup>22</sup> New European Driving Cycle.

## Expanding Our Energy Ecosystem

At GM, we are committed to making the transition to EVs easy and convenient. From home and public charging to fleet management, we want every element of the ownership experience to be integrated, seamlessly.

We are helping accelerate EV adoption through customer education and engagement, investing in smart charging products, helping create a comprehensive charging network and pioneering and developing innovative energy solutions to empower every person.

### GM Energy

In 2022, we introduced [GM Energy LLC](#) in the United States, a new business unit that will provide a holistic ecosystem of energy management solutions for residential, commercial and EV customers.

GM Energy expands our business opportunities beyond our vehicle portfolio. As part of this new energy ecosystem, we are introducing Ultium Home and Ultium Commercial, which, in combination with the existing Ultium Charge 360 holistic charging approach, will provide customers with access to a series of energy management solutions designed for homes, businesses and communities.



### Using EVs as Mobile Power Sources

We believe the scale of GM Energy’s solutions will help us address challenges with grid infrastructure, energy storage and energy management through resilient and accessible energy solutions for all customers and the grid.

We are working with several companies to deliver energy solutions to customers, including a vehicle-to-home (V2H) pilot project with Pacific Gas and Electric (PG&E). This aims to evaluate the effectiveness and scalability of using EVs as backup power sources for homes’ necessities in California during short-term power outages.

We plan to demonstrate that innovative bidirectional charging technology and energy management software will allow our bidirectional-enabled vehicles to be used as reliable mobile sources of energy at times of disrupted supply.

Simulated charger shown, subject to change. Show truck shown. Actual production will vary. Model year 2024 Silverado EV available Fall 2023.

## Ultium Charge 360

In line with our commitment to a zero-emissions future, we are working to create the largest integrated charging ecosystem. Ultium Charge 360 is our holistic approach to charging in the United States and Canada that provides broad charging access and simplifies the charging experience for EV drivers at home, in the community or on the highway.

Ultium Charge 360 integrates networks, products and services to help bring a unified charging experience to GM EV customers. This involves:

- Working with charge station operators, electric utilities and government agencies to increase access to home, workplace, public and fleet charging points
- Updating the GM vehicle digital experience to help owners find charging stations, initiate charging and make payments
- Offering EV owners tailored charging products and home charging installation services

Our EV Growth Operations (EVGRO) Team leads GM’s efforts to drive the consumer adoption of EVs, combining startup agility with the broad strength of our wider company, as well as an array of external collaborations. EVGRO seeks to leverage cross-functional expertise, minimize complexity and develop a range of projects and solutions designed to address consumer needs and accelerate EV adoption.





## Building Momentum

### Charging Infrastructure

In addition to expanding our portfolio of intelligent charging products and developing “turnkey” installation services for retail and commercial customers, we are investing nearly \$750 million in home, workplace and public charging infrastructure in the United States and Canada.

#### Home Charging

We are providing GM EV customers with charging solutions that fit their lifestyles. Our home charging solutions in the United States include:

- Covered standard 240 volt outlet installation or \$500 EVgo public charging credits for Chevrolet Bolt EV/EUV owners
- The choice between a \$1,500 credit toward EV concierge installation or two years’ public charging with EVgo for Cadillac LYRIQ owners
- A referral to self-pay EV Concierge service for GMC Hummer EV customers and a complimentary Level 2 charger for GMC HUMMER EV Edition 1 customers<sup>23</sup>

<sup>23</sup> See brand and model websites for current offers and additional information. Terms and conditions apply.

<sup>24</sup> Available on select Apple and Android devices. Service availability, features and functionality vary by vehicle, device and the plan you are enrolled in. User terms apply.

<sup>25</sup> GM EV drivers with an EVgo account, active OnStar connected services and the GM brand app for their vehicle must perform a one-time activation of Plug and Charge within the app. The customer’s payment information within the app will be linked upon activation, so that the customer simply needs to plug in to pay for charging. An OnStar subscription is not required. Plug and Charge will eventually extend across all compatible DC fast-charging stations on the Ultium Charge 360 network.

<sup>26</sup> Availability of these initiatives and tools may vary across the regions/countries that GM operates in.

#### Public Charging

As of March 2023, we have integration relationships with 12 EV charging networks, giving GM EV drivers access to thousands of charging plugs throughout the United States and Canada.

GM and Pilot Company are building a coast-to-coast fast-charging network in collaboration with EVgo. The program is targeting the installation of fast chargers at approximately 50-mile intervals across the United States, enabling long-distance corridor charging. This network of 2,000 charging stations will be open to all EV drivers at up to 500 Pilot Flying J travel centers.

We are also working with EVgo to install 3,250 DC fast-charging stalls in more than 50 U.S. metropolitan markets.

GM’s Dealer Community Charging program, which was launched in December 2022, is expected to add up to 40,000 public Level 2 charging stations in local communities across the United States and Canada.

Through the program, GM and its dealers are working together to expand charging access in communities, including underserved rural and urban areas where EV charging is often limited or nonexistent. These charging stations will be available to all EV drivers, not just GM EV customers.

The first community charging stations for Chevrolet were installed in Wisconsin and Michigan in 2022, while Cadillac and Buick dealers began enrolling in early 2023. More than 1,000 GM dealers in the United States and Canada have already joined the program.

#### Mobile Apps

Through our vehicle brand apps, Ultium Charge 360 enables access to more than 110,000 charging plugs in the United States and Canada.<sup>24</sup> GM EV drivers can find nearby charging stations, see real-time charger availability, plan routes, start charging sessions and more. Other possible features such as charger reservations, payments and discounts are under development.

To make EV charging as simple, efficient and accessible as possible, we are adding a new Plug and Charge service that comes with the vehicle at no cost.<sup>25</sup>

### Education and Engagement

Our strategy to accelerate the transition to an all-electric future involves demystifying EV ownership by addressing the barriers to adoption and creating a network of highly trained EV experts at our dealerships. The initiatives and tools we have in place to support education and engagement<sup>26</sup> include:

- [EV Live](#), our interactive and immersive experience
- Explore EV, which offers our vehicle brand app users additional information about the benefits of EV ownership
- A new Electric Vehicle Experience (EVX) program that designates EV specialists for Chevrolet and GMC dealers, while Cadillac dealers promote learning and training through their own dedicated dealer program, Pinnacle
- A dedicated curriculum of EV courses, teaching dealership personnel how to navigate customers through the EV ownership experience
- A new gamified micro-learning app
- A collection of dedicated EV literature to support retail readiness
- EV Showroom, a purpose-built online tool for dealers to guide customer conversations and amplify EV learning, covering topics such as fuel savings and charging calculators
- An “EV Ready” dealership, including the training, tools, requirements and special equipment to support the sale and service of EVs
- Transparency in GM’s advertised pricing to improve the shopping experience

## EV Live: Optimizing the Ownership Experience

As part of our mission to make EV ownership accessible to all, we launched [EV Live](#) in the United States. This immersive, virtual experience allows anyone—GM employees, dealers, retail, fleet and commercial customers, utilities and third-party collaborators—to connect with an EV Specialist from any internet-connected mobile or desktop device.

These specialists will answer EV-related questions in real time and give virtual tours of the EV Live studio. This houses real vehicles and dynamic displays of home charging, public charging, battery technology, sustainability, commercial applications and apps. EV Specialists can also guide participants through the home charging installation process and refer them to certified installers.



## Super Cruise and Ultra Cruise: Advanced Driver Assistance Systems

At GM, we are focused on safely deploying our advanced driver assistance systems (ADAS), like Super Cruise<sup>27</sup> and soon, Ultra Cruise.<sup>28</sup> These hands-free technologies are an important step in our journey toward our vision of a world with zero crashes and zero congestion.

- Super Cruise is the industry’s first true hands-free advanced driver assistance technology. In 2022, we announced a doubling of the Super Cruise road network to more than 400,000 miles of compatible highways in the United States and Canada on select vehicles.
- Ultra Cruise will offer a destination-to-destination hands-free driving experience, designed to enable hands-free driving in 95% of all driving scenarios.

At the end of 2022, GM customers had driven more than 50 million miles with Super Cruise engaged and the feature will be available on 22 GM vehicles globally by the end of 2023. Ultra Cruise will later be available on certain premium entries. Together, these technologies will bring ADAS to more customers on more vehicles, in more regions at more price points, playing an important role in GM’s comprehensive path to autonomous mobility.



“As a GM designer responsible for Super Cruise and Ultra Cruise radars, I get to create solutions that are changing the way we move and think about transportation. I am excited about the future and being part of it.”

**Jay Jones**  
Senior Engineering Designer

## Cruise: Autonomous Vehicle Commercialization and Rapid Scaling

With Cruise, our majority-owned autonomous vehicle (AV) technology startup, we are unlocking the full potential of self-driving technology. Cruise has been developing automated driving system (ADS) technology with safety front of mind since the company was founded in 2013. After its 2016 acquisition by GM, Cruise has continued developing and commercializing its self-driving ride hail and associated delivery services with zero tailpipe emissions.

Over the past four years, Cruise has been operating a fleet of fully integrated AVs in the complex driving environment of San Francisco. Initially, they all operated with a human backup driver before advancing to fully driverless operations with passengers onboard. Cruise became the first company to operate a commercial, driverless ride hail service in a major U.S. city in June 2022, and has since completed thousands of paid driverless rides. Cruise has continued to expand the service’s area of coverage and hours of operation in San Francisco and in late 2022 also launched in Austin, Texas, and Phoenix, Arizona.

Cruise is also expanding its collaboration with Walmart by building upon its initial grocery delivery pilot first launched in Scottsdale, Arizona. Local Walmart customers can now opt-in to autonomous deliveries and track their orders through a Cruise web app.<sup>29</sup> This pilot completed more than 22,000 autonomous deliveries through the end of 2022, and is now being expanded to eight stores in the Phoenix area.

<sup>27</sup> Always pay attention while driving and when using Super Cruise. Do not use a hand-held device. Requires active Super Cruise plan or trial. Terms apply. Automatic Lane Change and Lane Change on Demand are not available while trailering.

<sup>28</sup> Ultra Cruise advanced driver assistance technology functionality is currently in preproduction and subject to change. Capability will evolve over time by way of over-the-air updates once functionality becomes available. More details about Ultra Cruise will be available closer to launch. Terms and conditions will apply.

<sup>29</sup> Available on select Apple devices. Service availability, features and functionality vary by vehicle, device and the plan you are enrolled in. User terms apply.



In addition to deliveries with Walmart, Cruise has delivered more than 2.3 million meals to San Francisco residents in need as part of its Cruise for Good social impact program. Cruise began this work at the height of the pandemic, in response to the needs of local partners at San Francisco-Marin Food Bank and SF New Deal. It has pledged to dedicate at least 1% of its all-electric fleet to help meet local community needs, everywhere it operates.

### Cruise Origin

Encouraging passengers to ride together in shared electric vehicles has the potential to reduce urban congestion and pollution, serve more people and reduce fares. That’s why GM has developed the Cruise Origin in a collaboration with Cruise and Honda.

This self-driving vehicle operates without a steering wheel, brake or accelerator pedals, allowing more space for passengers, luggage or goods. With a focus on accessibility and sustainability, some of the benefits of Cruise’s fleet and operations include being all-electric and designed to not only reduce congestion but also increase access to transportation for those facing barriers to mobility.

### BrightDrop: Decarbonizing Last-Mile Deliveries

With the rapid growth in e-commerce putting more delivery vehicles on the road, logistics companies are looking for ways to meet consumer demand while reducing carbon emissions and congestion. At GM, electrifying our last-mile delivery fleet offerings is an important part of our carbon neutral ambition.

Our solution is BrightDrop, a wholly owned subsidiary currently operating in the United States and Canada that primarily serves two markets: last-mile package deliveries and online grocery deliveries. Both grew quickly during the pandemic and are expected to maintain double-digit growth rates throughout the decade. BrightDrop aims to help businesses lower costs, maximize productivity, improve employee safety and increase freight security with a portfolio of electric delivery vans and smart, purpose-built electrically propelled carts, as well as the BrightDrop Core software platform.

In 2021, BrightDrop launched the BrightDrop Zevo 600 all-electric light commercial vehicle (eLCV) and the BrightDrop Trace eCart, which helps couriers take goods the last step to the customer. The smaller BrightDrop Zevo 400 was also announced.

In 2022, we launched the BrightDrop Trace Grocery, an eCart designed to help streamline order fulfillment and pickup for online grocery purchases. The BrightDrop Trace Grocery eCart is expected to be fully available in 2024.

Our CAMI Assembly plant in Ontario, Canada, commenced full production of the BrightDrop Zevo 600 in 2023, and will scale up total Zevo production to a projected 50,000 units a year by 2025. With the speed to market and the levels of customer demand (see right), BrightDrop is on track to generate approximately \$1 billion in revenue in 2023.



“We are developing relationships with those that can help us expand our ecosystem of last-mile delivery solutions. For example, one such collaboration with Nauto offers an event-based safety system enabling better fleet management for our customers.”

**Robert Tiderington**  
Head of Strategic Partnerships, BrightDrop



The BrightDrop Zevo 600 received an honorable mention in Fast Company’s 2022 Innovation by Design Awards

Driving the BrightDrop Zevo 600, BrightDrop’s Stephen Marlin set the Guinness World Record for the longest distance traveled by an electric van on a single charge (nearly 260 miles from Manhattan to Washington D.C.) in April 2022

### BrightDrop Customers

#### FedEx Express

Reserved priority production for at least 2,000 electric delivery vans over the next few years, adding to an initial reservation of 500 BrightDrop EVs announced in 2021

#### DHL Express Canada

Plans to add BrightDrop Zevo electric delivery vans to its fleet in 2023, and is currently piloting BrightDrop Trace eCarts and software platform

#### Hertz

Plans to order up to 175,000 EVs, including BrightDrop vehicles, over the next five years

#### Merchants Fleet

Reserved 18,000 units (BrightDrop Zevo 600 and BrightDrop Zevo 400)

#### Walmart

Reserved 5,000 (BrightDrop Zevo 600 and BrightDrop Zevo 400) electric delivery vans to support the retail giant’s growing last-mile delivery network and goal of operating a zero-emissions logistics fleet by 2040

#### Kroger

Scheduled to add the BrightDrop Trace Grocery to its e-commerce operations

# Putting Customers First

Customers are at the center of GM's growth strategy. We deliver on that by producing high-quality, easy-to-use products, while offering an excellent customer experience.

## A Relentless Focus on Customer Experience

The people who drive our vehicles are an extension of the GM family. Every day, we aim to understand their expectations and retain their trust by delivering positive experiences as well as vehicles, features and services they cannot live without.

Through every interaction, we try to simplify the customer journey, making their lives easier and more enjoyable. We are committed to designing new and innovative solutions, including software-enabled services and features that allow us to continue enhancing the total vehicle ownership experience over time. By delivering excellence in every interaction, even in everyday moments, we can keep customers returning to GM.

## Listening to Our Customers

One of the best ways to deliver exceptional experiences is to listen to customers. GM's Voice of Customer platform pulls in millions of comments from across all our communication channels, including phone calls, emails, social media posts and dealership surveys. Once aggregated and anonymized, we use these insights to proactively support customers, focus our efforts where we can have the biggest impact and inform the development of future products, features and services.

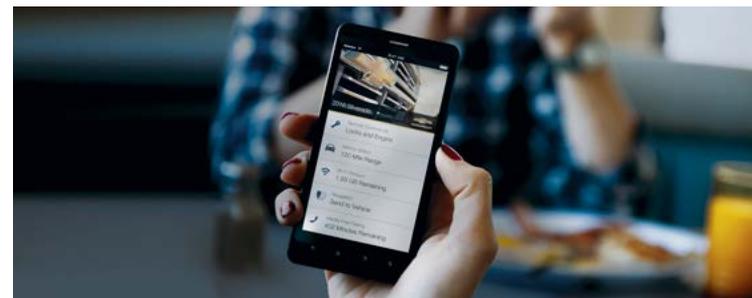
## Mobile App

Meeting connected vehicle owners wherever they are on their digital journey is key to delivering an exceptional GM ownership experience. In fact, GM owners who use our vehicle brand mobile apps show a significantly higher recommendation rate than owners who do not. As we continue to adapt to customer expectations and preferences, select OnStar safety and digital services, including remote access enabled in the mobile app, will now be offered on most vehicles in the United States and Canada for three years, with the initial vehicle purchase. We are working to broaden our standard connected features to other markets.

Additionally, we continue to listen to the needs of our customers and have redesigned the in-app "help" experience. This new functionality will include live chat, links to web support content and quick-start guides, which will make learning about and owning a new GM vehicle even easier. Recently, the GM mobile app team was recognized by Michigan's Association of Customer Experience Professionals for "Customer Feedback & Continuous Improvement" during the Industry Best Practices Award program.

## Building for the Future

The future is digital and we are reimagining experiences that can support this future. Our strategy is to create experiences that are both Digitally Human and Deliberately Human: digital experiences that are as easy and intuitive as interacting with a human, while preserving and enhancing interactions with people (dealers or advisors) in moments that have the most impact. We are determined to lead the future of the automotive customer experience as we create a first-class digital experience and continue to drive innovation to make the customer journey more convenient, simple, seamless and informative.



## Quality Assurance

Our quality policies and culture of continuous improvement inform our customers' product experience.

GM's Quality Policy states that: "GM will be Quality Leaders in every market and every segment in which we compete through effective execution of all applicable requirements and through continual improvement."

Globally, we have achieved, and sustained, certification to the International Organization for Standardization (ISO) 9001:2015 standard at all of our manufacturing facilities where required by region or country. As of the end of 2022, 52 operations had completed certification. We intend to maintain ISO compliance by adapting our processes to meet any modifications to the standard.

We have nine component plants that are certified to the International Automotive Task Force (IATF) 16949 standards. Our Global Manufacturing System incorporates all IATF requirements, guiding the quality aspects of our business and, in some cases, driving more rigorous standards than external ones. As a result, GM brands and products regularly perform well in the leading product quality, reliability, vehicle safety and consumer satisfaction studies.

Read more about [Vehicle Safety and Quality](#).





## External Recognition

We measure the quality and dependability of our vehicles, as well as customer satisfaction with our vehicles, sales and dealership service, through the following studies run by J.D. Power, a global leader in industry intelligence on customer interactions with brands and products for more than 50 years.

### Initial Quality

For 36 years, the J.D. Power U.S. Initial Quality Study (IQS) has measured problems that customers have experienced with their new vehicles within the first three months. In 2022, ongoing disruptions caused by the pandemic—microchip shortages and other supply chain issues, high vehicle prices and workplace dislocation—meant that problems across the industry reached a record high.

Despite the challenges facing the industry, GM was the highest-ranked manufacturer in initial quality for the second time in three years. We received nine model awards, with the Chevrolet Corvette as the highest-ranked model in the industry, while Buick was ranked the leading overall brand. Additionally, our San Luis Potosí facility in Mexico, which produces the Chevrolet Equinox and GMC Terrain, received the Platinum Plant Quality Award. GM’s Ingersoll (CAMI) plant in Canada, which produced the Chevrolet Equinox, and Yantai Dongyue 2 plant in China, which produces the Buick Envision, both received Bronze Plant awards for their region.



### Vehicle Satisfaction

The J.D. Power 2022 U.S. Automotive Performance, Execution and Layout (APEAL) Study examines how satisfied customers are with their new vehicles. In the latest study, Cadillac ranked third among premium brands and GMC ranked third among mass-market brands.

### Dependability

In the 2022 U.S. Vehicle Dependability Study (VDS), which measures vehicle dependability after three years of ownership, Buick ranked #2 in the industry. GM secured five segment winners: Buick Encore (Small SUV), Buick Envision (Compact SUV), Chevrolet Impala (Large Car), Chevrolet Silverado HD (Large Heavy-Duty Pickup) and Chevrolet Suburban (Large SUV).

### Sales Satisfaction

Buick was the highest-ranked mass-market brand in the 2022 U.S. Sales Satisfaction Index (SSI) Study, which measures customer satisfaction with the purchase experience among new-vehicle buyers and rejecters.

### Customer Service

The J.D. Power Customer Service Index (CSI) Study measures satisfaction with dealer service. Cadillac ranked second among luxury brands and Buick ranked second among mass-market brands in the 2022 U.S. study.

## J.D. Power Studies: U.S. Segment Award Winners 2022

### Initial Quality Study (IQS)

- Buick Encore GX (Small SUV)
- Cadillac Escalade (Large Premium SUV)
- Cadillac XT6 (Upper Midsize Premium SUV)
- Chevrolet Corvette (Premium Sporty Car)
- Chevrolet Equinox (Compact SUV)
- Chevrolet Malibu (Midsize Car)
- Chevrolet Silverado (Large Light-Duty Pickup)
- Chevrolet Silverado HD (Large Heavy-Duty Pickup)
- Chevrolet Tahoe (Large SUV)

### Vehicle Dependability Study (VDS)

- Buick Encore (Small SUV)
- Buick Envision (Compact SUV)
- Chevrolet Impala (Large Car)
- Chevrolet Silverado HD (Large Heavy-Duty Pickup)
- Chevrolet Suburban (Large SUV)



## Environment

To help create a more sustainable world, we aim to achieve carbon neutrality in global products and operations by 2040. We are working toward greater efficiency in our products and operations through our production processes and the resources we use.

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# everywhere.



“We cannot do it all alone; collaboration is key. So we continue to work closely with others—from governments and policymakers to partners, suppliers and customers—as we take each step toward achieving our all-electric vision and our carbon neutral goal.”

**Kathi Walker**  
Director, Global Sustainability Strategies

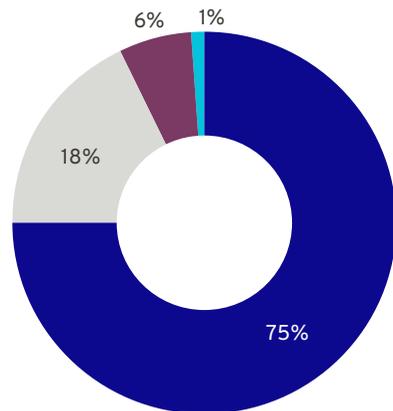
# Emissions Reduction Plan

Our goal is to achieve carbon neutrality in global products and operations by 2040.

## Where We Are Now

Our increased sourcing of renewable energy, our growing electric vehicle (EV) portfolio and our Ultium battery all contributed to an overall reduction in our total greenhouse gas (GHG) emissions compared to our 2018 baseline.

### Our Global 2022 Footprint



- Scope 3–Use of Sold Products
- Scope 3–Purchased Goods and Services
- Scope 3–Other
- Scopes 1 and 2

See more detailed performance in our [Data Center](#).

## Our Targets

To help us achieve carbon neutrality in global products and operations by 2040, we are committed to achieving the following milestones and Science Based Targets initiative (SBTi)-approved targets.

### Scope 3–Use of Sold Products

#### By 2025:

- Plan to rapidly scale our annual capacity to 1 million EVs for North America and more than 2 million EVs globally in 2025

#### By 2035:

- Reduce Scope 3 GHG emissions from the use of sold products of light-duty vehicles by 51% per vehicle kilometer by 2035 against a 2018 baseline
- Eliminate tailpipe emissions from new U.S. light-duty vehicles by 2035

### Scopes 1 & 2

#### By 2025:

- Source 100% renewable energy at our U.S. sites

#### By 2035:

- Reduce energy intensity in our operations by 35% by 2035 against a 2010 baseline
- Source 100% renewable energy globally
- Reduce Scope 1 and 2 operations emissions by 72% by 2035 against a 2018 baseline

## How We Will Get There

Scope 3 emissions make up the vast majority of our GHG emissions, and are where we focus many of our initiatives and programs.

### Our Initiatives and Programs

#### Scope 3–Use of Sold Products

- Anticipating total annual capital spending and investments in battery cell manufacturing joint ventures to be \$11–\$13 billion through 2025
- Operating Factory ZERO, GM's first fully dedicated EV assembly plant, in Detroit-Hamtramck
- Investing nearly \$750 million in home, workplace and public charging infrastructure in the United States and Canada
- Decarbonizing through hydrogen fuel cell technology
- Engaging in climate partnerships:
  - Breakthrough Energy Catalyst: public-private partnership working to commercialize green hydrogen, long-term energy storage and sustainable aviation fuel
  - TPG Rise Climate: helping the research community, investors and climate innovation accelerators develop clean energy, decarbonized transport and agricultural technologies

#### Scope 3–Purchased Goods and Services

- Inviting Tier I suppliers to sign the [GM ESG Partnership Pledge](#) and enhance emissions tracking
- Encouraging global Tier I suppliers to set carbon reduction goals using the GM Supplier Sustainability Goals Framework
- Monitoring participating global Tier I and Tier II suppliers' sustainability performance through CDP and EcoVadis
- Contractually securing all battery raw materials to [support our goal of having 1 million units of EV capacity in North America in 2025](#)
- Joining the First Movers Coalition through commitments to low-carbon steel, aluminum, concrete and cement, signaling a firm market demand for a net-zero transition

#### Scopes 1 & 2

- Reducing energy consumption by improving energy efficiency
- Successfully sourcing 100% of our electricity for our U.S. sites from renewable sources by 2025<sup>30</sup>
- Increasing our use of renewable power for electricity globally

<sup>30</sup> Based on estimated forecasted global renewable energy sourced through currently executed agreements, subject to change depending on actual future electric usage in operations and actual future renewable generation.

# Our Energy Strategy

Our strategy to manage energy in our operations and reduce our Scope 1 and 2 emissions involves a combination of improved energy efficiency, using more renewable power, mitigating against intermittent supply and advocacy work.



## Improving Energy Efficiency

Reducing overall energy use by lowering intensity levels and operational loads at our facilities

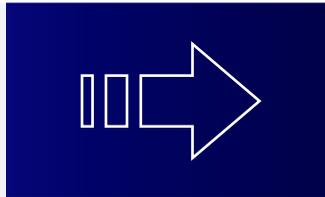


## Sourcing Renewable Energy

Supporting the growth of renewable power through direct investments, on-site generation, green tariffs and power purchase agreements

## Addressing Intermittency

Mitigating against gaps in supplies of renewable energy for electricity transmission



## Policy Advocacy

Advocating for policies that support a resilient, carbon-free energy system, drive down renewable energy costs and increase availability of renewable energy assets



“We continue to optimize our energy procurement process by evaluating renewable energy technologies. We also use tools that address intermittency and actively engage in policy efforts to ensure sustainable, reliable, cost-effective utility sourcing for our operations.”

**Rebecca Tody**  
Energy, Procurement & Reliability Manager,  
Energy Strategy



# Operational Energy Efficiency

Our energy conservation and renewable energy program, guided by SBTi-approved targets, will help us achieve our long-term goal of carbon neutral operations and products by 2040.

As part of our strategy to reduce Scope 1 and 2 GHG emissions, we are working to lower energy consumption by improving efficiency.

We continue to work on improving energy efficiency at our facilities through a global energy management system (EMS). Driven by a determination to achieve our science-based targets, we are focusing our efforts on the areas of highest use, such as reducing electricity consumption and using less fuel from nonrenewable sources.

In 2022, our energy intensity increased for a second consecutive year to 2.27 MWh per vehicle (see chart on [page 33](#)). We continue to invest in energy-efficiency projects around the world as we look to reduce energy consumption and drive energy efficiency. As global production volume stabilizes, we expect to see improved energy intensity that aligns with our long-term goals.

## Energy-Saving Programs and Initiatives

Our approach to improve the sustainability of our operations includes aligning our business strategy with aggressive environmental goals and energy reduction targets, collecting accurate data and publicly reporting progress against those targets. We continue to use an energy metering tool to monitor and reduce the use of our heating, ventilation and air conditioning equipment.

### U.S. Department of Energy (DOE)

To assess and improve our EMS, we have implemented the U.S. DOE 50001 Ready program across our business. 50001 is a voluntary global standard for energy management systems in industrial, commercial and institutional facilities.

As of December 2022, we had 28 sites in the United States recognized by the program, up from 27 in 2021. While not officially recognized by the U.S. DOE program, we have 16 other sites that have met the same criteria: three sites in Canada, four in Mexico, eight in South America and one in Korea.

We are also participating in the DOE Better Buildings pilot program, exploring ways to achieve low- or zero-carbon operations.

### Awards and Recognition

#### Received

GM has received the ENERGY STAR Sustained Excellence Award for the past 11 years



#### Won

GM won the Sustainability Leadership Award from the Business Intelligence Group in August 2022

#### Won

GM China's energy treasure hunt program won the Carbon Neutral Outstanding Practice Award at the International Green Zero-Carbon Festival in Beijing in August 2022

#### Awarded

In 2022, GM's Flint Truck Assembly plant was awarded the Michigan Battle of the Buildings title in the Manufacturing/Industrial category



### U.S. ENERGY STAR

Buildings certified by ENERGY STAR use less energy, save money and generate fewer GHG emissions. To be certified as an ENERGY STAR building, it must meet strict energy performance standards set by the Environmental Protection Agency (EPA) and outperform at least 75% of similar buildings nationwide. In 2022, we received four new certifications: Fort Wayne Assembly, Flint Assembly, Milford Enterprise Data Center and Arizona IT Innovation Center.

In 2022, we met the EPA ENERGY STAR Challenge for Industry at seven sites by reducing energy intensity by an average of about 18%. To meet the EPA Challenge, industrial sites must reduce their source energy intensity by at least 10% within a five-year period. In total, 71 GM manufacturing sites have met the EPA Challenge, with many sites achieving the goal multiple times for a total of 139 recognitions.

In 2022, we conducted 13 on-site ENERGY STAR treasure hunts, through which we found 194 energy-saving opportunities that could save the company approximately \$13 million.

Read more about our energy-saving initiatives around the world in our [Regional Reports](#).

#### Goal

Reduce energy intensity in our operations by

**35%**

by 2035 against a 2010 baseline<sup>31</sup>

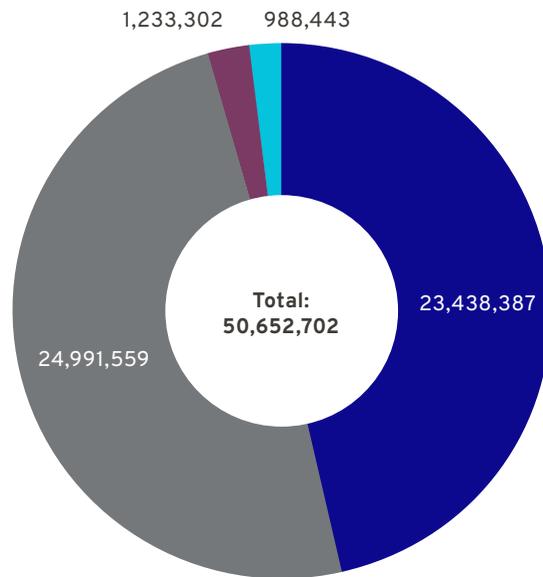


<sup>31</sup> Energy intensity is a global calculation. It is a measure of global energy usage in relation to global assembly production. Regional variations in volumes can impact global intensity.

## Our Global Energy and Emissions Progress

We continue to invest in energy-efficient systems and renewable energy strategies to reduce our Scope 1 and 2 emissions. Global energy intensity consists of two parts: base energy used in our buildings and variable energy, which is directly tied to production. Lower vehicle volumes translate to higher energy intensity. We continue to implement energy projects focused on both base and variable energy consumption, to achieve lower intensity as vehicle volumes stabilize.

### Energy Consumption by Source (GJ)



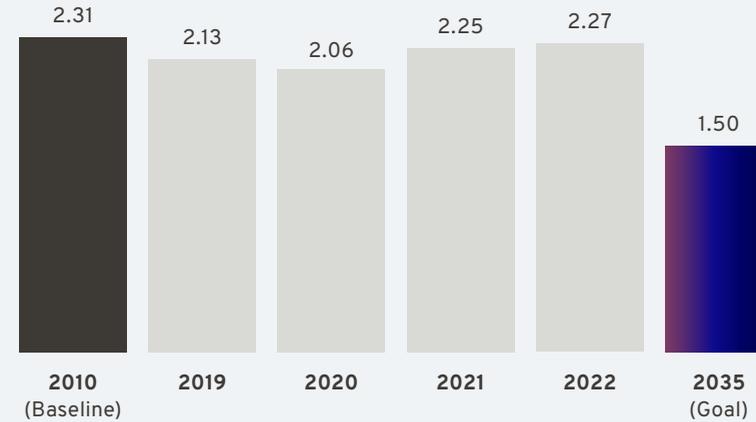
- Electricity Consumption (incl. cooling)
- Fuel Consumption From Nonrenewable Sources (incl. heating)
- Fuel Consumption From Renewable Sources (incl. heating)
- Steam Consumption

32 This is based on the production of 6,075,449 light-duty vehicles and includes all of our energy sources. The boundary for this is within the scope of our organization.

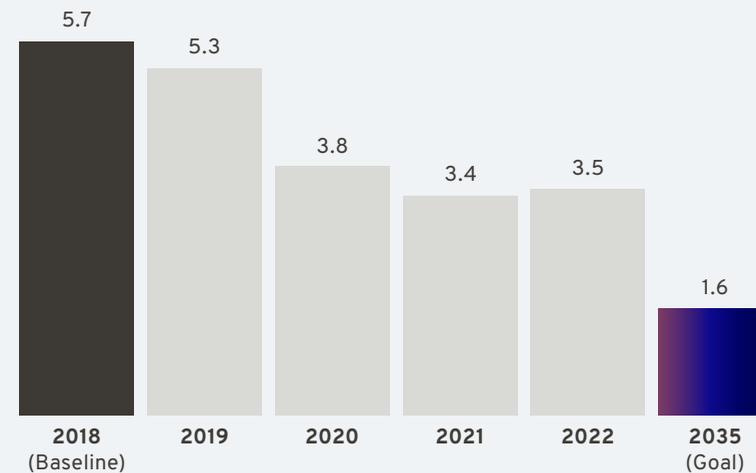
33 Based on estimated forecasted global renewable energy sourced through currently executed agreements, subject to change depending on actual future electric usage in operations and actual future renewable generation.

### Energy Intensity<sup>32</sup> (MWh/Vehicle)

Energy Used in GM's Operations



### Absolute Scope 1 & 2 Emissions<sup>34, 35, 36</sup> (Million Metric Tons CO<sub>2</sub>e)

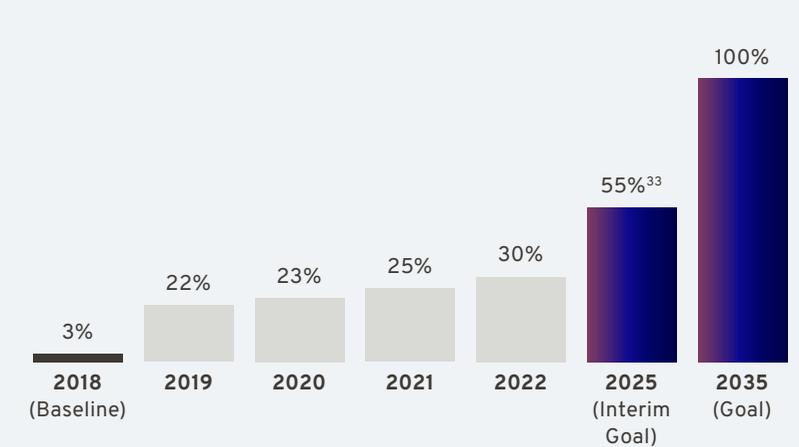


34 Baseline year 2018, and includes all facilities under GM operational control.

Calculation includes CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O. Reporting is based on GHG Protocol, and the source of emission factors is regulatory or IPCC Good Practice Guidelines.

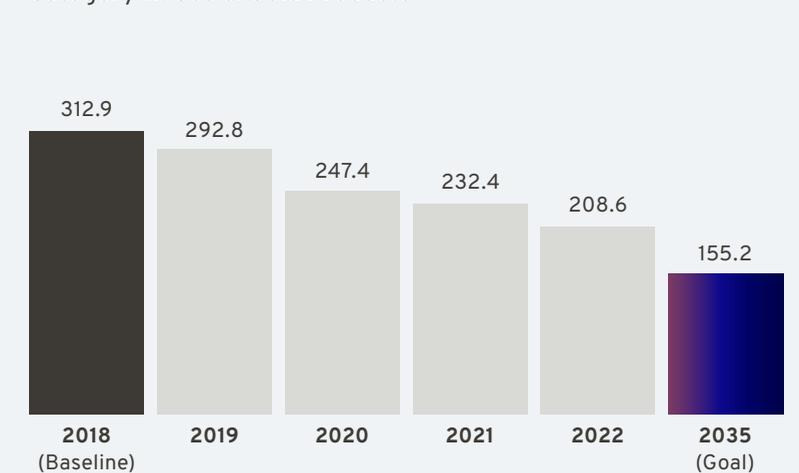
35 GM's Scope 1 emissions are generated from use of fossil fuels, mostly natural gas for process and building heat.

### Renewable Energy as a Percentage of Global Electricity Use



### Absolute Scope 3 Emissions<sup>37</sup> (Million Metric Tons CO<sub>2</sub>e)

Category 11: Use of Sold Products



36 GM's Scope 2 emissions are mostly from electricity used in our operations for process and building with some purchased steam and delivered heat by third parties.

37 GM's Scope 3 emissions are calculated in reference to the GHG Protocol for all 15 categories. Category 11: Use of Sold Products, is calculated using the well-to-wheel method, consistent with SBT requirements.

# The Transition to Renewable Energy

We now have the agreements in place to meet our goal to source 100% of our electricity for all our U.S. sites from renewable energy by 2025.<sup>38</sup>

## Sourcing Renewable Energy

We support the growth of renewable power generation through direct investments, on-site power generation, green tariffs and power purchase agreements.

As well as working to reduce the energy we use in our operations through [improved efficiency](#), we source renewable energy through direct investment, on-site generation, green tariffs and power purchase agreements (PPAs). According to Bloomberg New Energy Finance,<sup>39</sup> GM has sourced more renewable electricity than any other automaker over the last decade, giving us the scale to help drive the transition to renewable power across the United States.

### Goal

Source

# 100%

renewable energy to power our U.S. facilities by 2025, and globally by 2035



## Our Progress

In October 2022, we announced that we have successfully sourced 100% of the renewable energy needed to power all our U.S. sites by 2025.<sup>40</sup>

In meeting this accelerated timeline, we estimate that we will have avoided the production of approximately 1 million metric tons of carbon emissions that would have been produced between 2025 and 2030, which equates to burning 1 billion pounds of coal.

In 2022, our global consumption of renewable power totaled 1.869 billion kWh, an increase from 1.368 billion kWh in 2021. As the chart on [page 33](#) shows, the share of our global electricity powered by renewable energy increased to 30%, and we remain on track to meet our 2035 goal.

## Addressing Intermittency

Wind, solar and other renewable energy sources are intermittent by nature, and the first step to determine how we can address this intermittency is to understand our emissions footprint.

Tools and initiatives that help us track our emissions are an important element of our carbon reduction strategy. In collaboration with software provider TimberRock and Pennsylvania–New Jersey–Maryland Interconnection (PJM), the operator of the largest power grid in the United States, we are tracking the carbon emissions from our electricity use at 35 GM sites.

This almost-real-time “marginal emissions data” is provided every five minutes by PJM, which serves 65 million people across 13 states and the District of Columbia. The information highlights the most efficient times to run our operations, given the carbon output of the grid at the time. This helps us make strategic decisions about our energy use. For example, during times of high emissions, there is the potential to reduce electricity use or switch to stored sources of renewable energy to reduce our emissions.

<sup>38</sup> Based on estimated forecasted global renewable energy sourced through currently executed agreements, subject to change depending on actual future electric usage in operations and actual future renewable generation.

<sup>39</sup> Bloomberg New Energy Finance’s Corporate PPA Deal Tracker.

<sup>40</sup> Based on estimated forecasted global renewable energy sourced through currently executed agreements, subject to change depending on actual future electric usage in operations and actual future renewable generation.



## Policy Advocacy

Public policy and advocacy efforts will encourage the development of a resilient, carbon-free energy system. In the United States, grid decarbonization can be catalyzed by legislative efforts. The Energy Strategy Team collaborates with a number of organizations engaged in energy and decarbonization policy, including the Clean Energy Buyers Association, American Clean Power and the Renewable Thermal Collaborative.

Beyond the United States, we are working with several universities that are gathering feedback from companies in China, to better understand what market changes will help them meet their energy targets in an affordable way.

And in South Korea, we are working with other companies with clean energy goals to influence policy and regulation through RE100.

Read more in the [Public Policy](#) section.



(Above) Preproduction model shown. Actual production model may vary. Model Year 2024 Chevrolet Blazer EV available Summer 2023.

## Our Renewable Energy Portfolio

In October 2022, we announced that we now have 17 renewable energy sourcing agreements across 10 states, to source enough renewable energy to meet our 2025 target.<sup>41</sup>

When investing in assets that generate renewable electricity, we aim to do so near our facilities, to maximize their localized emissions reduction impact. The map on the next page shows the U.S. sites where we have invested in renewable power, generate on-site renewable energy, or have Green Tariff agreements or PPAs in place.



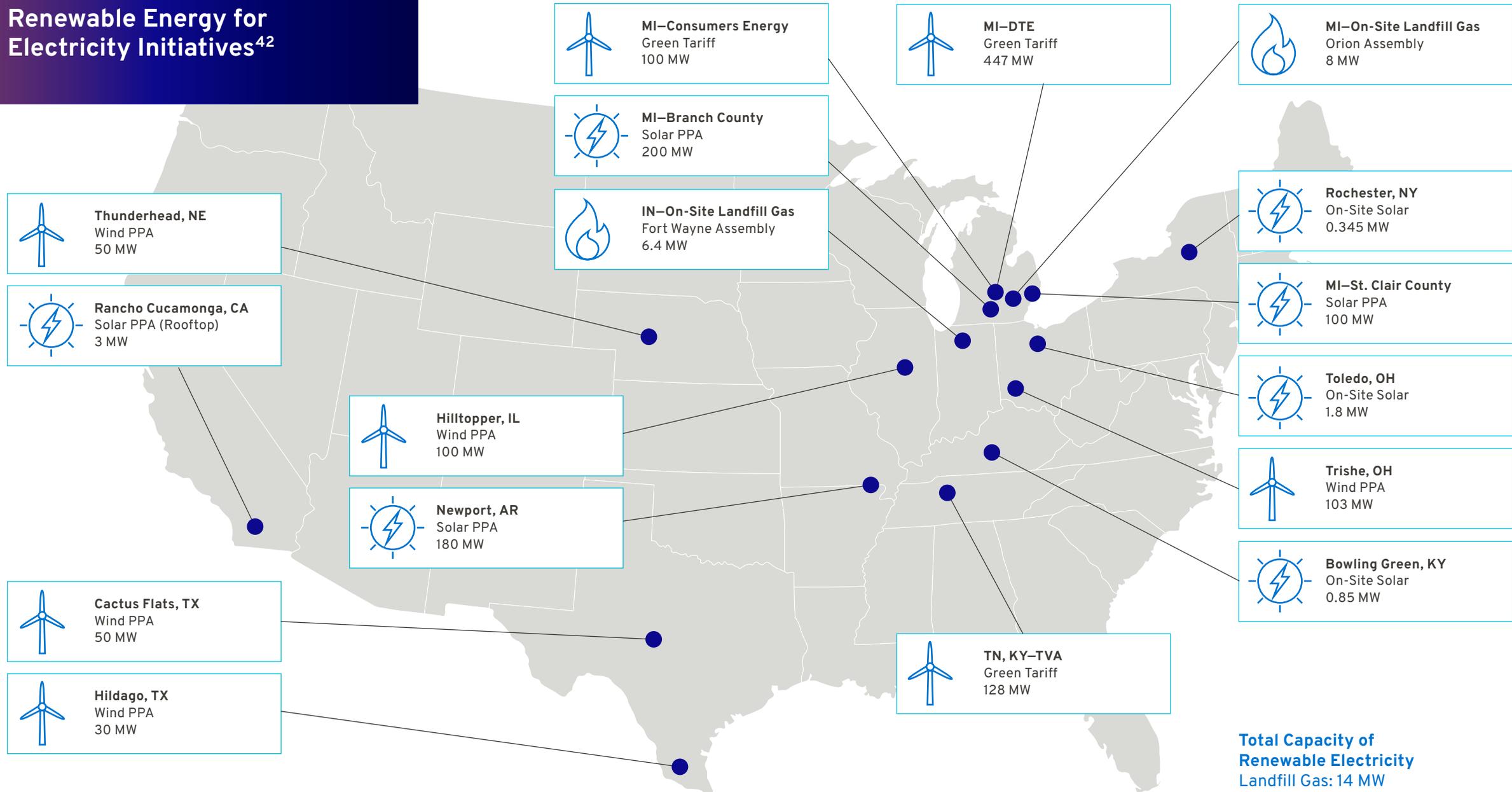
“Securing the renewable energy we need to achieve our U.S. goal by 2025 demonstrates tangible progress in reducing our emissions in all aspects of our business, ultimately moving us closer to our vision of a future with zero emissions.”

**Kristen Siemen**  
Vice President Sustainable Workplaces & Chief Sustainability Officer

<sup>41</sup> Based on estimated forecasted global renewable energy sourced through currently executed agreements, subject to change depending on actual future electric usage in operations and actual future renewable generation.



## Renewable Energy for Electricity Initiatives<sup>42</sup>



**Total Capacity of Renewable Electricity**  
 Landfill Gas: 14 MW  
 Solar: 614 MW  
 Wind: 880 MW

42 Figures include both operating and executed agreements.

## Clean Energy Buyers' Alliance

We are a founding member of the [Clean Energy Buyers' Alliance](#) (CEBA), a business association activating a member community of more than 350 energy customers and partners to deploy market and policy solutions for a carbon-free energy system.



We serve as Foundational Funders of the [Beyond the Megawatt](#) initiative through the Clean Energy Buyers Institute (CEBI), CEBA's sister organization. This public benefit charity is dedicated to solving the toughest barriers to achieving a carbon-free energy system. Beyond the Megawatt was established to promote clean energy procurement processes with a focus on energy security and resilience while minimizing environmental and societal impacts.

The Clean Energy Buyers Alliance was formed with an aspiration to achieve a 90% carbon-free U.S. electricity system and cultivate a global community of energy customers driving clean energy.

**(Below)** Preproduction model shown. Actual production model will vary. Model Year 2024 Silverado EV available Fall 2023.



## Awards and Recognition

GM shortlisted for an RE100 Changemaker Award in 2022



#18

GM ranked #18 in the EPA Green Power list in 2022

GM has sourced more renewable electricity than any other automaker over the last decade



**(Below)** Preproduction model shown. Actual production model may vary. Model Year 2024 Chevrolet Equinox EV available Fall 2023.

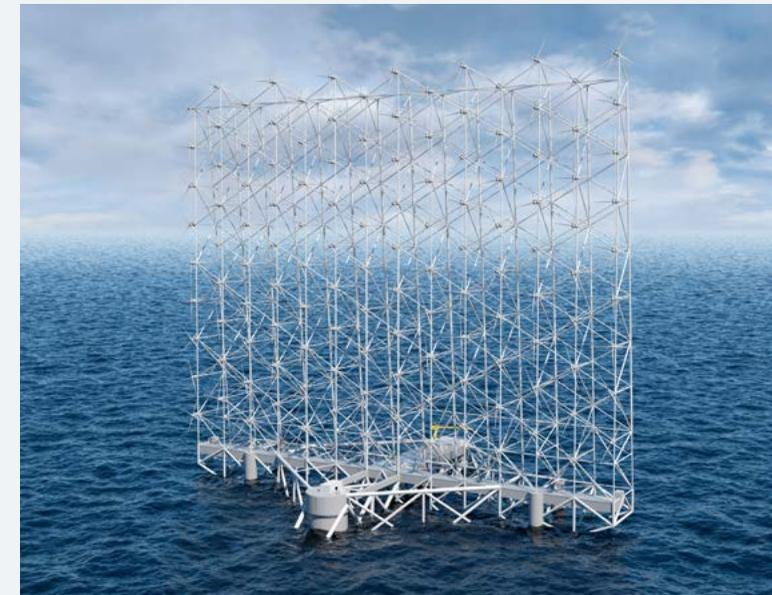


## Investing in Offshore Wind Technology

In 2022, GM Ventures made a strategic investment in Wind Catching Systems (WCS), a Norway-based offshore wind company. Our strategic agreement for collaboration covers technology development, project execution, offshore wind policy and the advancement of sustainable technology applications.

WCS is developing an innovative design that incorporates several individual turbines into a standalone Wind Catcher. GM's investment will be used for engineering, design, supply chain development and an anticipated pilot project. WCS's design is more space-efficient than traditional offshore technology as it produces nearly five times the energy in a single unit. It also costs less to maintain, overcomes installation and maintenance issues, and significantly increases production efficiency.

WCS was the recipient of Fast Company's Innovation by Design Awards in the Sustainability category.



# An All-Electric Future

Climate change is a [global challenge](#) that needs to be addressed. As part of the solution, we plan to make all-electric, zero-emission vehicles more accessible and affordable, bringing everyone along as we transition.

Under Scope 3, Use of Sold Products is the biggest contributor to our global emissions footprint and reducing these emissions is one of our highest priorities. Our main strategy for addressing this is by eventually replacing traditional internal combustion engine (ICE) vehicles with EVs, which have a significantly lower emissions intensity than equivalent ICE models.

We also collaborate with our [key suppliers](#), encouraging them to set ambitious emissions reduction targets of their own, source more [sustainable materials](#) and increase the transparency of their performance.

## Driving EV Adoption

As detailed in [Advancing Electrification and Autonomy](#), we are focusing on accelerating our transition toward EVs. We are building our [EV portfolio](#) to be inclusive, with models to suit a range of lifestyles and price points. We are on track to produce 400,000 EVs in North America by mid-2024, which will help lower the emissions intensity from the use of sold products significantly.

Many of these vehicles, including the all-electric GMC HUMMER EV, Cadillac LYRIQ and upcoming Chevrolet Silverado EV, Chevrolet Equinox EV and Chevrolet Blazer EV, will feature our Ultium architecture and battery platform. Read more about our [developments in EV battery technology](#).

## Goal

1M planned units of annual EV capacity for North America and more than 2M globally in 2025



## Vehicle Emissions

Across the company, we have embedded governance processes that assess our fleet's fuel efficiency and emissions performance. Learn more about [global fuel economy and emissions regulations](#).

### Well-to-Wheel CO2 Emissions per Light-Duty Vehicle<sup>43</sup> (gCO<sub>2</sub>e/km)

	2018	2019	2020	2021	2022
United States	287	293	280	301	290
China	220	208	206	206	194
Brazil	200	198	195	201	200
Total Weighted Average	245	243	240	246	233



<sup>43</sup> Data aligns with SBTi for Scope 3: Use of Sold Products. The SBTi standards require well-to-wheel (from fuel production to vehicle driving) for vehicle CO<sub>2</sub> intensity (gCO<sub>2</sub>e/km) calculations.

## Transforming Our Manufacturing Footprint

We are rapidly scaling up our EV production footprint. In 2021, we began production at our Factory ZERO Detroit-Hamtramck Assembly Center, which was retooled into a fully dedicated EV facility to produce the GMC HUMMER EV, the upcoming Cruise Origin, the Chevrolet Silverado EV and the GMC Sierra EV. In January 2022, we announced that we will convert our assembly plant in Orion Township, Michigan, for fully dedicated EV production, including the Chevrolet Silverado EV and the GMC Sierra EV.

In addition to the transformation of five North American assembly plants, we are also investing in component, stamping and propulsion plants to support EV production as we bring everybody in with us on our journey to an all-electric future.

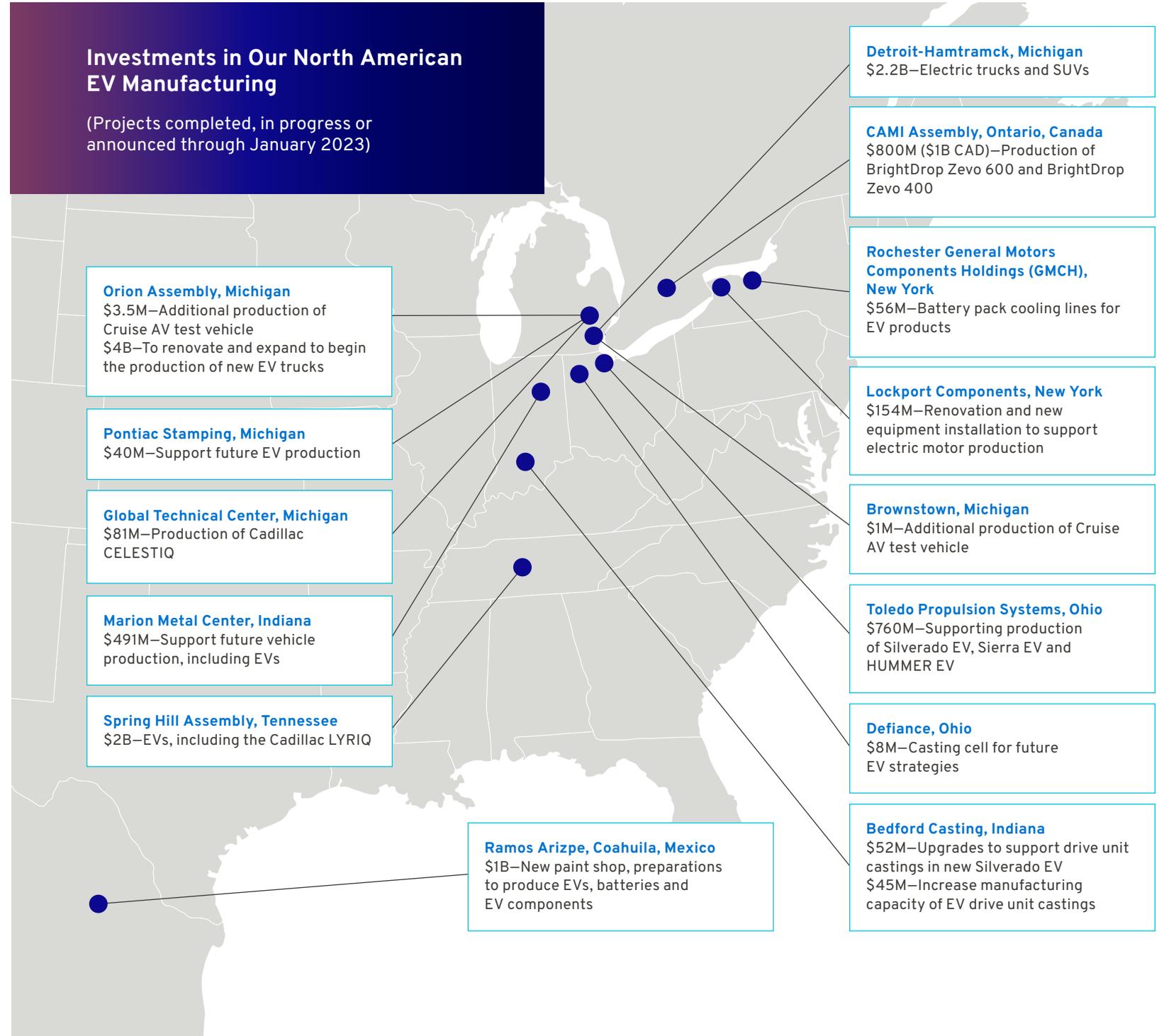
## Rapidly Scaling EV Production Capacity

In support of our ambition to expand our EV manufacturing capacity, we will continue to invest in EVs, EV software and autonomous electric vehicles. Since 2020, we have announced investments of \$11.7 billion across 14 sites in North America.



## Investments in Our North American EV Manufacturing

(Projects completed, in progress or announced through January 2023)



## CarbonCure

Following the successful implementation of CarbonCure's Ready Mix Technology in Spring Hill, Tennessee, GM engineers helped implement the technology at two more strategic locations in Lansing and Lake Orion in Michigan. CarbonCure's unique technology injects a precise dose of liquefied CO<sub>2</sub> directly into freshly mixed concrete to improve its compressive strength. This reduces the amount of cement needed and lowers its overall carbon footprint and global warming potential (GWP).

This collaboration has resulted in two more concrete producers adopting sustainable concrete technologies, further supporting our climate commitments as a member of the First Movers Coalition and helping bring sustainable concrete to the greater Michigan market.

In 2022, we used more than 100,000 cubic yards of low-carbon concrete in our projects and in 2023, we plan to double our use of low-carbon concrete to an expected 285,000 cubic yards.



## Investing in Battery Cell Manufacturing

We have announced plans to mass-produce battery cells for current and future EVs through Ultium Cells Holdings LLC (an equally owned joint venture with LG Energy Solution) in Warren, Ohio; Spring Hill, Tennessee; and Lansing, Michigan.

The first plant in Ohio opened in August 2022 and the second plant in Tennessee is currently under construction. Together, these sites are expected to create 6,000 construction jobs and 5,100 operations jobs when at full capacity.



## The Wallace Battery Cell Innovation Center

We are helping to pioneer cell manufacturing processes at our Wallace Battery Cell Innovation Center. The facility, located at our Global Technical Center (GTC) in Warren, Michigan, complements our two other existing facilities, the Estes Battery Systems Lab and our global R&D center.

This collaboration between our lab operations, R&D and product engineering teams will allow us to replicate large-format prototype battery cells in the same facility where we are developing them.

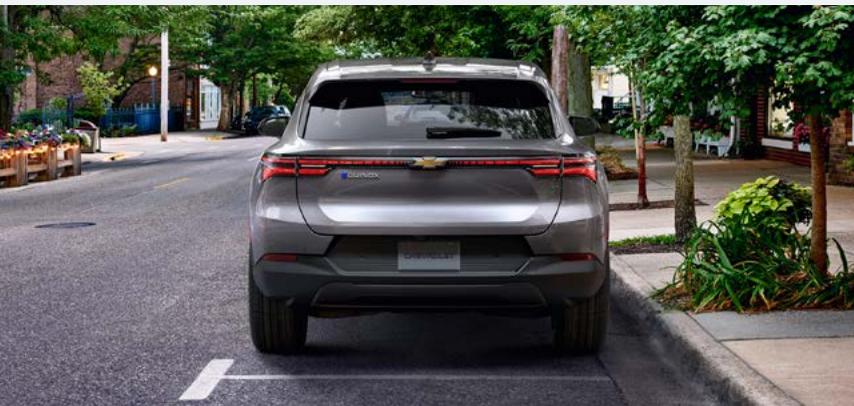
It typically takes many years working with a cell supplier to develop and evaluate a new chemistry in a large-format cell. The Wallace Center will allow us to do this much faster and use our own technology, increasing speed to market for our future battery technologies. The Wallace Center builds on the work of our R&D team, which already has more than 2,000 granted and pending patents in EV battery technology.



# Designing for the Environment

Through holistic evaluations of our sustainability impacts, we make data-driven design decisions to develop impactful technologies, materials and products that help advance GM's sustainability initiatives.

A circular approach will overcome some of the disadvantages of the traditional linear economy, in which materials are taken from the Earth, used to make products and then discarded as waste.



(Above) Preproduction model shown. Actual production model may vary. Model Year 2024 Chevrolet Equinox EV available Fall 2023.

44 GM's waste program represents the percentage of waste diverted from landfill, incinerators and energy recovery compared to a three-year average (2017-2019) baseline of total operational waste generated and is based on the Zero Waste International Alliance (ZWIA) to reflect a 90% diversion threshold.  
45 Total operational waste is defined as all relevant waste streams (≥98% of reported operational waste) that are not generated due to construction, demolition or remediation activities.

## Nature

We rely on nature for many of the materials used in our products, including metals, wood and rubber. We are working to preserve biodiversity and restore natural ecosystems at our facilities and in sourcing communities through collaborations with key partners.

- 40 wildlife conservation programs certified by the Wildlife Habitat Council (WHC)
- Working with Conservation International on agroforestry projects in the Amazon Rainforest and Felinos Pantaneiros on biodiversity conservation



## Sustainable Materials

We are aiming to reduce the carbon footprint of new GM vehicles through material selection and sourcing decisions such as lower GHG intensity processes, and more recycled and renewable content.

- Approximately 24 million pounds of recycled plastic used in GM vehicles
- Founding member of the Global Platform for Sustainable Natural Rubber (GPSNR)
- Joined the First Movers Coalition through commitments to low-carbon steel, aluminum, concrete and cement, signaling a firm market demand for a net-zero transition



## Circular Economy

Our work to improve circularity throughout the life cycle of our vehicles spans material selection and vehicle design, recycling, remanufacturing and reuse, and sustainable packaging.

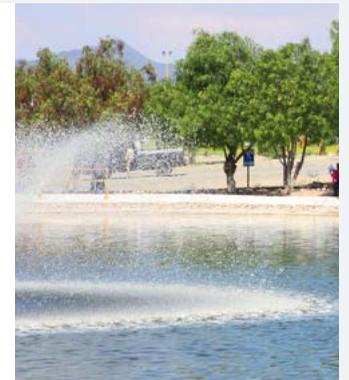
- Sold 750,000+ units of remanufactured parts (9 million units since 2013)
- Aiming to have 100% returnable, viably recyclable, reusable or compostable packaging by 2030



## Water

We are committed to managing water use in our facilities efficiently and responsibly, particularly in water-stressed locations.

- Signatory of the CEO Water Mandate
- Water consumption of 0.798 m3 per vehicle at our San Luis Potosí plant in Mexico



## Waste

We are working toward our Zero Waste<sup>44</sup> ambition by treating waste as a useful resource that is out of place rather than something for disposal.

- Diverted 1.33 million metric tons of waste from landfills, incinerators and energy recovery facilities
- Achieved a waste diversion rate of 91.8%, meeting our 2025 goal of 90% three years early<sup>44,45</sup>



# Sustainable Materials

As we transform our business to focus on the production of EVs, we aim to incorporate responsibly sourced materials in all our vehicles, and design in end-of-life (EoL) reusability and recyclability.

## Our Approach to Sustainable Materials

We are aiming to reduce the carbon footprint of the materials in new GM vehicles through material selection and sourcing decisions that transition us from traditional materials to those made with innovative new processes. We are also using more recycled and renewable content, and content utilizing a higher proportion of renewable energy, as well as carbon capture, utilization and storage (CCUS) technologies.

Our approach to sustainable materials relies on a comprehensive commodity management plan for each of our key materials: plastics, steel, aluminum, textiles, EV battery materials and more. Together, these represent more than 90% of the CO2 emissions associated with the materials we use in our vehicles.

The plans also drive collaboration within our supply chain and apply data-driven strategies to each commodity.

Read more about how we [source strategic raw materials](#).

## Recycled Plastics in GM Vehicles

To support the reduction of GHG emissions, we continue to increase the recycled content of materials in our vehicles. While such materials are not available on all vehicles, each application provides valuable insights and brings us closer to achieving our sustainability goals.

### Pounds

**12.6M** – wheelhouse liners

**4.5M** – HVAC ducts

**1.8M** – center console

**1.5M** – interior door skin

**1.3M** – window support brackets

**900,000** – door trim

**632,000** – underbody shields

**250,000** – active grill shutters

**245,000** – hubcaps

**210,000** – horn housings

**165,000** – fans and fan shrouds



## Steel and Aluminum

We engage with our aluminum and steel suppliers to identify, develop and acquire lower GHG intensity materials and products. We are working to understand our suppliers' long-term plans to achieve carbon neutrality for those materials and products, through the use of innovative new processes and technology, recycled materials, renewable energy, CCUS, carbon offsets and credits, and efficiency improvement.

We are also:

- Developing new alloys that allow increased recycled content
- Exploring closed-loop recycling to drive efficiencies and lower GHG emissions
- Continuing to develop and select metals with less mass, reducing emissions by consuming less material and by increasing the range per unit of fuel or battery energy
- Collaborating with suppliers, researchers, entrepreneurs and other organizations to develop innovative technologies and foster relationships that will enable the production of lower GHG emission metals and other materials
- Working with suppliers to establish strategic purchase agreements, like our recent agreement with U.S. Steel, which provides GM with steel that has up to 75% fewer emissions than the traditional blast furnace steel it replaces<sup>46</sup>

As part of our membership in the First Movers Coalition, GM will commit to purchase:

- **Crude Steel:** At least 10% of the crude steel used in manufacturing the sheet steel products that GM directly purchases for U.S., Canada and Mexico manufacturing facilities will be near-zero emissions by 2030, if prices are no more than 20% higher than current commercial prices and/or as approved by GM leadership

<sup>46</sup> Based on comparing Scope 1 and Scope 2 CO<sub>2</sub>e intensities for raw steel production at U.S. Steel integrated Blast Furnace–Basic Oxygen Furnace (BF-BOF) facilities and the Big River Steel Electric Arc Furnace (EAF) facility, as reported in the U.S. Steel 2021 Sustainability Report.

- **Primary Aluminum:** At least 10% of the primary aluminum used in manufacturing the sheet aluminum products GM directly purchases for U.S., Canada and Mexico manufacturing facilities will be low carbon by 2030, if prices are no more than 20% higher than current commercial prices and/or as approved by GM leadership

## Textiles

We have a goal of developing 50% recycled content on seat insert fabrics and up to 100% recycled content for overhead fabrics, carpets and floor mats in our new vehicles. Working with our suppliers, we are supporting the development of dozens of other textiles from items such as recycled plastic bottles, recovered fishing nets and plant-based fibers. We are also exploring lower-impact leather-tanning practices.

## Natural Rubber

As a founding member, GM participates on the Executive Committee of the GPSNR, a multistakeholder initiative working to make the natural rubber supply chain more sustainable. Around 55% of the global rubber supply chain are currently members of the GPSNR, including all GM tire suppliers. All members—original equipment manufacturers (OEMs), tire manufacturers, rubber producers, processors and traders, nongovernmental organizations (NGOs) and smallholder farmers—are expected to protect ecological health, local livelihoods and human rights.

As a GPSNR member, GM is required to report progress in implementing the company's [Sustainable Natural Rubber Policy](#) through [annual reporting requirements](#).



## Alternatives to Leather

We are supporting the development and commercialization of an innovative silicone-based material for seating and interior trim, offering an environmentally friendly alternative to animal leather that contains three times fewer volatile organic compounds (VOCs).

We are also working on a leather-free seating and interior trim made with plant-based bio-materials. This material is phthalate-free, [Oeko-Tex](#) certified, replaces a portion of fossil-based content with soybean oil and has a 100% recycled polyester backing made from post-consumer waste. Both materials are durable and chemically resistant.

Additionally, through GM Ventures, we have joined forces with bio-tech company MycoWorks to co-develop Fine Mycelium™, bio-based materials for our interiors. This innovative technology engineers mycelium, the densely entwined root structure of mushrooms, and offers the potential for premium, renewable materials with durability, softness and flexibility.



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# Circular Economy

GM is currently working to increase circularity throughout the vehicle life cycle. This starts with sustainable materials and vehicle designs, and continues with our recycling, remanufacturing, reuse and sustainable packaging initiatives.

GM has become a member of the [Ellen MacArthur Foundation Network](#), along with other businesses, policymakers and institutions, to promote the principles of a circular economy. Through our membership, we are investigating ways to measure and improve our circularity.



## Remanufacturing

GM's Customer Care & Aftersales (CCA) remanufacturing program is a crucial part of our commitment to a circular economy. The program helps reduce raw material needs and waste to landfill by enabling the reuse of vehicle parts through remanufacturing. These parts include engines, transmissions and other offerings, all of which meet engineering specifications.

In 2022, CCA sold more than 750,000 units, encompassing 7,000 unique parts including engines, transmissions and other offerings, in the United States. This brings our total units sold to 9 million since 2013. Alongside new service parts, remanufactured parts also enable vehicle repairs to help prolong the life of vehicles. The CCA Team also works with dealers and suppliers to encourage parts that are not currently remanufacturable to be recycled. Examples include fascias, aluminum wheels and catalytic converters, where all or part of the product is recovered for recycling or reuse.

A cross-functional team at GM identified and executed an opportunity to provide high-quality, competitively priced remanufactured headlamps to customers and insurance companies, which often use lower-quality aftermarket headlamps for claims. Our team created a specification, developed the process and identified a supplier. The materials included new components and those that could be reused once tested and validated against the original equipment (OE) specification.

Our CCA Team's catalytic converter recycling program enables the recovery of platinum, rhodium and palladium. These precious metals are injected into new catalytic converter production while other recovered metals go on to be redistributed for other industrial purposes.

## Sustainable Battery Life Cycle

GM's EV battery life cycle management program is an important element in our commitment to a circular economy and a zero-emissions future. It helps reduce energy and resource use throughout the battery supply chain and minimizes sustainability impacts across the vehicle's life, from design to EoL disposal. Recycled battery materials have a lower carbon footprint than mined materials and reduce many of the risks of human rights abuses and deforestation associated with sourcing new materials.

GM's CCA Team supports circularity on all GM field-returned propulsion batteries in the United States. These batteries flow through a GM determination process and are either remanufactured, recycled or allocated for second uses. Since 2016, our CCA Team has been successfully remanufacturing both propulsion battery packs and modules to GM specifications.



## Recycling

As we work to make our battery supply chains more sustainable, we are investigating the most efficient ways to circulate scrap battery materials back into the supply chains of future battery cells where it makes sense.

We are working with our cell and cathode manufacturers to identify global recycling partners and establish pathways for recycled material from our manufacturing battery scrap and warranty returns to reenter EV supply chains in a way that is environmentally and technologically sound. We also support the development of recycling and recycled material reuse in new cells through a collaboration with recycling companies and the Department of Energy's U.S. Advanced Battery Consortium.

We have a longstanding collaboration with Cirba Solutions, which handles dismantling and recycling components, as well as materials used in our EV batteries. Cirba also allows employees to drop off batteries at designated recycling points at certain GM facilities.

By actively enabling a use for spent battery metals and supporting high recovery rates for raw materials, the work to return recycled material to our supply chain aligns with our priority of making sure our batteries get recycled at the end of their useful life.

## End-of-Life Disposal

It is important that we dispose of EV batteries properly. Our [recyclemybattery.com](https://www.recyclemybattery.com) website provides dismantlers with valuable information on how to disable, remove, store and ship used battery packs from our EVs. We will continue to develop guidelines that support the safe handling and transport of EV batteries by EoL processors and to evaluate opportunities to enable the recycling of all batteries.

We are also engineering and refining battery packs that are easier to recycle at the end of life.

## Battery Recycling with Lithion

In 2022, GM Ventures made a strategic investment in Lithion, a Québec-based battery recycling company. Lithion's technology creates opportunities to recover raw materials. With a recovery rate above 95%—and using Québec's green energy—Lithion can reduce the GHG emissions in battery materials by over 75%, and water use by over 90%, compared to mining new materials.

Having commissioned an industrial-scale demonstration plant in January 2020, Lithion will start commercial recycling operations in 2023. This new facility will be able to process 7,500 metric tons of lithium-ion batteries a year.



## Using Sustainable Packaging

GM is focused on innovation and embedding circular principles into packaging procurement and design. As part of this work, we recently announced a new goal, aiming to have 100% returnable, viably recyclable, reusable or compostable packaging by 2030.

We have contracted with ORBIS Corporation and Monoflo International to increase the use of recycled resin within knockdown shipping containers, enabling the use of more than 7.4 million pounds of recycled resin between 2021 and 2022. Through this innovative and collaborative initiative, we increased recycled content use to approximately 80%, which is a 40% increase for these containers.

In addition, our CCA Team has developed programs to reclaim and reuse packaging—including wheel foam packaging—from remanufacturing facilities.



**“We believe that collaboration is critical when focusing on circularity. We are piloting new packaging types and materials to minimize waste, and evaluating tools that measure how much material we reuse, recycle and remanufacture.”**

**Reeshemah Howard**  
Emerging ESG Sustainability Strategies Manager

# Waste

We aim to divert more than 90% of our total operational waste from landfills, incinerators and energy recovery facilities by 2025.<sup>47</sup>

We operate in a resource-intensive industry, so it is important to integrate circular design thinking into our product development and operational footprint.

We are proud to have surpassed our waste reduction target three years ahead of schedule. This has been accomplished by achieving a waste diversion rate of 91.8%<sup>47,48</sup> and diverting 1.33 million metric tons of waste from landfills, incinerators and energy recovery facilities.

Our waste program<sup>48</sup> builds upon our previous “landfill-free efforts.” By diverting waste from landfill, incineration and energy recovery for reuse, recycling, composting and other treatment options, our waste hierarchy is aligned to drive innovations that reduce harm to the environment.

## GM Waste Hierarchy

Our waste hierarchy represents the approximate increasing benefit of each waste management method.

### Reduce / Reuse

To generate less waste, we aim to reduce the amount of waste in our products and manufacturing processes from the start.

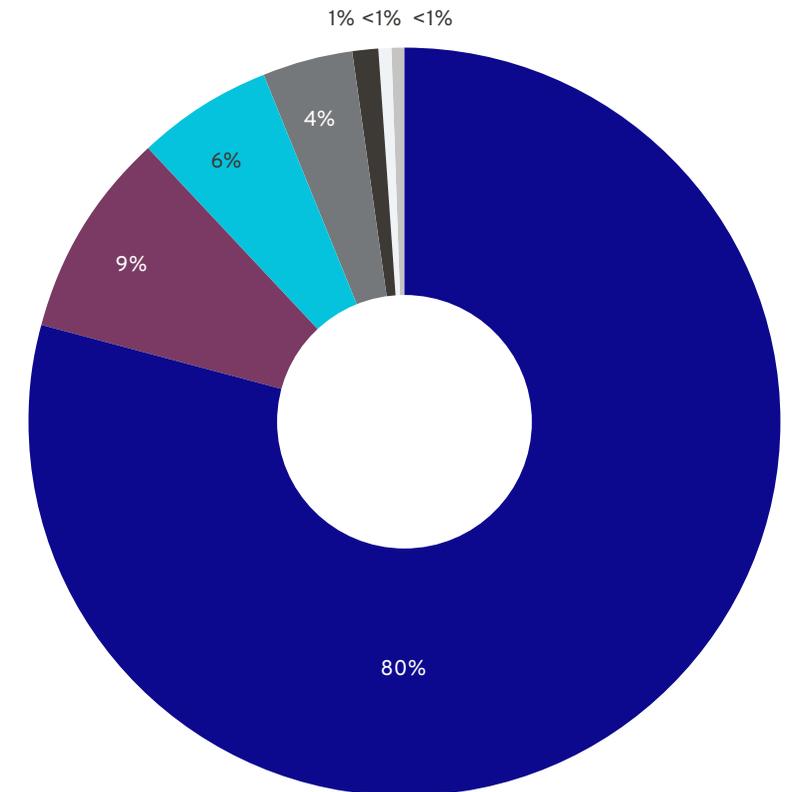
### Recycle / Compost

For material byproducts that we cannot design out or reuse, we evaluate recycling and composting options.

### Other Treatment / Energy Recovery / Incineration / Landfill

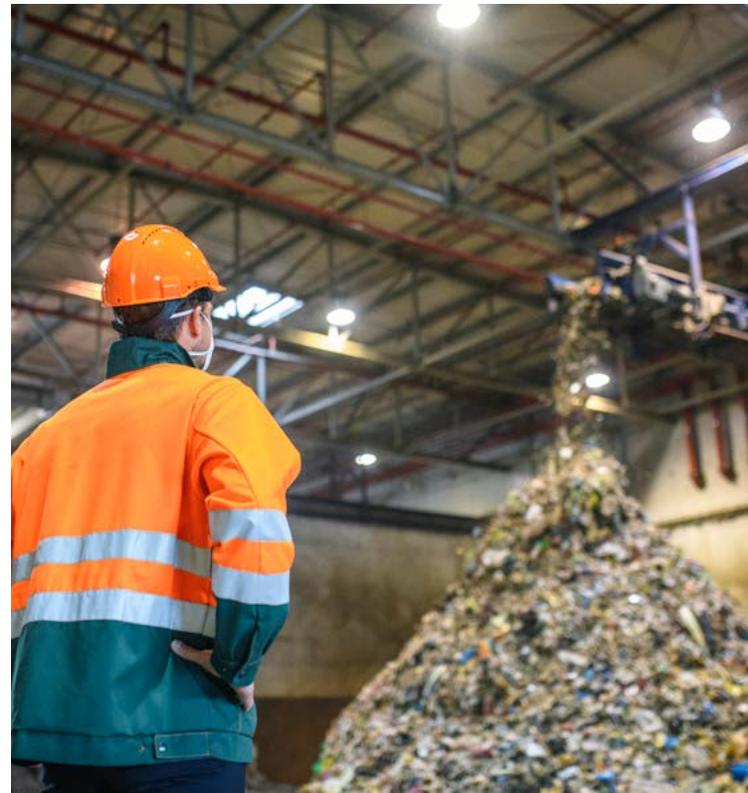
Any remaining waste materials are analyzed to ensure responsible disposal.

## 2022 GM Waste Management Methods



Key:

- Recycling
- Reuse
- Landfill
- Energy Recovery
- Incineration
- Other Treatment
- Composting



<sup>47</sup> Total operational waste is defined as all relevant waste streams (≥98% of reported operational waste) that are not generated due to construction, demolition or remediation activities.

<sup>48</sup> GM's waste program represents the percentage of waste diverted from landfill, incinerators and energy recovery compared to a three-year average (2017–2019) baseline of total operational waste generated and is based on the Zero Waste International Alliance (ZWIA) to reflect a 90% diversion threshold.

## Waste Initiatives Around the World

We have implemented a range of innovative projects to design out waste and improve reuse and recycling at a local, regional and national level.

- In late 2022, our Milford Proving Ground partnered with CLEARAS Water Recovery, Inc. to trial a low-level nutrient recovery unit within our on-site wastewater treatment plant (WWTP).
- We teamed up with Carbon Rivers to recycle some of the carbon and glass fiber from scrap Corvette fascia. We are now researching the feasibility of “closing the loop” by reusing this material in our own product line.
- In Brazil, we work to extract metal content from the filter cake generated from our wastewater treatment processes. All material with at least 5 mg of metal per kilogram are processed and to date, nearly 618 tons of metals have been extracted and recycled into steel.

## Employee Engagement

We have implemented an “everybody-in” approach to waste reduction, engaging senior leadership, employees and external partners across our global footprint.

One example of how we support this behavior is through our Zero Waste<sup>49</sup> treasure hunt programs. Through this initiative, cross-functional teams visit specified facilities to identify opportunities and best practices for reducing waste. In 2022, we led Zero Waste<sup>49</sup> treasure hunts at nine sites across the United States, Mexico and Brazil. Informal treasure hunts were conducted across all GM regions: North America, South America, China and International.

Another channel we use to promote engagement is the Sustainability Ambassador Program. This diverse group of employees across 10 countries meets monthly with senior leadership to learn about achievements and challenges, develop their skills and support GM’s sustainability aspirations.

## Collaborations to Accelerate Progress on Waste

We have a number of collaborations in place to maximize our reach and our waste reduction efforts.

- Chemical Recycling of Automotive Shredder Residue (ASR): This project demonstrates that plastics recovered from EoL vehicles can be chemically recycled and used in new automotive components.
- Automotive Industry Action Group (AIAG) and Suppliers Partnership for the Environment: Together, we are working across the automotive industry to benchmark zero waste definitions and management methods, and generate white papers to share knowledge and solutions.
- DOE’s Better Plants program: We have partnered with the DOE’s Better Plants program to help lead manufacturers to reduce their carbon and waste footprints.



<sup>49</sup> GM’s waste program represents the percentage of waste diverted from landfill, incinerators and energy recovery compared to a three-year average (2017–2019) baseline of total operational waste generated and is based on the Zero Waste International Alliance (ZWIA) to reflect a 90% diversion threshold.

## Manufacturing Reuse Practices

In 2022, we reused approximately 60 tons of steel structure from an old press line and an old area of die storage at our São José dos Campos site in Brazil, reworking and reinforcing them to be reinstalled in the new press line. This process reduced costs, avoided the need for purchasing new steel structures and reduced our CO2 impact.

Starting in 2021, two GM foundries that manufacture engine components have teamed up to reuse waste sand, completely replacing the need for virgin sand on a block production line. This project diverts sand waste from Defiance Foundry, OH, to our foundry in Saginaw, MI. This initiative reused more than 1,000 metric tons of sand in 2021 and 4,000 metric tons in 2022, with a cost saving of nearly \$230,000.

In partnership with the Ohio Department of Natural Resources, Defiance Foundry has also collaborated with our Biodiversity program to restore its on-site sludge ponds into a native wildlife habitat. In 2022, this habitat restoration project reused nearly 99,000 metric tons of sand.



# Water

Water is a scarce resource, and access to clean water and sanitation is fundamental.

We are committed to managing water use in our facilities efficiently and responsibly, particularly in water-stressed locations such as Mexico and China. We use predictive modeling to focus our efforts to preserve water quality and support water stewardship in our operations, supply chain and local communities.

Water scarcity is a global and increasingly critical issue with the potential to impact our production and the communities we support. In response, we have identified which of our facilities are under water risk stress regarding quality, quantity and regulatory issues, and developed action plans and commitments.

## Managing Water

We are committed to identifying and implementing ways to reduce our operational water use. Focusing on the areas of our business with the highest consumption, such as paint shops and cooling towers, we design water-saving measures into new processes and retrofit technology during facility upgrades. Additionally, the World Resources Institute's Aqueduct tools help us identify water risks such as floods and droughts, informing location-specific decisions ranging from introducing conservation measures to sourcing alternative supplies.

Furthermore, we explore opportunities to reduce water use at our manufacturing facilities by engaging employees through water treasure hunts.

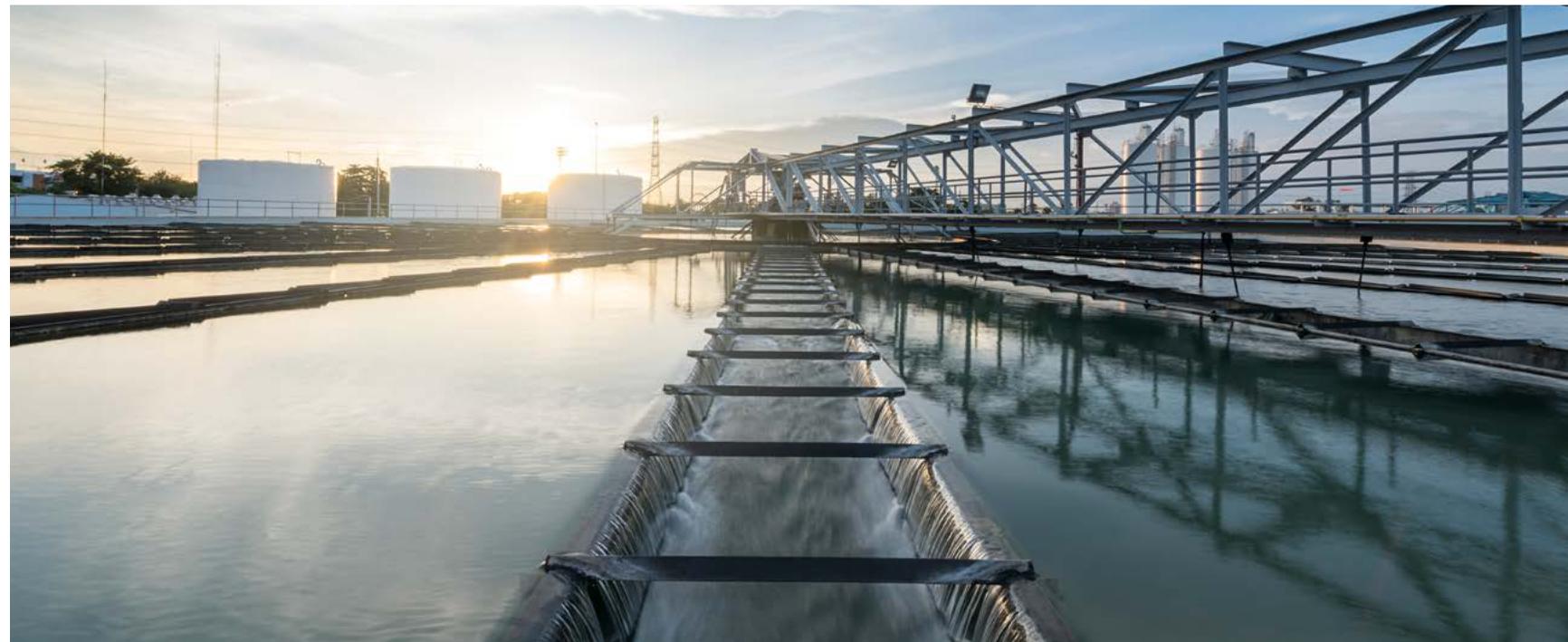
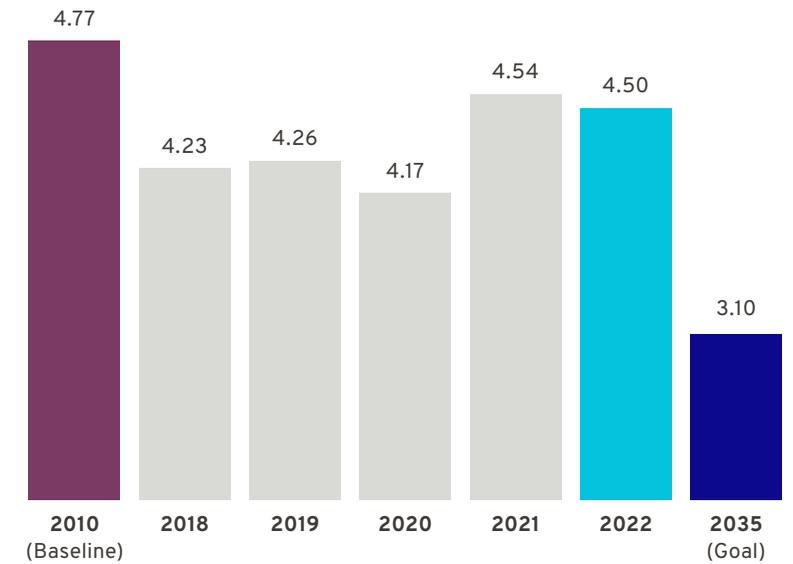
<sup>50</sup> Water intensity is a global calculation. It is a measure of global water usage in relation to global assembly production. Regional variations in volumes can impact global intensity.

## Reducing Water Intensity

Over the past decade, we have been dedicated to achieving our 2035 goal to reduce the water intensity of our operations by 35% compared to a 2010 baseline. This could save enough water to fill more than 4,000 Olympic-sized swimming pools.

We continue to invest in water-efficient systems and recycling strategies to reduce our water consumption. Global water intensity consists of two parts: base water used in our buildings, and variable water, which is directly tied to production. Lower vehicle volumes translate to higher water intensity.<sup>50</sup> We continue to implement water projects focused on both base and variable water consumption, to achieve lower intensity as vehicle volumes stabilize. In 2022, our water intensity decreased to 4.50 m3 per vehicle.

Global Water Intensity (m3/Vehicle)



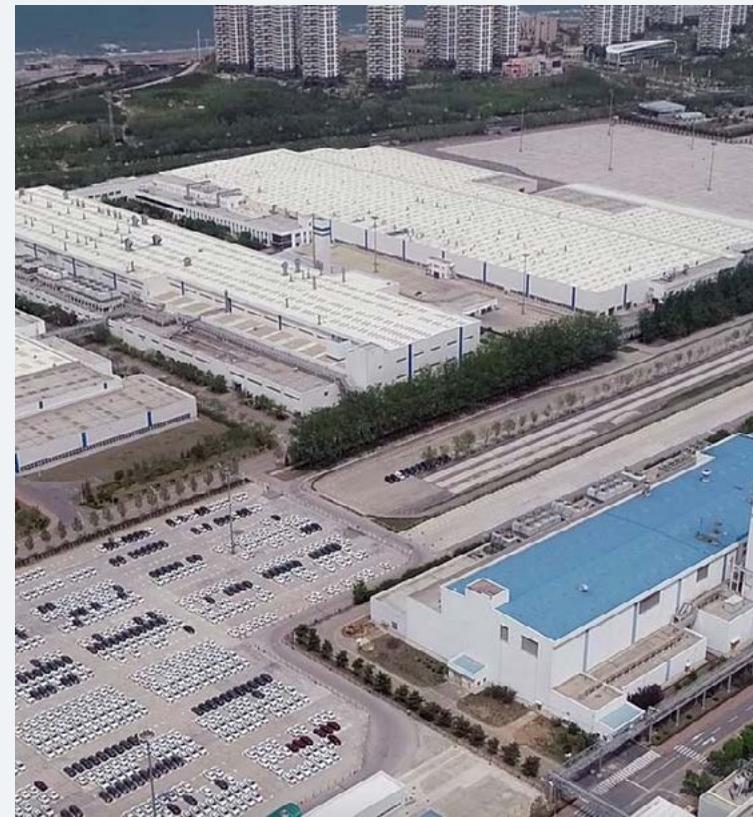
## Water Projects Around the World

We manage water locally, with each facility setting its own annual improvement targets in line with the level of water stress in the area.

**Mexico:** At our San Luis Potosí Complex, our Assembly Complex water efficiency benchmark, we continue to build upon our sustained water conservation efforts. The Transmission plant has taken actions to reduce water from processes by reducing filter cleanouts and improving oil/water separation within the circulating system. The Assembly plant, looking to improve separation and therefore the treated effluent quality, studied and implemented alternative chemical treatment methodologies. The resultant high-quality effluent is used as a source of make-up water in our paint sludge pit system, as well as within our fire extinguishing system, replacing the need for fresh water. The paint team evaluated the sludge pit system, resulting in a decrease in the volume of make-up water required to maintain this critical operation. Through these and other initiatives, San Luis Potosí's water consumption per vehicle produced is 0.798 m<sup>3</sup>. The technical, operational and cultural knowledge from San Luis Potosí is being incorporated into best practice conversations and documentation, and ultimately evaluated for implementation where applicable across our manufacturing portfolio.



**China:** Our Transmission and Assembly manufacturing complex in Dongyue continues to focus on water conservation initiatives and remains one of our lowest water intensity facilities at 1.59 m<sup>3</sup>/unit. Focusing on continued improvement, the site replaced cooling towers to minimize water loss. This increased the efficiency of its tower operations, reducing make-up water requirements and eliminating the need for several high-purity water rinses within the paint shop.



## Engagement on Water Security

In 2021, we signed the CEO Water Mandate, a UN Global Compact initiative. In doing so, we joined other global business leaders in addressing key challenges around water security. We are mapping our water progress and achievements against the mandate's six core target areas: direct operations, supply chain and watershed management, collective action, public policy, community education and transparency.

We are active stakeholders in regional watershed committees and projects to protect river basins, specifically in Colombia and Ecuador. Additionally, we are conducting reforestation and soil care activities to help us improve the water cycle in the Toluca Complex and Sierra Morelos Park area of Mexico.

We also engage with around 300 suppliers through organizations including the AIAG and undertake annual responses to CDP's Water Security questionnaire.



# Nature

Through key collaborations, we are working to preserve biodiversity and restore natural ecosystems at our facilities and in surrounding communities.

## Our Collaborative Approach to Nature Conservancy

Nature, biodiversity and ecosystem services are linked to our business. We rely on the natural world for many of the materials used in our products, including metals, wood and rubber. The production and use of our vehicles also has an impact on the environment. GM is also:

- An engagement member of Science Based Targets for Nature
- An active member of the Suppliers Partnership for the Environment Biodiversity working group
- Engaging in pollinator projects with several of our own pollinator gardens, including at the Warren Tech Center and Renaissance Center



### Wildlife Habitat Council (WHC)

The WHC certifies land that promotes wildlife conservation. Through our collaboration, we have 40 Certified programs, the most in the automotive industry. Of these, 17 are Certified Gold programs, which are considered exceptional by the WHC.

Another collaboration with the WHC was the GM Biodiversity by Design catalogue. The catalogue shares best construction practices that integrate green design into new builds, retrofits, expansions and land management at GM facilities. We have incorporated these best practices into nine GM facility transformations. They include an eco-friendly lighting strategy with energy-efficient LED lighting, as well as using skylights and reflective surfaces to maximize natural light. We also enhanced facility grounds with living walls and no-mow zones, by planting trees and by incorporating native plants into landscaping.

At our São Caetano do Sul site in Brazil, we built a green roof—the Goldenfield Space—to benefit the environment and our employees. The space contains native plants and trees, a solar energy system that generates electricity for the entire space and a self-watering system that harvests rainwater. In addition, the material used to protect the surroundings comes from 100% recycled and reused content.



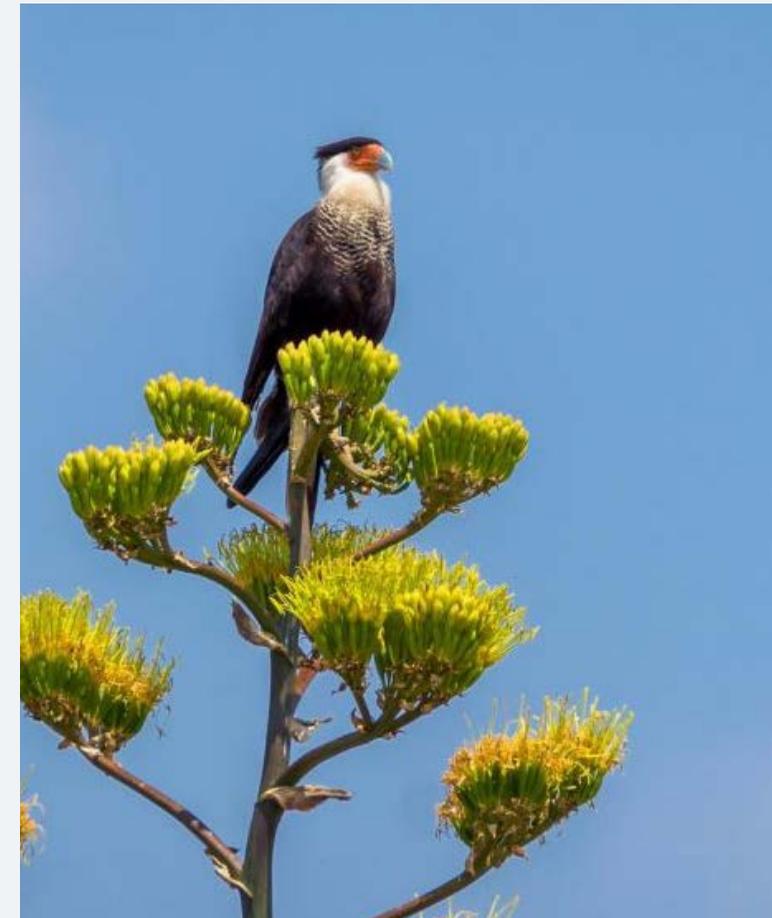
### National Wildlife Federation (NWF)

Through Eco-Green, our educational partnership with the NWF, we have supported project-based learning since 2015. With a science, technology, engineering and mathematics (STEM) focus, we offer students a chance to learn about the environment, either remotely or in person. We also support teachers' professional development and share information through videos, webinars and blogs.

In 2021 and 2022, more than 2,000 students from 20 U.S. schools took part in 75 sustainability projects, ranging from wildlife habitat restoration and water preservation to community gardens and plastic recycling. In addition, 20 GM employees contributed nearly 400 volunteer hours to assist teachers and mentor students.

### WHC Awards

In June 2022, WHC recognized our nature conservancy work by awarding GM two of its three highest honors. We received WHC's most prestigious award, the Corporate Conservation Leadership Award, for our commitment to biodiversity and conservation education across 40 programs and 136 projects. We also received the Employee Engagement Award, which celebrates 6,000 employees participating in WHC biodiversity projects in 2022.



## Conservation Projects in South America

We have invested in several strategic conservation and restoration projects in South America. For example, GM's partnership with Conservation International in the Amazon region encompasses work in four countries: Brazil, Colombia, Ecuador and Peru. In 2022, our overall support for the conservation of the Amazon totaled approximately \$500,000.



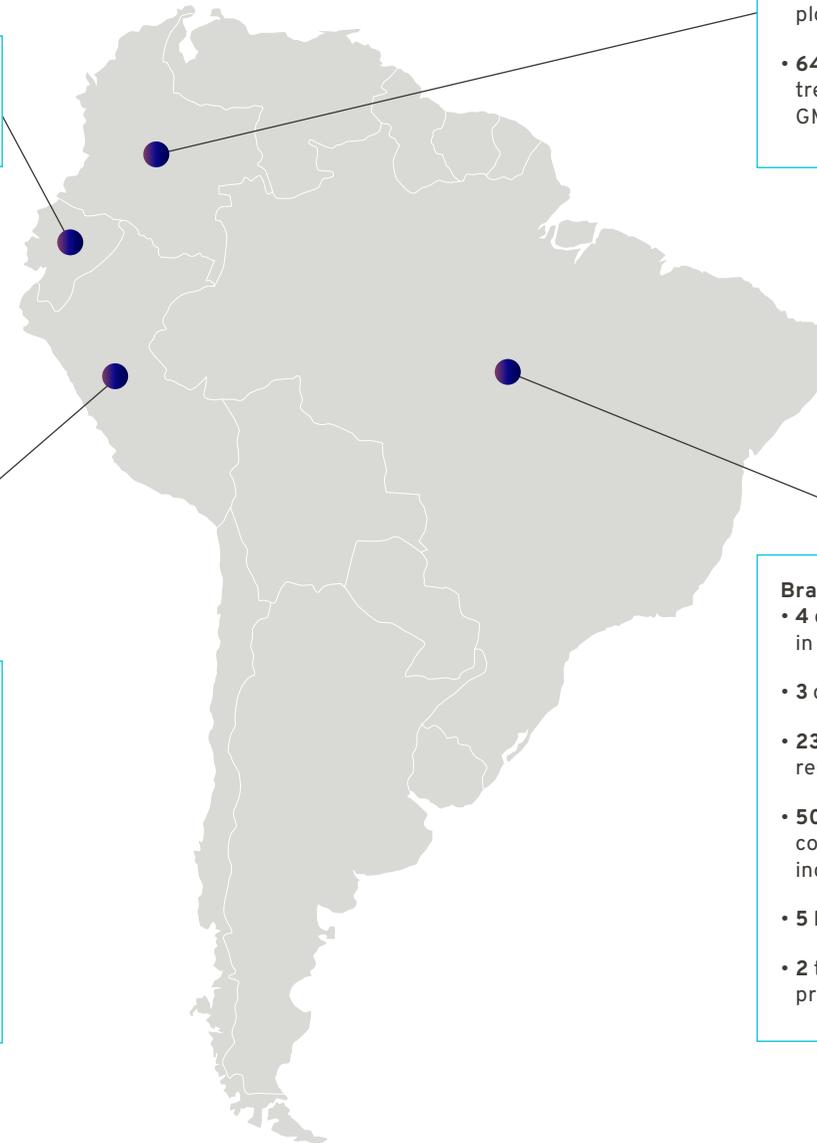
## Impact of Agroforestry Projects with Conservation International

**Ecuador**  
• 300 beneficiaries across 85 families in the Zabalo community

**Peru**  
• 4 Indigenous communities participating  
• 27 female community leaders in charge of agroforestry pilot plots across 25 hectares  
• 20 farms involved in traceability/block chain pilot for sale of certified organic cocoa  
• 17,000 tree seedlings produced

**Colombia**  
• 157 families participating in the Putumayo and Caquetá region  
• 87 hectares of agroforestry plots developed  
• 642 tons of materials and 60,000 tree seedlings transported using GM vehicles

**Brazil**  
• 4 community organizations involved in agroforestry projects  
• 3 communities with female leadership  
• 23 families impacted directly by restoration activities  
• 50 women with greater restoration, community business and gender inclusion skills  
• 5 hectares of degraded land restored  
• 2 tree seedling nurseries able to produce and store 40,000 seedlings





## Social

Our aspiration is to make GM the most inclusive company in the world. We are also focused on protecting human rights, fostering supplier relationships and bringing communities along.

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“Collectively, doing the hard work of creating consistently inclusive environments that are supported by equitable practices makes way for every team member to thrive and contribute to the GM purpose.”

**Telva McGruder**  
Chief Diversity, Equity and Inclusion Officer

# everyone.

# Climate Action Framework

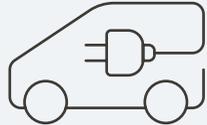
The changes driving the transition to an all-electric future represent a seismic shift in our industry. As we accelerate that future, we must listen and learn. We understand that climate change does not impact every community equally, and that sustainable technology alone is not enough for everyone to benefit from an all-electric future.

Our Climate Action Framework is rooted in four key areas: the future of work, access to electric vehicles (EVs), infrastructure and climate.

Through the [Climate Fund](#), we have committed to several capital and philanthropic ventures that are helping to close the community gaps present in the transition to EVs and other sustainable technologies.



## Focus Areas

Future of Work	EV Access	Infrastructure	Climate
 <p>Developing skills for our electric future by investing in training and reskilling, such as through our Technical Learning University and its Electrical Apprentice Program</p>	 <p>Planning to offer a wide range of EVs across segments and price points</p>	 <p>Committing to accessible charging solutions that can help meet customers where they are and understanding the need to help address charging deserts and other scenarios that can hinder EV ownership</p>	 <p>Funding organizations that are helping to close the climate gaps at the community level as well as educating key GM stakeholders</p>

## Principles

- Help make mobility safe, accessible and environmentally friendly for all
- Incorporate and normalize equity considerations across our business operations and program implementation efforts, including workforce strategy, sustainability efforts, and products and services
- Work with community-based stakeholders to identify their unique needs, assets and priorities as well as collaboratively assist impacted communities
- Advocate for climate change action, renewable energy and transportation-related policies at the federal, state and local levels
- Help support organizations that are providing diverse communities access to a more sustainable future

# A Team That Includes Everybody

To attract and inspire the most qualified and diverse talent, we focus on fostering great employee experiences in an inclusive culture in which everybody can learn, grow and thrive.

We listen carefully to feedback from across the business to improve our approach every day. Our processes focus on experiences during the recruitment process and through the employee journey.



## Recruiting Talented People

We are building a more diverse, equitable and inclusive environment to make a positive impact and deliver on our purpose. Our talent recruitment and assessment processes are strategically executed with a mindset of inclusion to allow candidates from all backgrounds to find opportunities in inspiring and challenging roles.

We recognize that everyone brings their own unique experiences to a role—and we are consistently improving our recruitment methods to enable each candidate to highlight their skills during the application and interview processes.

Our Global Talent Acquisition Team uses various outreach strategies, including market analysis, sourcing, talent marketing and communications, to generate relevant, effective candidate interactions.

We establish partnerships and use marketplace databases to expand our outreach to diverse candidates, including to universities such as Historically Black Colleges and Universities (HBCUs) and Minority Serving Institutions (MSIs). We also employ relationship management systems to notify potential candidates when relevant positions become available.

We aim to remove barriers by reframing job descriptions to focus on the capabilities and skills needed for the role. Candidates participate in structured interviews that help provide an objective platform for our teams to assess skill and behavioral alignment with the specific job needs. We also strive to create diverse teams of interviewers who can provide different perspectives when assessing a candidate.

## Leveraging Talent Innovation

Innovation is at the heart of transforming GM technologies, and we bring that same mindset to how we recruit talent. Some examples of these efforts include:

- Implementing an agnostic approach to recruiting, aiming to reach schools all across the United States. In 2022, we hired more than 2,800 early career individuals with recruitment efforts at over 500 universities. Of these, over 2,000 filled entry-level positions, with more than 700 taking intern and co-op roles. We are proud that our student program has been recognized as a Top 100 Internship Program by a panel of industry expert judges and thousands of public votes, organized by yello and WayUp.
- Collaborating closely with other organizations, such as the American Indian Science and Engineering Society, the National Society of Black Engineers, the Society of Hispanic Professional Engineers and the Society of Women Engineers.



## Engaging Every Employee

We are reimagining our workforce strategy and evaluating our systems to ensure that all GM employees have impactful experiences and feel connected to [our purpose and our values](#).

We collect employee feedback throughout the year. This includes our Workplace of Choice engagement survey, conducted every other year, and shorter “pulse” surveys that check in on important topics. These surveys provide critical information to support data-driven decisions that improve the employee experience.

In 2022, we conducted a “pulse” survey in June and a Workplace of Choice survey in October. Across both, we collected more than 199,000 global salaried and represented employee responses. A record 66% of represented employees responded to the Workplace of Choice survey, significantly higher than any prior edition.

[We use several internal channels to foster dialogue and help employees stay up to date, such as our global microsite, which hosts the latest EV news, learnings tools and available resources. We also have a Yammer channel dedicated to EV conversations and questions, and a Degreed course covering key parts of our electrification strategy.](#)



## Earn a Living. Make a Life.

[Earn a Living Make a Life](#) is a collaboration between our Marketing and Manufacturing Communications Teams with the purpose of highlighting the amazing people behind our products. It celebrates their talents and the impact that they have in their families and communities. Our manufacturing employees are much more than their jobs—they are parents, grandparents, friends, coaches, students, leaders, mentors and community advocates.

We are using billboards, digital screens, video streaming and newspaper advertisements to bring their contributions and personal stories to life. Recognizing employee impact is one way we demonstrate inclusion.

## Unlocking Everybody’s Potential

Learning continues to be a significant enabler of our employees’ growth and development. We subscribe to a 70–20–10 philosophy of learning, where 70% of learning occurs through on-the-job experiences, 20% through exposure activities, coaching, mentoring, participation in Employee Resource Groups (ERGs) and other social activities, and 10% through formal educational resources.

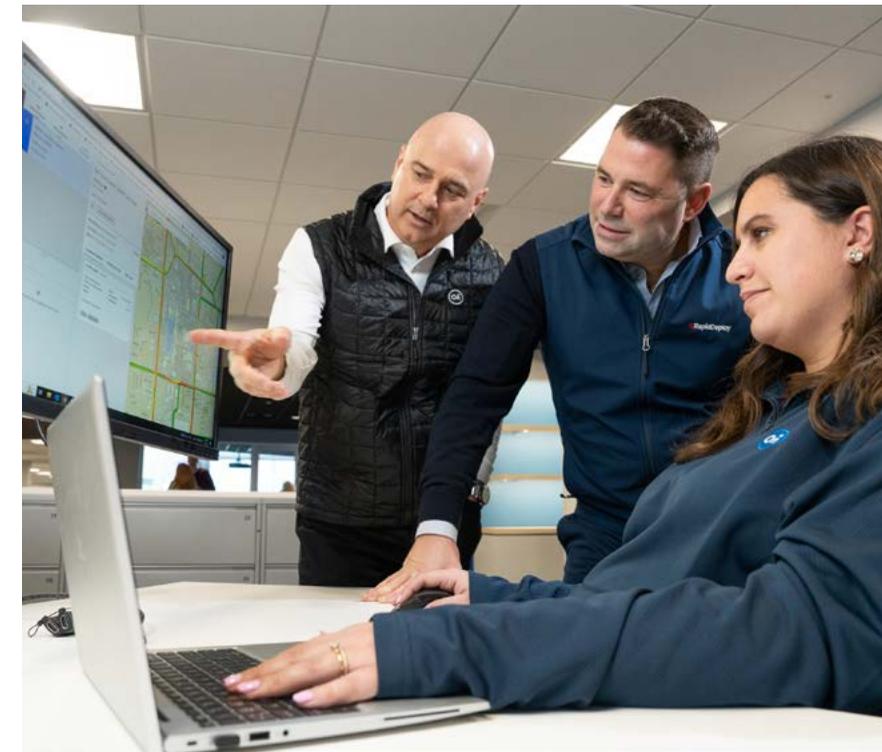
We make learning and development opportunities available to employees at all levels. GM’s Technical Education Program (TEP), established in 1984, helps us keep our engineering community on the cutting edge of innovative knowledge. We provide employees with technical coursework in partnership with top universities with impactful automotive and automotive-related research initiatives. Each program has at least one GM-directed component in which students integrate and apply their coursework knowledge to generate solutions to improve processes and solve issues resulting in measurable value to GM.



In 2022, TEP reached 601 students from 11 countries and five capstone projects were awarded TEP’s Value Add Award for enhancements and tangible savings in areas of cost, quality, innovation and customer satisfaction.

For example, we have deployed Virtual Advisor to support OnStar navigation inquiries using Google’s Dialogflow. This project—selected for TEP’s Value Add Award—focuses on expanding conversational AI across all customer engagement channels to analyze unstructured data and gain better insights. It has enabled voice calls to be routed through Virtual Advisor, which has improved customer satisfaction, expedited customer assistance and supported the OnStar blue button virtual advisor initiative valued at approximately \$6 million in first year cost savings.

Learn more on the [GM Careers website](#).



## How We Invest in Learning at GM

We encourage employees to build skills and seek out unique experiences that interest them through a variety of programs and tools.

### Degreed



Learning experience platform that supports employee learning.

# 2,500+

Enables self-assessment of skills proficiency across more than 2,500 learning pathways.



# 11,600+

Access to more than 11,600 social learning groups.

### SYNAPS

Annual innovation competition hosted by our innovation lab, iHub, where teams of employees create, develop and pitch ideas to leadership. In 2022, the competition focused on accessibility, including to the future of EV charging stations.

### Technical Learning University (United States)



A technical training umbrella that encompasses several programs, including the Electrical Apprentice Program, that aims to equip participants with technical skills, including related to the latest technologies such as Programmable Logic Controllers, robotics and vision systems. It also includes the manufacturing labs at our Global Technical Center campus that enable skilled trades workers and salaried manufacturing engineers to hone their skills using next-generation equipment such as automation and robotics.

### Talent Spotting Framework

Designed to advance our talent planning and development, we have introduced data-informed talent decisions anchored by assessments and external benchmarking. To help our people leaders identify and champion talent at every level, we launched an awareness and training program, which more than 6,000 employees completed in 2021-2022.



### Workday Mentoring Platform

Hosted through our Workday platform and open to global salaried and represented employees, we encourage individuals to establish relationships with our more than 2,500 available mentors through a range of formal and informal channels.



### The Professional Managers Network (North America)



The network is focused on customers, relationships and excellence and is open to front-line people leaders as a resource to help engage and motivate their teams. It provides business unit updates from across GM and creates opportunities for networking, career development and best practice sharing.

### Talent Cards and Talent Profiles



As part of our Workday platform, employees are able to share their unique skills and experiences as well as current and future career aspirations through their talent profiles. This allows employees and HR to view curated summaries which help to inform career discussions, talent planning and progression.

### Developing Skills for the Future

Our Automotive Manufacturing Electrical College, an immersive training program, helps prepare participants for their current or future electrical role at GM. The wide-ranging curriculum includes classroom-based and hands-on content, including structured learning at our plants.

### Leadership Development

Collaborations and available training with institutions such as Stanford University and the University of Michigan keep leaders up-to-date on emerging trends in business and society.

# Diversity, Equity and Inclusion (DEI)

We recognize that creating a culture that thoroughly embraces DEI throughout our global business is an ongoing journey.

This journey must be rooted in transparency and accountability. We continue to take deliberate actions that support our commitment to cultivating a workforce that reflects the places in which we live and work.



“Creating inclusive moments that matter can lead to great things. It’s important to make the effort to listen to and understand everyone’s perspective so you can make an informed decision.”

**Julie Xiong**  
Business Intelligence and  
DEI Data Governance Manager

In 2022, GM was recognized in the DiversityInc Top 50 for the seventh consecutive year.



## Our DEI Leadership and Strategy

Our DEI strategy is aligned with and integrated into our growth strategy across three strategic pillars: DEI Maturity, Transparency and Talent Innovation.

We continue to invest in and strengthen our Center of Excellence for DEI, in areas such as business intelligence and insights, ERG impact, internal and external partnerships, global reach, and workforce design and innovation.

We recognize that DEI is the responsibility of every leader at GM. Accountability for diversity, equity and inclusion begins at the highest levels of the company and extends across the company. Throughout the year, our chief DEI officer shares strategy, growth and progress updates with the Senior Leadership Team and Board of Directors. Additionally, the GM [Inclusion Advisory Board \(IAB\)](#), comprised of internal and external leaders and led by our Chair and CEO, provides guidance and recommendations to our Senior Leadership Team on DEI and cultural competence.

Along with examining systems and implementing structural improvements, we ensure progress and accountability using key strategic indicators, which measure diversity in the overall and executive populations. We also review progress in hiring, promotions, performance assessments, candidate populations and retention. To measure inclusion, we use an Inclusivity Index derived from our Workplace of Choice survey.

Other diversity-focused councils within GM include:

- GM Supplier Council
- ERG Leader Council
- Minority Dealer Development Council
- Women’s Dealer Advisory Council
- One DEI Council
- Disability Action Committee

## Driving DEI Maturity

We build DEI maturity across the business by engaging in critical conversations with leaders and employees to improve our interactions with each other and our customers, suppliers and communities.

We recognize that unconscious bias is one of the key impediments to building an inclusive culture, so in 2022, we trained more than 200 employees around the world to facilitate unconscious bias workshops. This helped us provide more than 22,900 employees with experiential workshops to significantly increase unconscious bias awareness in the company.

In January 2022, we launched Inclusive Leadership Coaching to provide people leaders with the tools to live up to the “Be Inclusive” GM behavior. Our inclusive leadership model encourages leaders to use the leadership levers of listening, empathizing, collaborating, leaning in and building trust. We prioritized the global manufacturing and finance organizations, and through 2022, nearly 25% of manufacturing people leaders and over 70% of finance people leaders had been exposed to the coaching experience.

## Creating an Inclusive Culture With Employee Resource Groups (ERGs)

The employees in our ERGs are an important part of our cultural transformation. ERGs are global employee-led groups that serve as a resource for their constituent members and allies and help to improve DEI maturity throughout our business.

We have 12 ERGs, with chapters spanning the United States and globally. They have executive-led advisory councils to help them progress, address issues and pursue opportunities. We are proud that more than 55% of our salaried employees are a member of at least one ERG.



### GM Generations: Our Newest ERG

Studies show that multigenerational teams add value through a diversity of skills, opinions and experiences. Formed in 2022, the GM Generations ERG’s mission is to break down generational stereotypes and bias through cross-generational sharing and teamwork. In addition to helping everyone feel respected and supported, the ERG will facilitate the sharing of professional and personal lessons.



“I believe our 12 ERGs are critical to helping GM in pursuit of its aspiration of becoming the most inclusive company in the world. They highlight our commonalities and differences, as well as the need to ensure DEI is something we consider in everything we do at GM.”

**Kerri Wright**  
GM Able Co-President and  
ETS Project Portfolio Manager

Increased collaboration between ERGs is also helping us to address intersectionality and the interconnectedness of people and issues. Through workshops and various events, our ERGs are increasing cultural intelligence and competence across the company. To continue driving progress, in 2022 we:

- Established an ERG Innovation and Growth Team to oversee and support the ERGs as they drive their initiatives forward, assist in sharing best practices and promote collaboration among ERGs
- Held our first ERG Summit, an in-person event for ERG leaders and other stakeholders, featuring speakers, Inclusive Leadership Coaching, networking opportunities and education on multicultural mental health
- Hosted our first ERG Week, which featured 19 sessions including inclusion workshops, sessions on interfaith education, multicultural market information, executive panel discussions and global content
- Introduced a new Degreed Pathway for ERG leaders, catered to those with less experience leading people, covering a range of leadership topics

To complement our ERGs, we have employees serving as DEI Ambassadors. They are engaged in inclusion committees within business functions. This structure is critical to our ability to address local opportunities as well as to scale certain DEI initiatives. It also ensures we address DEI from both local and centralized perspectives and enables everyone to lead DEI efforts.

## Making Mobility More Accessible

In 2021, GM hired the industry’s first chief engineer of accessibility to lead a new Accessibility Center of Excellence (ACE). The ACE is helping drive GM to be a trusted accessible mobility provider, supporting new ideas that help advance the 1.3 billion people the World Health Organization estimates live with a disability.

The team works across four main areas: researching and innovating with the customer, defining what it means to have accessible solutions in our vehicles, creating customizable solutions for a variety of customer needs and creating an ecosystem to grow the culture around accessibility.



“For us, helping GM fulfill its purpose of connecting people means understanding the mobility needs of the millions of customers with disabilities and incorporating that into our innovation and design strategies.”

**Carrie Morton**  
Chief Engineer – Accessibility,  
Accessibility Management

## GM's DEI Ambassadors Are Catalysts for Change

Across GM, our more than 160 DEI Ambassadors are creating and facilitating DEI messages and activities, sharing tools and resources to educate and inspire inclusive behaviors and collaborating to address barriers to inclusion.

Global Purchasing & Supply Chain DEI Ambassadors created a DEI week focused on leading inclusively with five inspiring sessions attracting an average of 700 participants each.



Sales, Service & Marketing DEI Ambassadors coordinated multiple executive-led 90-minute conversations on mindfulness, bias, mental health, inclusion and psychological safety.



Global Finance DEI Ambassadors facilitated events such as DEI All People Meeting Quarterly Roundtables, DEI showcases presented by global teams and Inclusive Leadership Coaching for their people leaders.



## Increasing Transparency

Inclusivity demands transparency. We are committed to holding ourselves accountable and demonstrating progress to our internal and external stakeholders through data collection, analysis and disclosure. We have launched an Inclusivity Index as part of our global Workplace of Choice survey. We disclosed our consolidated [Equal Employment Opportunity \(EEO\)-1 Report](#) in 2022 and commit to making similar disclosures in the future.

We also believe that transparency reaches beyond data. We aim for transparency through our guiding principles (Our Words, Our Deeds, Our Culture) and encourage open discussion of our DEI journey.

### Representation in Top Management Positions in 2022 (Within Two Levels of Our CEO)

**30%** women globally  
**17%** minorities in the United States

### Executive Population in 2022, Compared to 2021

**18%** increase in women globally  
**12%** increase in minorities in the United States

### Salaried Representation in 2022, Compared to 2021

**12%** increase in women globally  
**16%** increase in minorities in the United States

## Talent Innovation: Building New Pathways to Entry

GM is committed to evolving our talent pathways through inclusive hiring practices that highlight skills, remove barriers, enhance career opportunities and increase diversity.

We continue to build strategic relationships to expand our recruiting efforts with underrepresented communities, for example:



GM engages talent developer programs that are focused on providing technical skills to position candidates for opportunities in our workforce.

We are a founding member of OneTen—a coalition of 72 companies and leaders that aims to train, hire and advance 1 million Black Americans over a 10-year period into family-sustaining jobs with opportunities for advancement. In 2022, we hired more than 800 qualifying OneTen talent.



Our U.S. career re-entry program—Take 2—targets anyone with two or more years of experience in a field who has taken a break from that field for two or more years.

## Promoting Equality

We believe everyone deserves to work in an environment where they can be proud of who they are. GM has long advocated for women in the workplace. In 2022, we were recognized in the JUST 100 rankings, leading in the Automobiles & Parts industry, and ranked third on Equileap’s Gender Equality score for the United States. We also participate in the Bloomberg Gender-Equality Framework.

In 2022, women comprised 30% of management positions within two levels of the CEO.

We are committed to equal pay practices, and our Equal Pay Pledge reflects our belief that employees’ protected characteristics, including gender, should not factor into compensation decisions. As part of this commitment, we have a rigorous annual process that involves measuring pay equity and making adjustments if unaccounted-for discrepancies are found.

Our Disability Action Committee, managed and led by our DEI Team, is dedicated to identifying opportunities to increase inclusivity and accessibility for all employees.



“We strive to support our communities in a holistic way. That’s why our Inclusion Fund focuses on programming aligned with GM’s initiatives in education, economic empowerment, personal and professional development, and health.”

**Rhonda Fields**

Senior Manager, Corporate Giving: DE&I Initiatives

## Extending Inclusivity Into the Market

### Dealer Diversity

GM’s Minority Dealer Development (MDD) Program—established in 1972 and covering North America—is the industry’s longest-running minority dealer program. In addition, GM is the only original equipment manufacturer to have a Women’s Retail Network (WRN) program in the United States. We work diligently to:

- Increase the number of qualified diverse dealers
- Help dealers reach levels of operational effectiveness that consistently meet or exceed the general dealer population
- Encourage and attract strong leaders into retail organizations as dealer operators, managers and employees
- Provide dealers with resources to implement inclusive practices in their dealerships

In 2022, we made educational DEI resources available to more than 92,000 dealer team members.

We are proud that our MDD and WRN programs together consist of over 600 diverse dealerships within our dealer network. Our diverse dealers consistently outperform all other GM dealers in many key performance indicators and are among the most profitable of our retail partners.

### Inclusion Fund

In the United States, we are working to drive generational change through our Inclusion Fund. We aim to support historically underserved communities by supporting organizations that drive meaningful change in the areas of health, education and economic empowerment.

In 2022, GM disbursed approximately \$8 million to 45 nonprofit organizations serving a projected 3.6 million people.

These grants are expected to support outcomes which include access to quality early childhood education (with an emphasis on STEM), providing resources for entrepreneurs and improving access to mental health services so that communities have higher standards of living.

## Engaging on Behalf of Employees

GM engages in public policy advocacy on matters that reflect company priorities and policies that impact its employees. Our efforts include the following initiatives:

- CEO Action for Diversity & Inclusion Pledge
- Coalition for the American Dream
- Business Coalition for the Equality Act
- The Dialogue Project
- Gender and Diversity KPI Alliance
- Business Statement on Anti-LGBTQ State Legislation
- Human Rights Campaign supporting the Respect for Marriage Act
- Companies of Purpose Initiative
- Disability:IN CEO Letter on Disability Inclusion





# Total Rewards

We prioritize a holistic approach to well-being, which includes support for employees' physical, emotional and financial wellness.

## Total Rewards Program

Our comprehensive Total Rewards program supports our employees and their families around the globe.

Besides competitive wages, GM's benefit packages, which vary by country, can include health insurance, access to employee assistance programs, life insurance, disability benefits, profit sharing, retirement and savings plans, paid time off, tuition assistance, vehicle discounts and various other offerings.

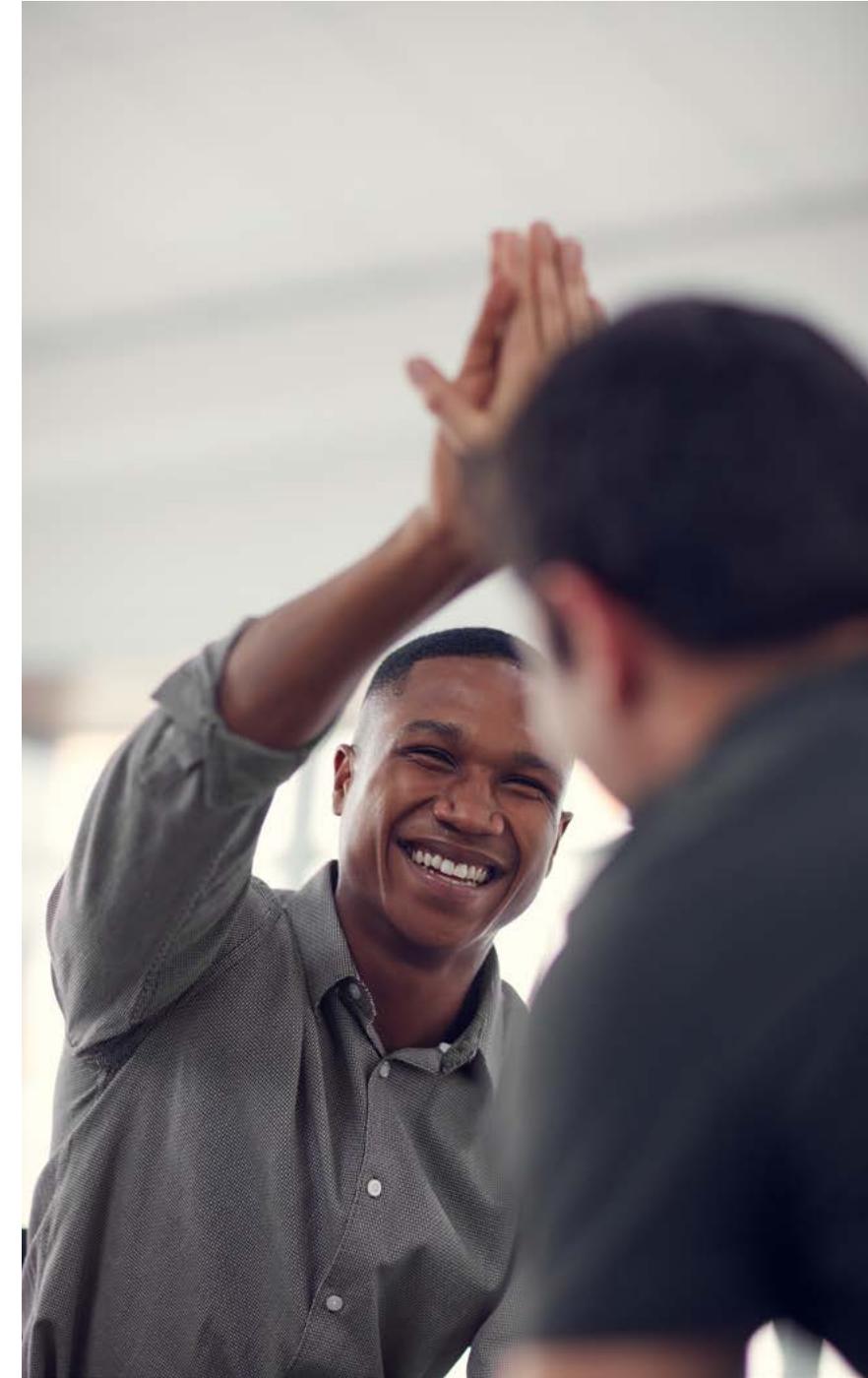
See the [Supplement](#) for more information about our employee benefits by country.

### Expanding Benefit Eligibility to Domestic Partners

In January 2023, we expanded our dependent eligibility provisions in the United States to include domestic partners, allowing our salaried employees to add domestic partners—regardless of gender—and their children to certain benefits and policies, making them eligible for medical, dental, vision and life insurance. GM now recognizes domestic partners as eligible dependents in many countries and we continue to look for opportunities to expand them further.

## Recognition Program

Recognition is an important part of our culture, and our salaried recognition program provides an online platform where employees around the world recognize individuals or multiple colleagues for their contributions and demonstrating our company values and behaviors. This program is used by 99% of our salaried employees. In January 2022, we launched a pilot at our Lockport Components location, with 53% of the hourly employees at this facility actively using the recognition program. We continue working with our union partners to find ways to recognize and engage represented employees.





# Labor Relations

At GM, manufacturing is our competitive advantage in building our all-electric future. The success of our represented employees and GM’s growth are inextricably linked.

This skilled and experienced workforce comprises nearly 95,000 industrial problem-solvers on our Manufacturing Team. It is critical that we bring this workforce along on our EV journey.

Since the beginning of 2020 through January 2023, we have announced the creation or retention of approximately 10,200 jobs as part of our investments in North America. These investments include the conversion of an assembly plant to EV production and upgrades in production capabilities for two other assembly plants. See [An All-Electric Future](#). Equally important are investments in our workforce to ensure they possess the required skills to successfully launch our future EVs. See [How We Invest in Learning at GM](#).

## Working Collaboratively With Union Partners

Healthy union relationships are built on effective communication. We engage with our union partners daily and provide opportunities for them to offer input into our processes. An ongoing priority is to ensure that our represented employees feel empowered as members of our Global Manufacturing and Operations Team and that their voices and ideas are heard on topics such as safety and quality improvement.

In 2019, GM ratified a [four-year labor agreement](#) covering employees at 55 United Auto Workers (UAW)-represented sites across the United States. This agreement provides GM-represented workers with a world-class wage, benefit and profit-sharing package, rewarding their hard work and supporting families and communities across the United States. It also outlines collaborative initiatives to enhance the health and safety of manufacturing employees as well as other aspects of the production process.

Our National Committee on Advanced Technology, made up of both union and management representatives, meets at least quarterly to discuss the impact of electrification and other advanced technologies on our represented workforce.

## Supporting Employees Through Business Challenges

When we face significant challenges to our operations, such as the global pandemic and associated supply chain shortages, we prioritize our represented employees by working to ensure the health and safety of all who are on the job.

Our responsible employment philosophy extends to times when workers are displaced because of a plant production adjustment through measures including on-the-job training programs and various types of paid leave and supplemental unemployment insurance.

For example, we have had to creatively manage the complex and fluid global semiconductor shortage, which called for inventive ways to sustain production of our highest-demand, capacity-constrained products while developing long-term supply chain solutions.

## Strong Relationships

GM works with about 28 unions globally, representing approximately 99% of our represented workforce—or approximately 60% of our total global workforce—who are covered by collective bargaining agreements.

We manage our labor relations regionally, with responsibility for labor relations held by the global manufacturing leader. Our leadership devotes time to work productively with our union partners and ensure they are updated on the business and pertinent issues. We hold regular meetings, including:

- Quarterly meetings between our CEO and UAW leadership
- Meetings between regional vice presidents of manufacturing and unions during manufacturing site visits
- Regular meetings between manufacturing directors and local unions at plant sites
- Daily discussions between plant managers and local unions

These meetings provide critical inputs to business decision making in a highly dynamic working environment.

We work continuously with our union partners to address unique issues within their respective markets. Collaborations in 2022 included:

- In the United States, [committing to invest \\$4 billion in Orion Assembly](#) to renovate and expand the facility to begin the production of new EV trucks in 2024, including the Chevrolet Silverado EV and GMC Sierra EV
- In the United States, [committing to invest \\$760 million in Toledo Propulsion](#) to produce drive units for the Silverado, Sierra and Hummer EVs, as part of our continuing transition to electric vehicles
- In Mexico, [committing to invest more than \\$1 billion in Ramos Arizpe Manufacturing](#) for a new paint plant to prepare the complex’s Global Propulsion Systems (GPS) and assembly plants to produce EVs
- In Korea, focusing on our employees and product footprint to transfer employees to where they are needed and better ensure full employment

# Vehicle Safety and Quality

GM views safety in a holistic way. We engineer our products through a human lens of driver behaviors and the driving environment, developing features and technologies that can assist drivers and help keep vehicle occupants and others safe.

## Our Approach to Vehicle Safety

At GM, safety starts with our employees. All employees are trained to have an appropriate level of safety knowledge through annual training that conveys the importance of product safety. Product safety is also stressed during an annual Safety Week, which is an opportunity to strengthen our safety culture and collectively reaffirm our foundational commitment to keeping ourselves, our colleagues and our customers safe.

We bring together technology, safety advocacy and research to improve the safety of drivers, passengers and those outside the vehicle through:

- Development of vehicle technologies to help drivers avoid crashes, reduce injuries and help save lives
- Safety advocacy to support nonprofit organizations, such as Safe Kids Worldwide
- Research conducted with world-renowned universities and institutions, including the [Virginia Tech Transportation Institute \(VTTI\)](#) and the [University of Michigan Transportation Research Institute \(UMTRI\)](#)

## A Holistic Approach to Vehicle Safety

### The Vehicle

Engineering advanced technologies and features



### The Driver

Education and advocacy to help reduce driver error and risky driving behaviors

### The Environment

Influencing vehicle and driving policies to make city and community infrastructures safer, including by providing insights to customers and governments



The vice president of global product safety and systems provides updates on product safety performance to the Board. Product safety risks and initiatives are also reviewed annually with the Board's Risk and Cybersecurity Committee.

## Developing Safe Products

Our Global Product Safety & Systems organization is responsible for vehicle safety systems, confirming and validating vehicle safety performance, identifying emerging issues and conducting field actions, including recalls.

We monitor crash data to understand where safety opportunities exist. For example, unrestrained occupants account for nearly half of in-vehicle fatalities in the United States, which drove the development of our Buckle to Drive feature. When turned on, this feature can prevent the vehicle from being shifted into gear for up to 20 seconds while reminding unbelted drivers and front-seat passengers through a chime and visual message to buckle their seat belt.

We design our vehicles to meet or exceed regulatory crash requirements, leveraging both physical testing and virtual methods. Our safety engineering development includes a rigorous safety peer review process to assess vehicle performance and incorporate our best practices and learnings into new vehicle designs.

We foster strong collaboration and communication between our Quality and Safety Teams. Metrics we gather about the efficacy of our safety features are also used to guide the development and enhancement of these features, as well as our overall safety strategy. See [Engineering Advanced Technologies and Features](#).

Learn more about our [Quality Assurance](#).

## Global Product Safety Management Process

### Investigate and Analyze



Internal product investigators and safety forensic engineers investigate potential vehicle safety issues. Data analytics experts merge inputs from numerous data sources—including Speak Up For Safety (SUFS) submissions and service records to conduct statistical analysis and apply machine learning models to help identify potential issues early.



### Review



Management, including senior leadership, reviews identified issues. Should a recall decision be made, a cross-functional team initiates all necessary actions to inform appropriate government agencies, dealers and customers.



### Execute Recalls



Safety recall remedies are provided to customers free of charge, along with follow-up communications encouraging a repair. Completion rates are monitored and shared with government agencies where appropriate. Global Product Safety and Systems works cross-functionally to analyze recalls and address functional safety with the goal of ensuring that we do not repeat previous mistakes.

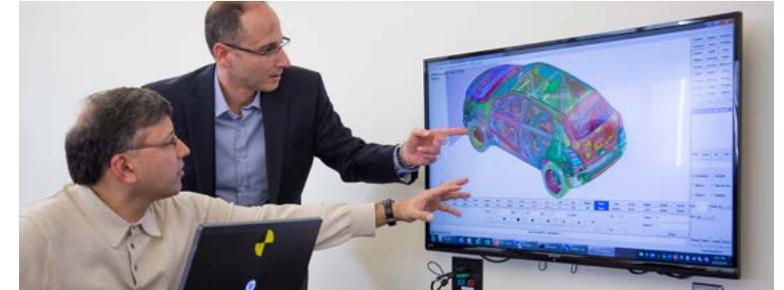
## Speak Up For Safety

Our SUFS program gives hourly and salaried employees and contractors an easy way to report potential vehicle safety issues and suggest improvements. Concerns are submitted through a toll-free phone number, a smartphone app, email or the SUFS website.

We view SUFS submissions by our employees as a measure of employee engagement in safety issues. By building a culture of safety, we attempt to identify issues sooner and reduce the number of impacted vehicles. A dedicated team evaluates concerns raised through SUFS submissions and escalates them as appropriate.

In 2022, we made enhancements to the program, including the user experience with the SUFS process. For example, interviews with prior submitters led to modifications in communication with and feedback for new submitters. We also implemented a user survey to gather ongoing feedback on user experience. To further monitor our safety culture, we conducted a Global Safety Survey to assess attitudes toward product safety and willingness to raise safety concerns.

Externally, we maintain an open dialogue with the National Highway Traffic Safety Administration (NHTSA), including regularly scheduled meetings with senior agency officials. Expedited discussions, as needed, cover field investigations, safety recalls and other identified issues. GM also participates in meetings with NHTSA and other stakeholders to advance safety discussions that benefit the industry as a whole.



### Speak Up For Safety Submissions

**38,937** **3,900** **3,419**

since program inception

approximate annual average (2018–2022)

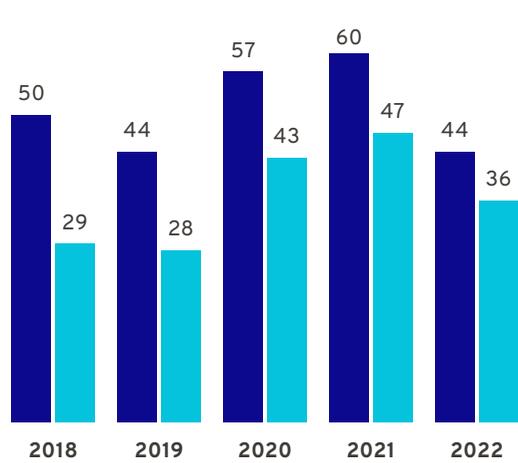
in 2022

Our Speak Up For Safety program and Safety Field Investigation processes help identify and investigate potential issues, while our Prevent Repeat Defects process captures lessons that will help us improve our standard procedures and prevent issues from recurring.



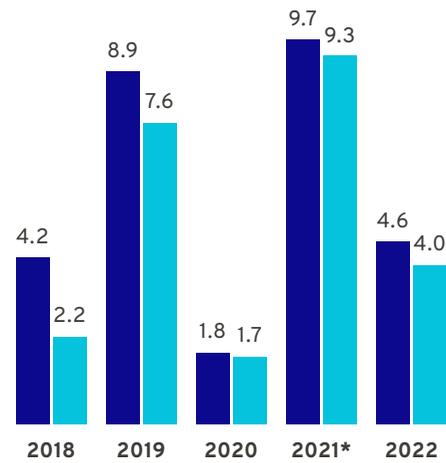
(Right) Preproduction model shown. Actual production model may vary. Model Year 2024 Chevrolet Equinox EV available Fall 2023.

### GM Safety & Noncompliance Recalls (Number of Recalls)



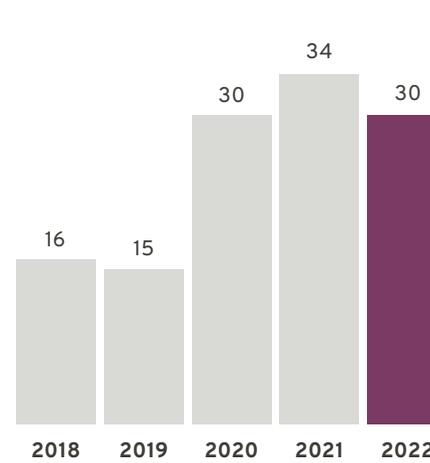
● Global ● North America

### GM Safety & Noncompliance Recalls (Vehicle Volume in Millions)



\* Includes 7M Takata airbag-related recalls.

### Number of Global Recalls with <10,000 Vehicles



Global recalls that involve fewer than 10,000 vehicles are one way we measure the effectiveness of our product safety management process. The ability to catch more issues early—with a relatively low volume of vehicles affected—and act swiftly is positive. The data above is also included in the total vehicle volume of safety and noncompliance recalls.

## Engineering Advanced Technologies and Features

In pursuit of a world with zero crashes, we provide foundational vehicle safety through crash performance, thoughtful reminders, technology to help avoid or mitigate crashes, and other safety innovations.

We are continually developing a pipeline of safety and driver assistance features, such as Rear Cross Traffic Braking<sup>51</sup> and Automatic Emergency Braking (AEB),<sup>51</sup> which can avoid or reduce the harm caused by striking the rear end of a vehicle ahead. Similarly, Lane Keep Assist with Lane Departure Warning<sup>51</sup> uses a brief, gentle steering wheel turn to alert drivers when it detects they are unintentionally drifting out of their lane lines.

## Road Safety In Collaboration With INRIX

GM Future Roads is a start-up through which we are harnessing aggregated and anonymized data insights to understand factors that can impact and reinforce safety outside of the vehicle to help keep all road users safe. Its first product, Safety View by GM Future Roads and INRIX, is a cloud-based data insights tool. It is designed to provide transportation planners and operations managers with insights to help improve road safety. It provides crash, vehicle, vulnerable road user (VRU), and U.S. Census datasets and analytical tools to deliver a holistic view that supports Vision Zero and the U.S. Department of Transportation's Safe Streets and Roads for All.

## Vehicle Safety: EV First Responder Training

With a human-first approach to safety, we expanded EV first responder training efforts in the United States and Canada. The latest training program is aimed at first and second responders and focuses on how to safely approach and address emergency situations involving EVs. The four-hour, in-person program provides information about EV technologies and best practices for safely interacting with electrified vehicles during an emergency response.



<sup>51</sup> Safety or driver assistance features are no substitute for the driver's responsibility to operate the vehicle in a safe manner. The driver should remain attentive to traffic, surroundings and road conditions at all times. Visibility, weather and road conditions may affect feature performance. Read the vehicle's Owner's Manual for more important feature limitations and information.



## Leveraging Renowned Research

We work with world-class research institutes to study how Advanced Driver Assistance Systems (ADAS) technologies are making a real-world difference on the path to a world with zero crashes. We collaborate with organizations such as VTTI, UMTRI, the Insurance Institute for Highway Safety (IIHS) and the Highway Loss Data Institute (HLDI). We utilize safety data from many sources, including crash data from the NHTSA. Following a landmark police report study initially published in 2019, GM and UMTRI continue to collect data, to analyze the performance and

field effectiveness of a wide range of GM ADAS technologies as police report data becomes available.

Because a key purpose of ADAS is to alert the driver to potential crashes, we have conducted significant research to determine how best to communicate these alerts to the driver. For example, the GM-exclusive Safety Alert Seat,<sup>52</sup> developed with research by the Netherlands Organisation for Applied Scientific Research, as well as with VTTI, can provide directional vibrations to help alert drivers of potential crash threats.

## Effectiveness of ADAS

2024 Chevrolet Silverado EV



**1**  
**Front Pedestrian Braking\***  
reduced frontal pedestrian crashes by **23%**

**4**  
**Lane Change Alert with Side Blind Zone Alert\***  
reduced lane change crashes by **16%**

**2**  
**Lane Keep Assist with Lane Departure Warning\***  
reduced roadway departure crashes by 17%, and reduced such crashes with reported suspected minor injury or higher injury severities for anyone in the crash by **21%**

**5**  
**AEB\* (or Forward Automatic Braking\*) with Forward Collision Alert\***  
reduced rear-end striking crashes by 41%, and reduced such crashes with reported suspected minor injury or higher severities for anyone in the crash by **55%**

**3**  
**IntelliBeam\***  
or auto high beam highlighting, reduced a combined set of frontal animal, pedestrian and bicyclist crashes by **22%**

**6**  
**Reverse Automatic Braking\* feature** combined with Rear Vision Camera,\* Rear Park Assist\* and Rear Cross Traffic Alert\* reduced backing crashes by **83%**

### Models Equipped With ADAS in the United States<sup>52, 53</sup>

**34**  
Forward Collision Alert



**25**  
Safety Alert Seat



**28**  
Lane Keep Assist With Lane Departure Warning



**27**  
HD Surround Vision



**27**  
Rear Cross Traffic Alert



**30**  
Adaptive Cruise Control



**29**  
Front Pedestrian Braking



**31**  
Enhanced Automatic Emergency Braking or Automatic Emergency Braking



**35**  
Lane Change Alert With Side Blind Zone Alert or Side Blind Zone Alert



52 Safety or driver assistance features are no substitute for the driver's responsibility to operate the vehicle in a safe manner. The driver must remain attentive to traffic, surroundings and road conditions at all times. Visibility, weather and road conditions may affect feature performance. Read the vehicle's Owner's Manual for more important feature limitations and information.

53 Number of models with these technologies available or as standard equipment out of 35 models: 2023 Model Year – Buick, Cadillac, Chevrolet and GMC models available in the United States. Excludes commercial vehicles.

\* Safety or driver assistance features are no substitute for the driver's responsibility to operate the vehicle in a safe manner. The driver must remain attentive to traffic, surroundings and road conditions at all times. Visibility, weather and road conditions may affect feature performance. Read the vehicle's Owner's Manual for more important feature limitations and information. All results shown are from a research study conducted with UMTRI.

## Education and Advocacy

We recognize the need to keep building public awareness of road safety risks by promoting safe driving behaviors. We invest in nonprofit relationships and initiatives to promote good behaviors such as seat belt use and educate on the dangers of impaired and distracted driving. Our current relationships and initiatives include:



For more than 25 years, GM and Safe Kids Worldwide have collaborated to help keep kids safe in and around vehicles through the GM-funded Safe Kids Buckle Up Program. Buckle Up has educated more than 29 million parents and caregivers, including around protecting young children from heatstroke. More than 2.3 million car seats have been inspected for proper installation and 792,000 car seats have been provided to families in need. In addition, 31 GM employees are certified Child Passenger Safety Technicians and volunteer to support Buckle Up events.



The Governors Highway Safety Association (GHSA) and GM are working together to combat distracted driving. With our support,

GHSA published a report with 29 recommendations that State Highway Safety Offices (SHSOs) and their partners can implement to help address this pervasive and persistent problem. GHSA and GM have provided competitive grants to seven states and they are currently implementing recommendations in the report.



America Walks engages the public to advocate for safe, equitable, accessible and enjoyable places to walk and move. With GM's support, the organization is expanding existing communications, capacity building and training programs to create safe streets for everyone.



CarFit® is an educational program developed by AAA, AARP and the American Occupational Therapy Association. CarFit enables mature drivers to assess how

well they fit in their vehicle and identify opportunities for improvement through a checklist that focuses on 10 key areas. The program also provides community-specific resources that could help enhance driver safety through correct seat belt usage.



“We have supported nonprofits with grants that focus on improving vehicle and road safety, from decreasing driver distraction to teaching mature drivers how to use new vehicle technology.”

**Alexis Brandl**  
Manager, Corporate Grantmaking

## OnStar Safety Innovation

OnStar is available to over 21 million connected vehicles globally through subscription-based and complimentary services. It is also available through the [OnStar Guardian mobile app](#), available throughout North America. Launched in 2020, OnStar Guardian allows members, and up to seven of their family members and friends, access to key OnStar safety services from their compatible mobile devices, whether they are at home, out walking or traveling in any vehicle.

In late 2021, we expanded the service to include the OnStar Guardian skill for Amazon Alexa in the United States. Now fully launched, the skill enables customers to communicate with OnStar Emergency-Certified Advisors 24/7 by simply saying, “Alexa, call for help,” to any compatible Alexa-enabled smart speakers. In 2022, we added Guardian Motorcycle Crash Response using a customized version of our algorithm.

We work in collaboration with RapidDeploy, a public safety technology company working to accelerate Next Generation 911, to supply 911 centers statewide with real-time Automatic Crash response notifications in California, Arizona, Tennessee and Kansas, along with 10 other states. The number of states adopting this technology continues to grow. Certified emergency OnStar advisors coordinate with the appropriate 911 center for rescue and response. The advisors can relieve pressure on emergency call centers by triaging situations and providing verbal medical instructions through the vehicle speakers while responders are on en route.

Injury Severity Prediction (ISP) is a feature included with OnStar’s Automatic Crash Response service for subscribers in the United States and Canada.<sup>54</sup> ISP predicts the likelihood of severe injury to vehicle occupants in a motor vehicle crash by using certain vehicle-generated crash data and other information. This is shared with public safety dispatch for first responders to mobilize the right type of support.

Additionally, Super Cruise<sup>55</sup> driver assistance technology is regularly updated via vehicle software updates. Super Cruise functionality is enabled by an OnStar data connection for real-time, precise positioning, periodic Super Cruise map updates and access to an OnStar Emergency-Certified Advisor.

## Incorporating Safety Into Electric Vehicles

Our dedicated High-Voltage Battery Safety Team works to protect the EV battery in a crash, similar to the protection of fuel systems in ICE-powered vehicles. Our batteries are packaged below the seating area and designed as an integral part of the vehicle structure safety cage. We assess the crash performance of a high-voltage battery system, and our vehicles are designed to shut down and isolate the electrical system in the event of a crash or flood to avoid the risk of electrical shock. We play a key role in leading standards committees on battery safety through organizations like the Society of Automotive Engineers International.

<sup>54</sup> OnStar plan, working electrical system, cell reception and GPS signal required. OnStar links to emergency services. Not all vehicles may transmit all crash data. See [onstar.com](#) for details and limitations.

<sup>55</sup> To operate Super Cruise, an active and eligible OnStar Connected Services plan is required.

# Workplace Safety



Our workplace safety vision is to “Live values that return people home safely. Every person. Every site. Every day.” This vision is guided by our [Global Workplace Safety Policy](#), which applies to everyone working at our sites.

## Safety Governance

Workplace safety is governed at the highest levels of the company through monthly operating reviews with global functional senior leaders, including the CEO, and through the Global Safety Leadership Council (GSLC), which comprises more than 20 senior global leaders.

Workplace safety risks and control initiatives are reviewed on an annual basis, and updates are provided to the Board’s Risk and Cybersecurity Committee. Workplace safety reviews are also a part of every meeting of the full Board.

## Global Workplace Safety (GWS) Strategy

Our comprehensive GWS strategy highlights Culture, Knowledge, Systems, Data-Driven Decisions and Risk Mitigation. These five key focus dimensions enable us to achieve our vision as we aspire to zero injuries and fatalities. We have a three-year plan for each of these dimensions, refreshed annually with new initiatives to help us continuously improve.

## Our Safety Culture

We strive for a culture where each person decides to keep themselves and their team members safe—“People First, Task Second.”

To help create mindsets where people consider safety and health in all that we do, senior leaders use a process called Safety and Health In Everyday Leadership Discussions (SHIELD) in meetings. Senior leaders ask probing questions within agenda topics to help create awareness and understanding of potential safety impacts. Using the SHIELD process has increased safety engagement during meetings and in overall decision making. Our [Employee Safety Concern Process](#) also provides a structure for employees to report potential safety issues.

The Manufacturing Leadership Team is focused on improving the effectiveness of High-Risk Global Performance Standards, which address pedestrian and vehicle interaction, electrical safe work practices, lockout energy control and fall protection practices. This effort has been expanded at the site level by developing high-risk performance standard teams led by site staff members and engaging all sites across the globe to accelerate safety culture improvements.

In 2022, we continued to incorporate leadership levers—listen, empathize, collaborate, lean-in, build trust—to drive safety culture change, conduct site safety culture assessments and deliver personalized one-on-one coaching to leaders in targeted sites.

## Knowledge: Hazard and Risk Identification

We aim for every person, at every site, to be able to recognize hazards, understand risk levels and feel empowered to address safety concerns.

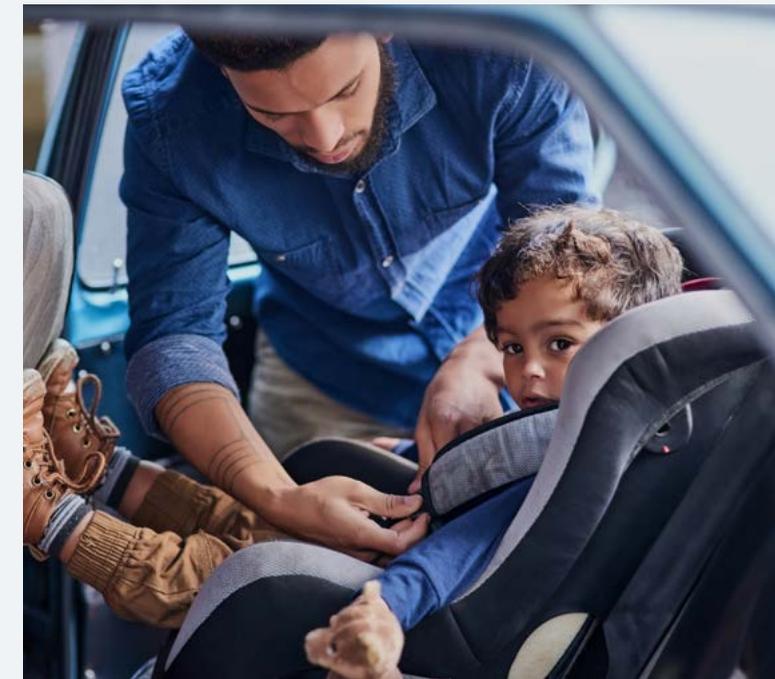
We deliver training on topics that impact potential serious injuries or fatalities (SIF) in interactive, conversational forums. We openly discuss overconfidence, normalization of deviance and other biases which often lead to perceptual distortion and poor judgment. This helps employees recognize situations where they may be inadvertently putting themselves or others in harm’s way.

In 2022, we continued to deliver these trainings, as well as content related to high-risk activities, and held learning discussions around leadership levers with people leaders across the globe.

## Global Safety Week

Global Safety Week is about celebrating GM’s commitment to safety. Participation is companywide, and in 2022 the GM China Campus in Shanghai once again supported GM’s annual tradition. At the opening ceremony, 13 GM China Safety Heroes were recognized for their behaviors, efforts, contributions and actions in regard to safety.

Throughout the week, special activities were organized for employees, executives and GM China Advanced Technical Center team members to refresh their knowledge of safety and remind everyone to focus on safety.



## Systems: Workplace Safety Systems

Our global safety management system, Workplace Safety System (WSS), drives continuous improvement across all five global workplace safety dimensions: Culture, Knowledge, Systems, Data-Driven Decisions and Risk Mitigation. It is aligned with our continuous improvement philosophy and internationally recognized standards such as International Organization for Standardization (ISO) 45001.

WSS includes a set of tools designed to drive continuous improvement through the Plan-Do-Check-Act (PDCA) cycle. The system has five components across the PDCA cycle: Policy, Risk Identification & Control, Operation, Process Validation and Leadership Review. We use global procedures, performance and technical standards to reinforce our goals, objectives and behavioral expectations for safety. These are based on recognized international standards such as ISO, Occupational Health & Safety Administration (OSHA) and American National Standards Institute (ANSI) and are mandatory for all GM operating units.

Our governance process for WSS includes annual site self-assessments, validations conducted by global or regional safety teams, and independent internal safety audits conducted by GM Audit Services, providing oversight to the Board.

In 2022, our sites continued to enhance WSS and created high-risk performance standards teams to accelerate safety culture improvements.

### Data-Driven Decisions

We use a data management system to report, collect and analyze all safety information, including incident reports, audit findings, inspections, corrective actions and risk mitigation data. This data provides us accessible insights that promote effective, data-driven decisions.

Any loss of life or serious injury in the workplace is unacceptable. Our target is zero, so that every person who enters a GM facility leaves safe and unharmed. We have a robust prevention program developed to promote the reporting and control of events that could result in severe harm or a fatality. Through it, we identify critical activities and develop global performance standards with mandatory safety controls.

In 2021, we introduced a SIF hierarchy of control (HOC) metric that is intended to focus our corrective actions on controls that have a higher level of effectiveness when compared to others. Engineering, substitution and elimination controls are much more effective at preventing recurrence of incidents than applying personal protective equipment (PPE) or administrative actions. We set a goal for 25% of our SIF actual or SIF potential events to have at least one corrective action aimed at engineering controls or above. We exceeded this goal by achieving corrective actions at this level for 39.7% of our SIF incidents.

### Risk Mitigation

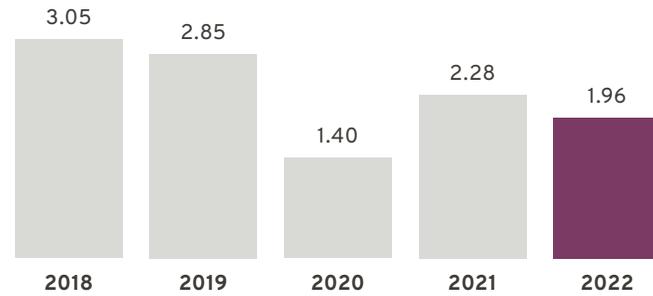
We aspire to do business with companies and contractors that share our commitment to safety. In 2022, the majority of SIF events at GM sites involved contract labor. We work to provide contractors and temporary employees the necessary training to prevent safety occurrences and build a culture of safety while emphasizing contractor oversight. Our Safety Contract Management calibration method includes a series of assessments to measure contractors' engagement with our safety culture. We have also expanded our attention to supplier prescreening and on-site safety culture validation processes.

Our EV Occupational Safety Team is continuing to assess opportunities, enhance mitigation plans and improve standards to keep employees safe across the company as our technology, facilities and work environments change. Comprised of around 30 subject matter experts from across the business, the group uses research, benchmarking and networking to create standards and training that support a safe work environment for people exposed to battery packs and EV manufacturing.



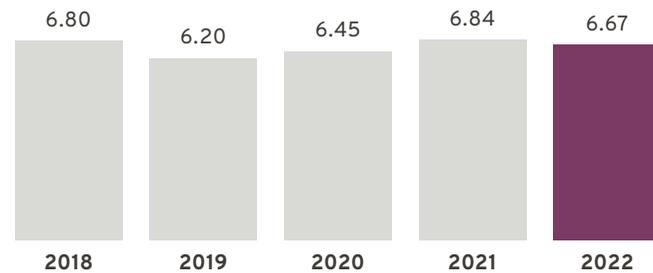
## Global Workplace Safety Performance

### Lost Workday Case Rate<sup>56</sup> (GM Employees)



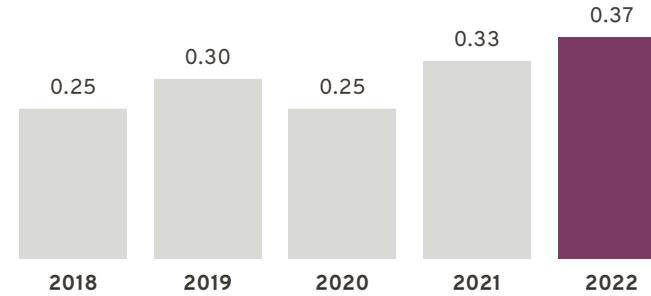
Number of lost workday injuries and illnesses per 1,000,000 work hours. This key performance indicator focuses on those injuries and illnesses that resulted in employees and contract labor losing days from work. This helps us identify areas and processes where we should center our focus to improve our safety controls.

### Recordable Incident Rate (GM Employees, Contracted Workers and Contractors)



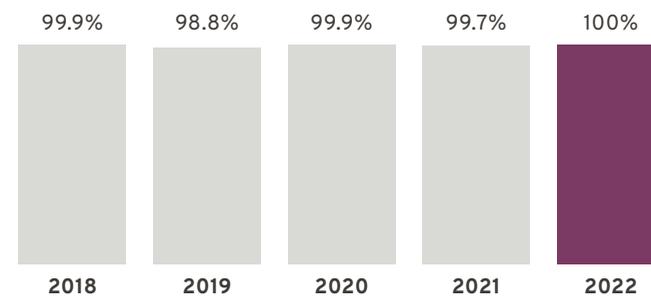
Number of incidents that resulted in injuries or illnesses that required medical treatment beyond simple first aid treatment per 1,000,000 work hours. This metric helps to identify hazards, eliminate risks and drive reporting for all incidents so that we can identify and assess areas for improvement.

### Lost Workday Case Rate<sup>56</sup> (Contractors)



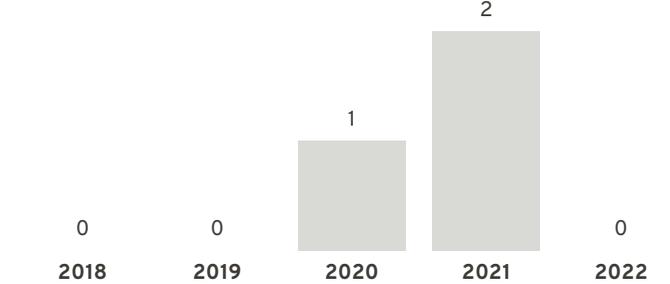
Number of lost workday injuries and illnesses per 1,000,000 work hours. This key performance indicator focuses on those injuries and illnesses that resulted in contractors losing days from work. This helps us identify areas and processes where we should center our focus to improve our safety controls.

### Global Calls to Action Closed on Time



Percent of Global Calls to Action closed on time. A Global Call to Action is a list of lessons learned and required corrective actions to be performed by each GM site globally in response to serious incidents that occurred on any GM site.

### Fatalities (GM Employees, Contracted Workers and Contractors)



A work-related incident resulting in death. Our target is zero, so that every person who enters a GM facility leaves safe and unharmed.



<sup>56</sup> Lost workday case rate is defined as an incident that resulted in an injury or illness that required a worker to be away from work for one full work day or more after the date of injury.

# Human Rights

We are committed to transparently upholding and respecting human rights.

GM’s approach to human rights is informed by our understanding of our potentially salient issues (See [Human Rights Due Diligence](#)) and grounded in our companywide commitments, which include expectations for our suppliers.

In 2022, we began creating a roadmap of specific steps for continuing to operationalize our commitments. Using expert guidance, our cross-functional team identified strategic priorities and focus areas, and has begun creating detailed action plans that will enable us to achieve our objectives, integrate robust processes across the business and achieve meaningful outcomes for people.

In 2022, we published our first disclosure for the Corporate Human Rights Benchmark (CHRB). GM ranked 10th of 127 companies, and second in the automotive industry.



## Policies

GM’s [Human Rights Policy](#) applies to all our global operations, including joint ventures in which we have managerial control. Along with our [Supplier Code of Conduct](#), the Human Rights Policy also contains obligations for suppliers and contractors. In 2022, we further updated the Human Rights Policy, reflecting new provisions in the International Labour Organization’s (ILO) Conventions regarding safe and healthy working environments.

## Human Rights Strategic Priorities and Focus Areas

Strategic priorities	Focus areas			
1. Take action on <b>salient issues</b>	▶ Build and strengthen action plans for identified salient issues	Engage affected stakeholders	Develop metrics, assess baseline, track progress	Refine supply chain saliency assessment
2. Ongoing implementation of systems for <b>human rights due diligence</b> (both proactive and reactive)	▶ Strengthen systems to identify and manage risks	Embed capacity and increase expertise on human rights	Communicate: Report and disclose on progress	Due diligence specific to high-risk commodities
3. Manage human rights impacts related to <b>specific business models and contexts</b>	▶ Assess and address human rights risks related to EVs	Build and use leverage with JVs to assess and address human rights risks	Implement human rights due diligence in select high-risk geographies	

The Human Rights Policy includes a commitment to respect all internationally recognized human rights and sets out our expectations on topics including ethical recruitment practices, diversity, anti-harassment, prohibition of unlawful discrimination, support of women’s rights and equal pay, individual privacy, reporting and non-retaliation policies. It also describes our commitment to respect the rights of human rights defenders and people who may be particularly vulnerable.

Through our [Supplier Code of Conduct](#), [Anti-Slavery and Human Trafficking Statement](#), [Responsible Minerals Sourcing Policy](#) and [Conflict Minerals Policy](#), we set out our expectation that our suppliers and business partners make their own commitments to human rights, including to the ILO’s Core Conventions against forced labor, child labor, discrimination and harassment, and protecting freedom of association and the right to collective bargaining. In accordance with our Supplier Code of Conduct, suppliers should cascade similar expectations through their own supply chains.



“Respecting human rights is a responsibility to which we have committed. And as we transition to an all-electric future, we continuously review our processes to ensure that we have the right policies in place to identify, prevent, mitigate and remediate potential impacts.”

**Claudia Arana Sanchez**  
Global Sustainability Strategies & ESG Disclosures Manager

## Governance and Management

Human rights is an important issue addressed both by the Board and cross-functionally across the company. The Board provides regular oversight of human rights-related issues and topics, including routine workplace safety reviews, and addresses human capital management and supply chain matters as needed. The Board also considers human rights expertise as part of its annual environmental, social and governance (ESG) self-evaluation to ensure it has the requisite skills and expertise to oversee our ESG opportunities, priorities and risks.

As outlined in its charter, the Board’s Governance and Corporate Responsibility Committee (GCRC) has primary oversight responsibility for human rights and conducts reviews of GM’s human rights practices, including responsible sourcing practices. The GCRC also oversees the development of ESG initiatives, strategies, policies, and sustainability and corporate responsibility practices that may have a significant impact on the company.

GM’s chief sustainability officer (CSO) is the executive in charge of our Human Rights Policy, supporting its implementation and regularly considering potential updates. Human rights-related responsibilities are distributed across GM, with senior leaders being accountable for setting strategy and overseeing day-to-day management of human rights matters related to their areas of focus.

## Communicating Our Commitments

We aim to have our entire global workforce understand our human rights commitments and be aware of our [Human Rights Policy](#). To achieve this, we developed our global communications strategy, which uses GM’s internal company site, announcement and discussion platform, ERGs, location-specific social media channels and local leadership teams. The Human Rights Policy is [available in nine languages](#), reflecting our primary operating regions, to promote ease of access and understanding.

## Human Rights Due Diligence

### Identifying Potential Impacts

To effectively prevent and mitigate potential impacts to people, the United Nations Guiding Principles defines how to identify what those potential impacts could be and prioritize them in a process known as a human rights saliency assessment.

### Saliency Assessment Process

#### 1. Evaluate

Consider, through a cross-functional workshop, severity and likelihood of potential impacts to people across our value chain



#### 2. Validate

Develop and refine potentially salient human rights impacts with internal and external stakeholders

#### 3. Act

Act – Prevent, mitigate and remediate potential human rights impacts to which we may contribute, as detailed in our Human Rights Policy



In 2021, as a part of our saliency assessment process, we conducted desktop research, reviewed industry analyses and connected with external stakeholders. We also held a series of interactive internal capacity-building and exploratory workshops with leaders from across the business and geographic footprint to identify and prioritize potential human rights-related impacts.

In workshops with a cross-functional working group, we looked at our value chain, and considered potential impacts to people throughout it and the severity and likelihood of each potential impact. Through this process, we derived an initial set of prioritized potential impacts.

Nearly all of the potential impacts we identified are systemic and not limited to GM or even the automotive industry. Nevertheless, we take seriously our responsibility to work to identify, prevent, mitigate and remediate potential human rights impacts to which we may contribute, as detailed in our Human Rights Policy.

We see the saliency assessment process as an ongoing exercise with potential impacts and prioritization that will likely change over time.



## Preventing and Mitigating Impacts

We work to recognize and address potential adverse impacts on people, and take steps to prevent, mitigate and, where necessary, remediate those impacts.

We rely on training as a tool to prevent human rights-related issues from arising, as well as robust reporting and internal review mechanisms to rapidly identify and respond to issues. Our aim is to achieve a best-in-class grievance mechanism. Our existing mechanisms include the GM Awareline, which is accessible at any time to everyone—including our suppliers’ stakeholders—to report concerns. Through our Supplier Code of Conduct, we expect suppliers to share information about the Awareline with their workers, or establish their own mechanism. See [Reporting Concerns](#).

To bolster our supply chain due diligence processes, we partner with the Initiative for Responsible Mining Assurance to promote comprehensive third-party assessments and certifications, in addition to continuing to work closely with the Responsible Minerals Initiative. See [Supply Chain](#).

We are also expanding our diligence efforts to gain more insight into whether suppliers are meeting our human rights expectations. In 2022, we launched a new platform to help educate and build supplier capacity around human rights and other critical sustainability areas. See [Supply Chain](#).



Engagement. We also continued inviting Tier I suppliers to sign GM’s ESG Partnership Pledge, which focuses on commitments to environmental, social and governance topics, including labor and human rights, ethics and sustainable procurement. See [Integrating Sustainability Into Our Supply Chain](#).

## Engaging Stakeholders

Stakeholder engagement is an important aspect of our approach to human rights. Hearing directly from the people our business may impact is critical to the development of effective policy. These conversations build trust and provide invaluable opportunities to learn and to co-create potential solutions. See our [Corporate Human Rights Benchmark Disclosure \(section B.1.8\)](#) for more information.

## Partnering to Address Human Rights

We help to advance human rights within and beyond our industry by engaging in a wide range of partnerships.



In 2022, we joined the [Responsible Sourcing Coalition \(RESCO\)](#), which aims to drive the mining value chain to go beyond risk management in its mineral sourcing work by connecting companies with Indigenous peoples and local communities. See [Sourcing Strategic Raw Materials](#).

To strengthen our supply chain due diligence, we also joined the Responsible Business Alliance (RBA) in 2022. We use the RBA’s risk assessment and auditing tools to further our human rights monitoring efforts, including by identifying high-risk suppliers for whom we create corrective action plans to remediate risk.

## Our Approach to Social Sustainability

In 2022, we recognized the need to promote alignment across the many teams at GM working on social sustainability. In response, we hosted a series of internal workshops and benchmarking exercises that fostered meaningful conversations about what leadership looks like. Those discussions helped create a common sense of ambition around our shared goals. In 2023, we aim to build on these efforts to establish buy-in around common aspirations and roadmaps across four key areas:

### Human Rights

Protecting people through sustainable sourcing practices, robust processes that manage and avoid negative impacts and by strengthening standards in our supply chain



### Diversity, Equity and Inclusion

Accelerating GM’s cultural transformation by designing new entry points, removing barriers across the company and designing products with accessibility in mind



### Well-Being

Helping our employees thrive physically, emotionally and financially through holistic programs, while making customer well-being central to our product design



### Climate Action

Driving toward an all-electric future by training our workforce, creating new career paths, supporting diverse suppliers and helping community members develop new skills



# Strong Supplier Relationships

Our vision of a zero-emissions future relies on broad-scale commercialization of electric vehicles (EVs). That future depends on a supply chain that can provide the necessary components and materials, including advanced batteries and other technologies.

Our global supply chain spans thousands of businesses and is built on strong and trusted relationships. These relationships, managed by our Global Purchasing and Supply Chain (GPSC) organization, are critical for product quality, availability, affordability and sustainability. To become the customer of choice for suppliers, we strive to improve competitiveness, mitigate risks, improve quality and efficiency in our value streams, and help to address societal concerns.

## GPSC Priority Wheel



Our supply chain strategy flows from GPSC’s Priority Wheel, a set of customer-focused priorities that align with our supply chain objectives.

## Supply Chain Scale & Scope

# \$88.2B

approximate supply chain spend

# 16,000

approximate supplier count

## Local Sourcing as a Percentage of Regional Spend<sup>57</sup>

# 74%

International and South America



# 97%

China



# 93%

North America



<sup>57</sup> Percentages are approximate. Local spend tracks local sourcing at a regional level (direct supply chain spend only).



## Sourcing Strategic Raw Materials

We know the importance of a resilient and sustainable supply chain. This is especially relevant as we expand our EV portfolio, where improving visibility and traceability in the supply chain is critical.

To manufacture our EVs, we require cobalt, aluminum, battery-grade nickel and lithium, as well as other minerals and materials. Aluminum has both battery and nonbattery needs, such as aluminum sheets for body panels and ingots for foundry applications. We pursue responsibly sourced materials at strategic tiers of the supply chain and explore where investment and partnerships can yield benefits and untapped value.

We are developing battery technologies that maximize efficiency and performance while minimizing their environmental footprint. We are also engaging suppliers to identify socially responsible and low-carbon aluminum products that can be incorporated into our vehicles.



## Battery Production and Supplier Agreements

To support an all-electric future, we have made critical investments to contractually secure all battery raw materials to support our goal of 1 million units of EV capacity in North America in 2025 (see [Leveraging the Ultium Platform](#)). We look for opportunities that align with our human rights and environmental objectives. In 2022, these included:

### GLENCORE

GM and Glencore announced [a multiyear cobalt supply agreement](#), providing the foundation for a strategic collaboration for the future of decarbonizing energy consumption through EVs. Glencore is a member of the Responsible Minerals Initiative (RMI) and Glencore's Murrin Murrin operation in Australia conforms to the Organisation for Economic Co-operation and Development (OECD)-aligned Responsible Minerals Assurance Process.

### LG Chem

We reached [a long-term supply agreement with LG Chem](#) in North America for cathode-active material (CAM), a key battery material that consists of components such as processed nickel, lithium and other materials. LG Chem plans to provide GM more than 950,000 tons of CAM over eight years, enough for approximately 5 million units of EV production.

### posco FUTURE M

In 2022, GM and POSCO FUTURE M, formerly POSCO Chemical, announced a joint venture, Ultium CAM. Together, we are [building a CAM facility](#) estimated at \$400 million in Québec, Canada, creating approximately 200 jobs.

### Livent

To obtain battery-grade lithium hydroxide for higher-performance, higher-mileage EVs, we entered [a long-term supply agreement with Livent](#). While materials are largely extracted at Livent's operations in South America, 100% of Livent's downstream lithium hydroxide processing for GM will transition to North America over the course of the agreement (six years from 2025). Livent is actively engaged in a Responsible Mining Assurance third-party assessment, has a gold rating from EcoVadis for sustainability and has announced a goal of overall carbon neutrality by 2040.

### LithiumAmericas

In February 2023, GM agreed to invest \$650 million in Lithium Americas, representing the largest-ever investment by an automaker in a company to produce battery raw materials. Lithium Americas is developing Thacker Pass, Nevada, which is the third-largest source of lithium in the world, and expects the extracted and processed lithium will support the production of up to 1 million EVs per year. Production is scheduled to start in the second half of 2026. GM will have exclusive access to the lithium from the first phase of the project and has the right of first offer on the second phase of the project.

## Responsibly Sourced Minerals

Many advanced technologies, including in our expanding range of EVs, may use minerals and materials potentially mined in conflict-affected and high-risk areas.

[In 2022, we joined The Responsible Sourcing Coalition \(RESCO\), an initiative of the Development Partner Institute. RESCO connects companies, including mining businesses, with Indigenous peoples and local communities.](#)

To identify and mitigate human rights risk, we conduct due diligence practices through our Responsible Materials Program and our Conflict Minerals Program, which are aligned with [OECD guidance](#). In addition, RESCO membership provides us with opportunities to engage with potentially impacted communities deep into our supply chain and hear from stakeholders in structured, regular engagements.

In support of our due diligence efforts, we annually request all Tier I direct vehicle component suppliers with cobalt, mica or conflict mineral (tin, tungsten, tantalum and gold) product content to complete the corresponding reporting templates (Cobalt Reporting Template, Mica Reporting Template and the Conflict Minerals Reporting Template (CMRT)).

We use the CMRT to survey Tier I suppliers with products containing tin, tungsten, tantalum and gold (3TG) that were shipped to GM. In 2022, 100% of these suppliers were surveyed to gain visibility in the smelters or refiners (SORs) in our supply chain. We also surveyed approximately 2,700 3TG supplier locations for GM's Conflict Minerals Program in 2022. We received responses from approximately 90% of those supplier locations.



The Responsible Minerals Initiative (RMI) validates that SORs pass the Responsible Minerals Assurance Process (RMAP) through a risk-based approach of processes for responsible mineral procurement.

RMI uses its ESG Standard for minerals processor auditing, which we see as a valuable tool to develop transparency and to perform additional due diligence within our supply chain. The ESG Standard marks an expansion of the RMI's scope, going beyond the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. We support the RMI Smelter and Refiner Audit Fund, which helps offset the costs of ESG audits for SORs.

Since coordinated outreach can encourage RMAP participation among nonconforming smelters or refiners, we are active in the RMI and subgroups such as the Smelter Engagement Team, which enable direct engagement. In 2022, we sent communications to 46 3TG, 17 cobalt and two mica smelters, refiners or processors.



## Supporting Supplier Communities

Through our RMI membership, in 2022 we provided support to the Pact Youth Apprenticeship Program (Pact) in the Democratic Republic of the Congo. Pact implements various programs in the Lualaba province to reduce child labor in mining, including community sensitization, positive parenting training, coordinating community stakeholders and strengthening civil society organizations.

Since 2017, Pact has assisted youth in the Kolwezi area to thrive in livelihoods alternative to mining by equipping them with vocational and business skills. Pact analyzes trade feasibility and profitability within a specific community, then identifies appropriate mentors based on character, experience, legal establishment and a local workshop. Adolescent miners aged 15–17 are then selected to undergo a six-month intensive apprenticeship in a trade.



# Supply Chain Engagement

The GPSC Team advances how GM and our suppliers achieve mutual success by providing better product quality, cost and durability to our customers.



## Engagement Programs

### GM Supplier Business Council (SBC)

The GM SBC consists of key suppliers who meet throughout the year with our GPSC Leadership Team, led by GM's vice president of GPSC. The SBC includes the Sustainability Sub-Council, comprising SBC and non-SBC members recognized for their work in sustainability, and a team of cross-functional GM employees. This group is the voice of our greater supply base on topics of sustainability.

### GM Supplier Business Meetings

GM Supplier Business Meetings are held regularly throughout the year as a global webcast where key suppliers are invited to attend and where global topics are shared. Our Chair and CEO addresses this group annually.

### GM SupplyPower

GM SupplyPower is an internet portal used to share information with suppliers, including sustainability event information, policies, guidelines, standards and reports, and best practices. In 2022, we added sustainability-related training programs that can help suppliers facilitate discussions within their organizations. In 2022, SupplyPower averaged 65,000 users.

## Training Programs

We provide external training to support suppliers in the areas of environmental management, workplace conditions, sustainability, ethics and human rights. In 2022, we conducted supplier educational sessions, covering topics that included energy reduction, conflict mineral reporting template requirements and sustainable logistics.

In 2022, we also launched our Platform for ESG Educational Resources for Suppliers (PEERS), an eLearning platform with scenario-based learning that references specific challenges to sustainability. The platform offers webinars, content from Tier I suppliers that supports our supply base and other free resources.

In December 2022, we held our third annual Supplier Energy Symposium, with speakers from the U.S. Department of Energy's (DOE) Better Plants program, Consumers Energy, Clean Energy Buyers Association (CEBA), Adient and Edison Energy.

## Energy Treasure Hunts

In partnership with our suppliers, we conduct energy treasure hunts to drive energy- and water-reduction efforts at Tier I and Tier II supplier facilities. The program's success is embedded in its collaborative framework, identifying potential energy reduction and financial savings opportunities at suppliers' manufacturing facilities. Each project uses an iteratively developed tool for data collection and assessment. These treasure hunts collectively provided recommendations to save approximately 14,000 MWh of energy and 41,000 cubic meters of water, as well as eliminating 4,600 metric tons of CO2 emissions.<sup>58</sup>

<sup>58</sup> Supplier self-reported data.

## Collaborating With Our Industry

We work closely with many industry- and supply chain-focused organizations, including the Automotive Industry Action Group (AIAG), in which we actively participate in the Responsible Materials Work Group, several of its subgroups and sit on the Corporate Responsibility Steering Committee. AIAG fosters dialogue and collaboration across the automotive industry related to conflict minerals and high-risk materials. GM also partnered with AIAG to provide training to employees and suppliers through Supply Chain Sustainability eLearning.

We are members of the RCS Global Better Mining Initiative and the Initiative for Responsible Mining Assurance (IRMA). IRMA advances responsible mining practice through a comprehensive set of standards and helps us conduct business with suppliers and partners whose standards and actions align with our own approach to integrity, responsible sourcing and supply chain management. It also fosters collaboration between companies to share best practices and drive transformation of the mining industry toward more responsible operations.

~400 GM employees in 2022 received AIAG's Supply Chain Sustainability eLearning training, which highlights fundamental principles of responsible working conditions.



## Key Industry Collaborations

Automotive Industry Action Group



Global Platform for Sustainable Natural Rubber



Initiative for Responsible Mining Assurance



International Automotive Task Force



Responsible Business Alliance



Responsible Minerals Initiative



Responsible Sourcing Coalition



Suppliers Partnership for the Environment



Sustainable Purchasing Leadership Council



## Sustainability in Logistics

GM participates in various freight sustainability programs, including the EPA's SmartWay Partnership, which we have been a proud member of since 2013. In 2021, we increased our engagement with the SmartWay program by encouraging all our eligible logistics suppliers to join. As a result, in 2022 we received commitment from U.S. and Canadian carriers representing over 96% of our 2021 U.S. and Canadian truck and rail ton-miles. In addition, GM North America was listed as a SmartWay High Performer for shippers meeting the emissions and carrier selection criteria of the program. Through participation in Transporte Limpio, a freight efficiency program administered by Mexico's Secretariat of Environment and Natural Resources, we are expanding freight efficiency efforts to include Mexican truck carriers.

Our GM Logistics Team aggressively evaluates our logistics network for optimization opportunities, studying methods for improving efficiency and emissions reduction through redesigning routes, changing modes and adjusting frequency. The integration of carbon calculation methodology allows for increased visibility of CO2 emissions when reviewing and considering various network scenarios.



# Integrating Sustainability Into Our Supply Chain

We envision an all-electric future for everyone, extending beyond GM to include our suppliers. Their commitment is a critical component of our vision of a world with zero crashes, zero emissions and zero congestion.

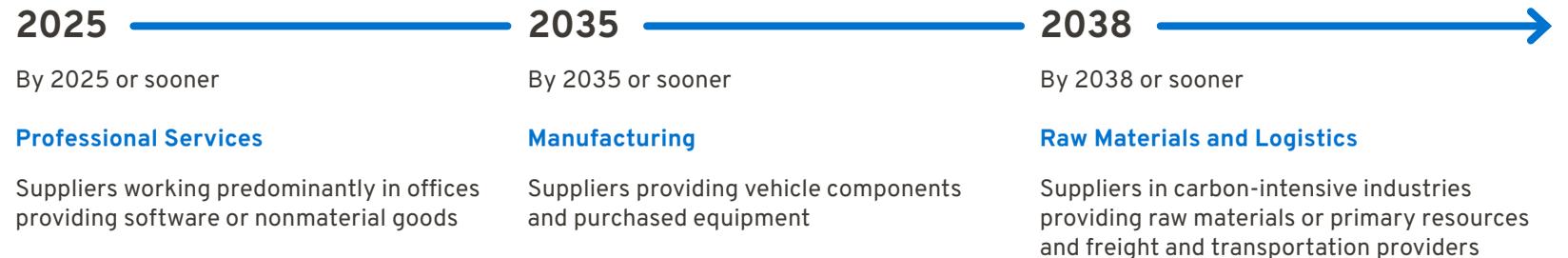
The cross-functional GPSC Sustainability Team is leading efforts to integrate sustainability into all aspects of our supply chain, with particular focus on logistics, materials, packaging and supplier sustainability. Through our engagements, we aim to build strong supplier relationships. We also encourage suppliers to identify emissions reduction opportunities with bold goals and aggressive timelines.

In 2022, we continued inviting Tier I suppliers to sign GM's ESG Partnership Pledge. This pledge holistically embraces sustainability and asks our suppliers to:

- Commit to carbon neutrality for their Scope 1 and Scope 2 emissions relevant to products or services they provide us
- Achieve or exceed a minimum EcoVadis score of 50% by 2025 in the areas of Labor and Human Rights, Ethics and Sustainable Procurement

By the end of 2022, 68% of our direct suppliers, by budgeted annual purchase value, had committed to the Pledge

## Timeline to Achieve Aspirational Carbon Neutrality by Supplier Category<sup>59</sup>



<sup>59</sup> Applies to products and services provided to GM.



GM’s Supplier Sustainability Goals Framework enables us to assess sustainability within our Tier I supplier community, including Strategic Supplier Engagement (SSE) and key indirect and logistic suppliers. Additionally, it creates a pathway for GM suppliers to take increasingly bold steps toward a more sustainable future.

Our GM ESG Partnership Pledge Guide and Supplier Sustainability Goals Framework for our Tier I suppliers communicate our supply chain goals, priorities and processes. Our Framework includes increasing levels of engagement from our suppliers with four distinct levels: compliance, commitment, growth and leadership. The framework allows for supplier-specific goals based on their priority assessments.

In 2022, we launched an enhanced packaging feature within our Online Collaboration Tool (OLCT), designed to drive our goal to have 100% returnable, viably recyclable, reusable or compostable packaging by 2030 (see [Circular Economy](#)) by helping our suppliers to quantify the impact of packaging. The new OLCT Environmental Sustainability module asks our suppliers questions about the recyclability and sourcing of their packaging materials.

## GM Supplier Sustainability Goals Framework

Level			
<b>Level 0 – Compliance</b> GM’s baseline requirements for our own suppliers	<b>Level 1 – Commitment</b> Making sustainability a priority, creating alignment, setting goals and achieving results	<b>Level 2 – Growth</b> Furthering commitment while expanding sustainability into one’s supply chain	<b>Level 3 – Leadership</b> A true accomplishment, recognizing a supplier as a pacesetter in sustainability
All Tier I Suppliers			
<ul style="list-style-type: none"> <li>• Terms and Conditions</li> <li>• Supplier Code of Conduct</li> </ul>	<ul style="list-style-type: none"> <li>• Priority assessment</li> <li>• Goals across the ESG pillars (relevant, impactful, transparent, improving, linked to United Nations Sustainable Development Goal (UN SDG))</li> </ul>	<ul style="list-style-type: none"> <li>• ≥ 4% year-over-year absolute CO2 reduction (Scope 1 &amp; 2)</li> <li>• Sustainable procurement program</li> <li>• Supplier to cascade goals into own supply base</li> <li>• Minimum ratings (CDP, EcoVadis)</li> </ul>	<b>Industry leader:</b> <ul style="list-style-type: none"> <li>• Leading innovator</li> <li>• Ambitious targets (Scope 1, 2 &amp; 3, SBTi, Zero Waste)</li> <li>• Proactive actions</li> <li>• Life cycle assessment (full)</li> </ul>
Enrolled Suppliers*			
<ul style="list-style-type: none"> <li>• Score in EcoVadis</li> <li>• CDP participation</li> <li>• Industry specific participation (e.g., GPSNR)</li> </ul> <p>* Initially, Strategic Supplier Engagement (SSE) suppliers, key indirect and key logistics suppliers will be eligible to become enrolled suppliers.</p>	<ul style="list-style-type: none"> <li>• ≥ 3% year-over-year absolute CO2 reduction (Scope 1 &amp; 2)</li> <li>• Actively support GM’s commitment to sustainable materials and packaging</li> <li>• Strong social sustainability commitment</li> </ul>		

## Assessing Performance

We use the EcoVadis platform to assess supplier management systems to support environment, labor and human rights, ethics and sustainable procurement. See [Supply Chain Compliance](#).

By the end of 2022, approximately 90% of our direct suppliers, by budgeted annual purchase value, had enrolled in the EcoVadis platform. The average score of all GM's rated suppliers is approximately 51 out of 100.



## CDP Supply Chain Initiative

We have participated in the CDP supply chain survey since 2013 and have collaborated with CDP and our suppliers to accelerate environmental action.

All our direct material strategic suppliers are invited to complete the CDP Climate Change and Water Security surveys, in addition to a subset of indirect suppliers and our top strategic logistics suppliers. In 2022, direct suppliers representing 90% of our budgeted annual purchase value participated in CDP.

We reached a response rate of over 84% in 2022 among in-scope SSE and key logistic suppliers with the Climate Change survey. We are now aiming to increase participation beyond our targeted and strategic suppliers.

## CDP Supply Chain Response<sup>60</sup>



### Climate Response

**84%**

response rate from enrolled suppliers



**\$1.6B**

estimated annual monetary savings from emissions reductions

**55%**

of suppliers engaging their own suppliers

**60%**

reporting active targets

**35M**

(metric tons) estimated annual CO2e savings



### Water Response

**69%**

response rate from enrolled suppliers

**25%**

of suppliers engaging their own suppliers

**78%**

reporting active targets and/or goals



**52%**

reporting any water-related policy



**59%**

reporting water accounting



<sup>60</sup> Data obtained from CDP.

# Supply Chain Compliance

We have high expectations of sustainable and ethical conduct of suppliers, who are expected to act consistent with our integrity, principles and values.

We are committed to upholding human rights across our network of suppliers and have several policies in place, including our [Human Rights Policy](#), [Conflict Minerals Policy](#) and [Responsible Minerals Sourcing Policy](#). When sourcing, we review criteria including meeting conflict mineral reporting requirements, CDP participation and EcoVadis scores when available.

The EcoVadis assessment includes evaluation of a company's policies and practices related to numerous significant human rights-related issues as reported by the company, such as working conditions, child labor, forced labor, human trafficking, diversity, discrimination, harassment, health and safety, and social dialogue.

We ask that suppliers participate in the EcoVadis platform in connection with their request for quotes. As of March 2023, over 900 GM suppliers have participated, including more than 200 SSE suppliers.

The GPSC Ethical Sourcing Team identifies suppliers below our minimum EcoVadis scores for Ethics and Labor and Human Rights categories and engages with them to implement corrective measures. We also have a risk remediation process for suppliers identified as nonconformant. Learn more in [section B.1.6 of our 2021 CHRB Disclosure](#).

Our [Supplier Code of Conduct](#) and purchase contract Terms and Conditions set out our approach to ethical practices. This includes our prohibition of child labor or any other form of forced or involuntary labor, abusive treatment of employees or corrupt business practices.

We aim to remedy supplier nonconformance to our policies and Supplier Code of Conduct. If we cannot mitigate the risk, we re-evaluate the business relationship.

Our expectations also include compliance related to data protection and privacy, wages, hours and conditions of employment, subcontractor selection, antidiscrimination, and occupational health and safety. We also expect suppliers to cascade these or similar requirements to their own value chain.

In 2022, we updated our Supplier Code of Conduct to include:

- More detailed expectations regarding labor and human rights, health and safety, environmental practices and business integrity
- Updated expectations regarding treatment of human rights defenders, due diligence requirements for responsible sourcing, respect of land rights, implementing grievance mechanisms and appropriate internal management systems
- Closer alignment with GM's Human Rights Policy, Conflict Minerals Policy, Responsible Minerals Sourcing Policy and ESG Partnership Pledge



**“We strive to align GM’s business endeavors with our ESG goals. When these goals and values are shared across the supply base, it makes a difference in communities and the environment through supply chain tiers.”**

**Maryellen Salliotte**  
Social Responsibility Supervisor, GPSC Ethical Sourcing Team

When we become aware of violations or alleged violations of our Supplier Code of Conduct, we respond swiftly and appropriately, up to and including the termination of business relationships.

We conduct annual supplier self-verification surveys to validate adherence to the Supplier Code of Conduct and contractual obligations. Supplier responses to the survey are reviewed and, if required, escalated to remediate risk and noncompliance. We directly address any noncompliance disclosed in surveys or otherwise identified with suppliers.

Approximately 3,500 suppliers participated in self-verification compliance surveys in 2022.

86% of approximately 4,000 supplier locations are third-party certified to the IATF 16949 Quality Standard.

GM Tier I suppliers must be compliant with IATF 16949 Quality Standards, which require responsible supply chain practices as well as policies on employee code of conduct, anti-bribery and ethics escalation policy (“whistle-blowing”). [Learn more in Human Rights.](#)



# Supply Chain Disruption

Supply chain visibility is key to proactively identifying and mitigating sustainability risk and impacts.

Our in-house supply chain visibility tool integrates GM plants, Tier I, II and III suppliers, and logistics nodes to map geographic locations and relationships across our global supply chain. The tool also constantly maps and monitors supply chain disruptions and potential human rights issues worldwide, including those affecting members of our supply chain.

Through our monitoring process, we can identify suppliers potentially involved in human rights events and, with our Supply Chain Risk Management Team, notify appropriate GM Global Supply Chain Crisis Response Teams. These teams work cross-functionally with Tier I suppliers and our functional Purchasing, Logistics and Engineering Teams to mitigate potential human rights or sustainability risks. In addition, our internal teams determine ESG risks for each commodity and communicate ESG trends throughout the purchasing organization.

## How We Monitor and Manage Supply Chain Risks



Senior leadership review at least four times per year



Cross-functional meetings



Board Risk & Cybersecurity Committee



Risk Advisory Council



Quarterly risk dashboard updates



Annual CEO business unit reviews



Annual global risk assessment



Senior Leadership Team interviews

## Supply Chain Monitoring



1 Use innovative tools and real-time data analysis to monitor catastrophic events (e.g., earthquake, hurricane) and isolated disruptions (e.g., factory fire, labor strike)

2 Report all potential impacts to regional command center

3 Receive information on suppliers and supply chain tiers through third-party services

4 Factor risk scores into sourcing process

5 Develop mitigation plan for high-risk areas





# Supporting Diverse Suppliers

GM continues to build upon our legacy of leadership by helping diverse suppliers advance.

## Our Vision

Achieve equitable and sustainable supply chain inclusion goals that ensure long-term viability for our diverse supply base



## Our Mission

Serve as bridge builders, connecting an ecosystem of diverse suppliers, communities, advocacy organizations and customers

## Our Aim

Ensure that our connections drive lasting business relationships, customer loyalty and world-class parts and services that support our long-term viability



In 1968, we became the first OEM to establish a formal supplier diversity program. To support diverse suppliers, we contribute to many community initiatives, aligning our actions with our vision.

For over a decade, we have attracted thousands of attendees to our annual Supplier Connections event to strengthen existing relationships, enhance our business acumen and identify new sourcing opportunities. Despite the impact of COVID-19, we supported advocacy partners, such as the National Minority Supplier Development Council, in preparing, positioning and propelling minority business owners to the next level of achievement during a challenging time.

In 2022, we invested over \$123,000 in technical assistance programs, reaching more than 47 diverse businesses through key collaborations.

Learn more about GM's [Diversity, Equity and Inclusion](#) program.

## Recognition for Our Work in 2022

### Inducted

Into the Hall of Fame by the Women's Business Enterprise National Council (WBENC)



### Recognized

As the Forefront 50: Top Corporations for Minority Business by the National Minority Supplier Development Council (NMSDC)



### Nominated

for Corporation of the Year by Michigan Minority Supplier Diversity Council (MMSDC)



### Received

Excellence in Supplier Diversity Award from Great Lakes Women's Business Council (GLWBC)



GM is an active member of the Billion Dollar Roundtable (BDR) and joined as a charter member in 2001. The BDR was created to recognize and celebrate corporations that achieve spending of at least \$1 billion annually with diverse-owned companies and promotes and shares best practices in supply chain diversity excellence through policy papers, webinars and summits. As a corporate member, GM aims to drive supplier diversity excellence through best practice sharing and thought leadership.

\$4.4B approximate spend with North America diverse Tier I suppliers<sup>61</sup>

\$2.5B approximate spend with North America diverse Tier II suppliers<sup>61, 62</sup>



“We are helping strengthen economic prosperity with diverse suppliers by utilizing certifying bodies, so that more diverse businesses run by women and those from minority groups can work with GM.”

**Pollyette Lenear**  
Supplier Diversity Program Manager,  
Supplier Engagement

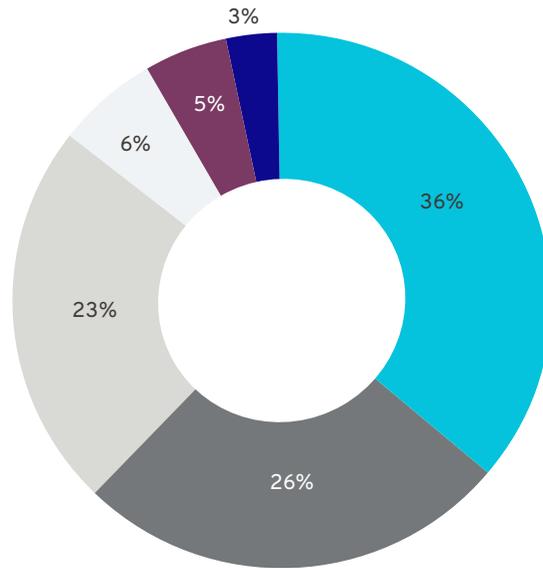


“GM is committed to building a culture and team that looks like the communities we serve. We are building bridges that connect people. Buying from small, local and diverse businesses changes lives. This builds economic wealth and empowerment in our communities.”

**Tamara Hicks**  
Assistant Director, Supplier Engagement

61 United States and Canada spend only.  
62 Tier II spend is self-reported by suppliers.

### 2022 Tier I Diverse Supplier Spend by Ethnicity—North America<sup>63</sup>



- Asian Pacific/Indian
- Women, Nonminority
- African American
- Hispanic
- Canadian Aboriginal
- Native American

### Supplier Diversity EV Immersion Symposium

In October 2022, we invited our 50 largest diverse suppliers, potential suppliers and relevant nonprofits to Warren, Michigan, for our Supplier Diversity EV Immersion Symposium. Designed to give diverse suppliers insights into our industry’s future, the event also helped business leaders learn how to align on a shared strategy for long-term sustainability as a GM supplier. Sessions showcased GM’s new EV technologies and programs and considered how diverse suppliers can remain competitive in any economic environment.

## Diverse Media Suppliers

In the United States and Canada, GM approaches diverse media relationships through our stated action plan, using diverse media to enable engagement, economic empowerment and sustainable growth. The action plan is realized through five components:

### Strengthened Commitment

- **Increased Diverse Media Spend:** In 2022, GM achieved our goal of investing 10% of our total annual media spend in diverse-owned and -targeted media, and we expect to maintain this performance in 2023.

### Deeper Engagements

- **Diverse-Owned Media Summit:** GM hosted our second Diverse-Owned Media Summit in May 2022, attracting over 300 individuals and demonstrating our commitment to building relationships through communication and collaboration. During the Summit, we announced our partnership with the [Michigan Minority Supplier Development Council](#) (MMSDC) to sponsor Minority Business Enterprise certification and recertification of summit participants.
- **Vendor Profile Analysis:** We encouraged diverse suppliers to submit an overview of their business to help us understand areas of opportunity for collaboration.
- **Quarterly Series:** In 2022, we introduced a learning series designed to aid in continuous dialogue, information sharing and inspiration for diverse supplier owners.

## Sustainable Growth

- **Diverse Marketing Incubator Fund:** GM is allocating \$50 million over 10 years to support and scale diverse marketing companies. This investment is to support sustainable growth and is incremental to GM’s media spend. The initiative is expected to foster equitable representation of media and marketing partners through three strategic pillars of business development, analytical capability and innovative creative marketing.

## Increased Flexibility

- **Revisited Payment Terms:** GM was an early adopter to shorten payment terms and offer greater flexibility to our diverse-owned marketing companies, modifying our standard payment terms and reducing payment timing from 60 days to 30 days. This underscores our priority to create a win-win for diverse media companies and GM.

## Expanded Opportunities

- **Prospective Partnering Analysis:** We expect our media buying agencies to follow a multifactor analysis for selecting diverse media. The analysis requires criteria for assessing capabilities, reach and analytics, and is expected to drive more opportunity for diverse media.
- **Diverse Owned Media Hub:** We host a dedicated space, launched by GM, for the sharing of content, thought-leadership, programming and dialogue to promote and support engagement, empowerment and growth for diverse media.

We achieved our goal of investing 10% of our total annual media spend in diverse-owned and -targeted media in 2022

<sup>63</sup> United States and Canada spend only.



# Supporting Communities

Our vision is of a world with zero crashes, zero emissions and zero congestion, and our Corporate Giving Strategy is designed to support this vision.

We create jobs and support local economies to advance social progress in the communities where we live and work. Our philanthropic focus is on investments that put people at the center. Learn more about our [Corporate Giving Strategy](#).

In 2022, we provided \$60 million in grants to more than 400 U.S.-based nonprofits to help create inclusive solutions to social issues. This funding is anticipated to impact over 7 million individuals.

See our [2022 Corporate Giving Report](#) for details.

## International Giving Program

In 2022, GM launched an international giving program to direct over \$1 million in philanthropic funds to five global regions: Canada, China, Egypt, Mexico and South America. Each region selected nongovernmental organizations (NGOs) within GM’s focus areas to support. In total, we supported seven organizations and anticipate that around 3,200 people will be positively impacted.



2022 Corporate Giving Focus Areas

**28%**  
**STEM Education**



**8%**  
**Vehicle & Road Safety**



**13%**  
**Community Development**



**15%**  
**Climate**



**24%**  
**Detroit**



**12%**  
**Other (Inclusive of Community Impact Grants and Disaster Relief)**




“I feel fortunate that through STEM and climate initiatives, we can teach students—our future engineers—about the environmental and technological advances we will need for a more sustainable future.”

**Samantha Sugiyama**  
Manager, Corporate Grantmaking

## Climate Fund

We are broadening our social impact by helping to create a zero-emissions future by working with our peers and others to amplify our impact. Our \$50 million Climate Fund, launched in 2021, helps community-based organizations innovate and include their customers in the transition to EVs and other sustainable technology.

Grants provided by the fund align with GM’s three climate-focused social outcomes:

- Access to sustainable jobs
- Access to more sustainable transportation
- Community climate action

### Program Highlights

#### Tackling Unequal Impacts with the National Wildlife Federation

In 2022, we partnered with the National Wildlife Federation as a founding member of [the new Climate Equity Collaborative](#), an initiative focused on addressing the disproportionate impacts of climate change on vulnerable communities and youth. The Collaborative will engage with people from these communities, as well as nonprofits, to design and implement equitable and inclusive climate solutions. Through our Climate Fund, we have donated \$1 million and we will co-design the Collaborative’s framework and roadmap.

### Climate Fund: Expected Benefits<sup>64</sup>

# 1.1K

people gained access to programs that increase sustainability career readiness



# 1.2M

individuals impacted by new or continued community climate programs like resilience hubs and environmental education programs

# 19.8K

people gained awareness of and/or access to sustainable transportation solutions



### Helping Underserved Communities Access Infrastructure Funds

To help underserved communities access federal funding for electric vehicle charging infrastructure, [GM gave Forth Mobility a \\$500,000 grant](#). The organization is experienced in developing electrification grant proposals and will help eliminate “charging deserts” by supporting underserved communities. The funding will support the development of publicly available tools and grant application templates, as well as education and training to help transportation program staff and other decision makers use federal funding most effectively.

### Encouraging EV adoption in the San Joaquin Valley (SJV)

GM supported the [Central California Asthma Collaborative \(CCAC\)](#) to launch the SJV Climate Equity Program, which will expand and integrate work to address climate inequity in one of the highest-risk regions in the United States. The project will carry out coordinated outreach related to EV technology, available light-duty EV and EV infrastructure incentives, and climate adaptation strategies—such as wildfire smoke preparedness—in disadvantaged communities in California.

## Investing in Detroit

As home to GM’s global headquarters, Detroit is a key focus of our Corporate Giving Strategy. In 2021, we announced the company will [invest \\$50 million in grant funding by 2025](#) to nonprofits that are innovating in education, workforce development and neighborhood revitalization. This is our way of working to help Detroiters learn, work and thrive.

By the end of 2022, GM had disbursed more than \$26 million through more than 120 grants to support nonprofit projects in Detroit and surrounding Hamtramck and Highland Park.

Learn more about how we are supporting strong communities, including through employee volunteering and giving, in our [2022 Corporate Giving Report](#).

64 Expected or anticipated figures based on programmatic plans of our nonprofit collaborators.

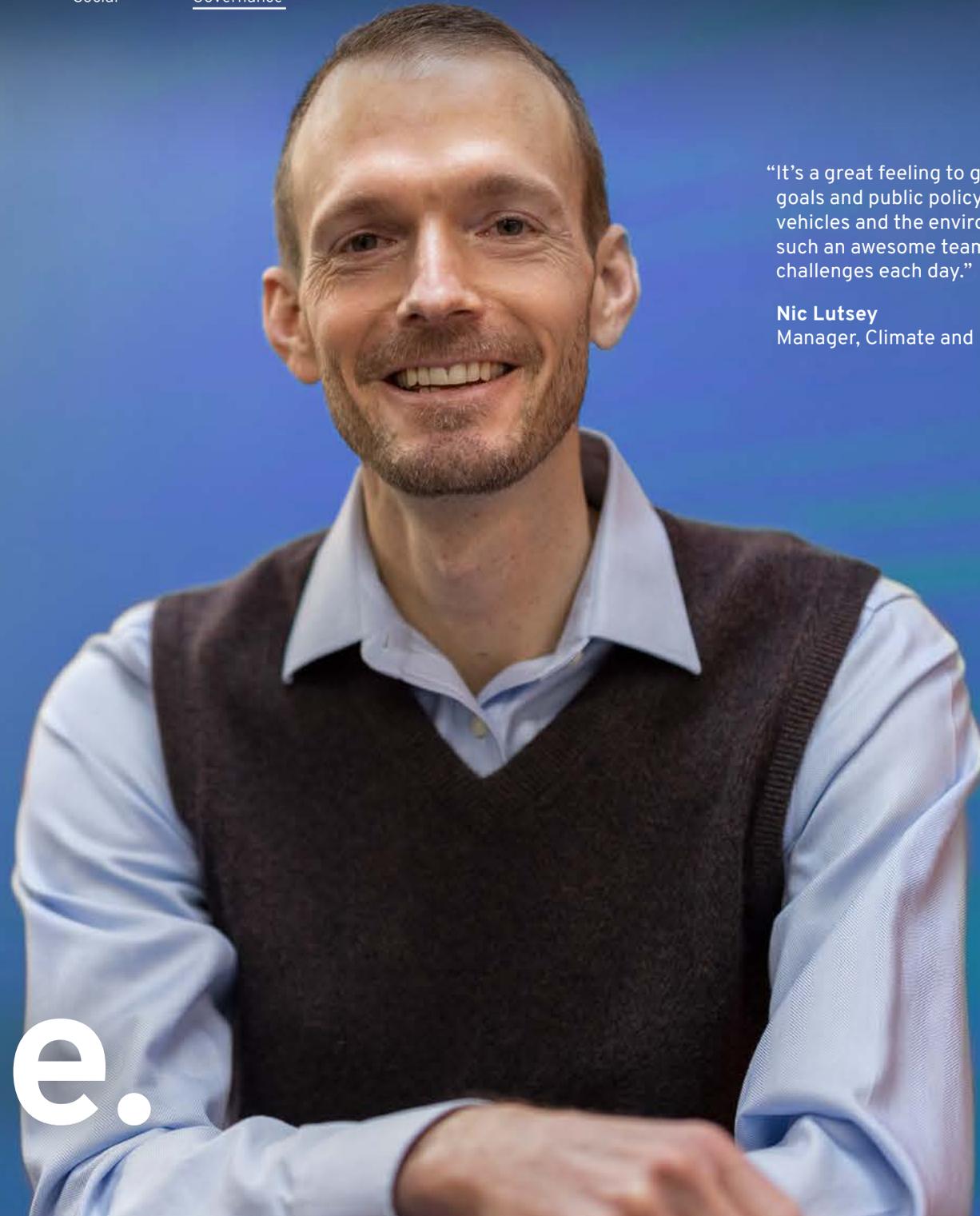


## Responsible Governance

We have robust governance structures and policies in place to manage our business in a responsible and ethical way. These strengthen our company, build a strong foundation for our sustainability strategy and help us address environmental and social issues.

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“It’s a great feeling to get to align our company goals and public policy related to electric vehicles and the environment—and to have such an awesome team to work through the challenges each day.”

**Nic Lutsey**  
Manager, Climate and Environment Policy

# evidence.

# Corporate Governance

The Board is elected by GM’s shareholders to oversee and provide guidance on GM’s business and affairs. It is the ultimate decision-making body of the company, except for those matters specifically reserved for shareholders.

Among other things, the Board oversees company strategy and execution of the strategic plan. In addition, it oversees management’s proper safeguarding of the assets of the company, maintenance of appropriate financial and other internal controls, proper governance and compliance with applicable laws and regulations.

The Board is committed to sound corporate governance policies and practices that are designed and routinely assessed to enable GM to operate its business responsibly, sustain our success and build long-term shareholder value. The Board also works with management to integrate environmental, social and governance (ESG) principles into the company’s business strategy. This includes agenda items and discussions related to ESG topics at Board and committee meetings.

In 2022, the Board updated GM’s [Corporate Governance Guidelines](#), Bylaws and several committee charters. Read more about these enhancements in our [2023 Proxy Statement](#).

## Leadership Structure

The Board is led by our Chair and CEO, who works closely with our Independent Lead Director. The Board comprises 13 members, all of whom, with the exception of our CEO, are independent, as defined by the Board’s Corporate Governance Guidelines, which reflect the independence standards of the New York Stock Exchange and the U.S. Securities and Exchange Commission.

## Governance Best Practices and Shareholder Protections

We are committed to protecting the interests of our shareholders and believe that Board independence is crucial to this work. To achieve these goals, we follow several governance structures and policies, including:

### Independence

of 12 out of 13 directors



### Annual

election of all directors



### Strong

Independent Lead Director empowered with clearly delineated duties



### Proxy

access and shareholder right to call special meetings



### Majority

voting with director resignation policy in uncontested elections



### Annual

review of the Board’s leadership structure by the independent directors



### No

poison pill or dual-class shares



## Board Diversity

GM's Board is composed of directors that have strong ESG expertise and possess a broad range of skills, qualifications and attributes that support our ambitious electric vehicle (EV) transition, growth strategy, sustainability and diversity, equity and inclusion (DEI) goals.

Board membership is 46% women, including the Chair and Independent Lead Director, with 17% identifying as racially or ethnically diverse. In addition, 50% of Board committees are chaired by women. See our [2023 Proxy Statement](#) for more information about Board composition, succession plans and perspectives on diversity.

## Committee Structure and ESG Governance

The Board has six standing committees, all of which, except the Executive Committee, consist entirely of independent directors. These committees help the Board develop and oversee GM's ESG strategy, including through delegated responsibility for specific ESG-related topics.

Governance and Corporate Responsibility Committee 	Audit Committee 	Executive Compensation Committee 	Finance Committee 	Risk and Cybersecurity Committee 
<ul style="list-style-type: none"> <li>Oversees ESG initiatives, strategies and policies that have a material impact on the company.</li> <li>Deploys an ESG scorecard to track progress against GM's public global sustainability targets and conducts annual reviews of ESG topics such as public policy, corporate philanthropy and other sustainability initiatives (including human rights and responsible sourcing).</li> <li>Responsible for the Board's shareholder engagement program.</li> <li>Reviews and approves the Sustainability Report.</li> </ul>	<ul style="list-style-type: none"> <li>Reviews the disclosure process and control procedures over ESG disclosures.</li> <li>Reviews and approves the Sustainability Report.</li> <li>Oversees the Internal Audit function, GM Audit Services (GMAS), which provides independent, objective assurance on the effectiveness of risk management, internal controls and governance processes within GM. GMAS' annual audit plan includes coverage of controls around ESG disclosures as well as workplace and product safety, ethics and compliance, environmental and cybersecurity risks.</li> <li>Oversees GM's ethics and compliance program, the Global Ethics and Compliance Center (GECC), and receives regular updates from GM's chief compliance officer on a wide range of compliance topics. See <a href="#">Ethics</a>.</li> </ul>	<ul style="list-style-type: none"> <li>Oversees design and implementation of an executive compensation program that drives alignment with shareholder interests, encourages management to make decisions that drive long-term value creation and does not reward excessive risk-taking, and attracts, motivates and retains the talent required to accelerate GM's transition to EVs.</li> <li>Makes an annual determination as to whether the company's ESG and sustainability goals and milestones are effectively integrated into our compensation programs.</li> <li>Responds to shareholder feedback relative to the alignment of executive compensation with strong performance, including with respect to sustainability goals.</li> </ul>	<ul style="list-style-type: none"> <li>Reviews changes to our shareholder composition, including the impact of ESG-oriented investors.</li> <li>Supports GM's sustainable finance projects, including reviewing our 2022 green bond offering and any future bond offerings connected to our Sustainable Finance Framework.</li> </ul>	<ul style="list-style-type: none"> <li>Reviews GM's strategic, operational and cybersecurity risks, including workplace safety, vehicle cybersecurity safety, climate change and privacy risk.</li> <li>Considers climate change as part of its key strategic and operational risk management framework.</li> </ul>

## Shareholder Engagement

Members of the Board and senior management regularly engage with institutional shareholders. These engagements help us collect feedback on various topics, including strategic and financial performance, operations, products, executive compensation, and Board composition and leadership structure, as well as on important environmental and social issues. The constructive insights, experiences and ideas exchanged during these engagements have helped the Board evaluate and assess key initiatives during GM's ongoing transition to an all-electric future. Learn more about these engagements with shareholders and other stakeholders in our [2023 Proxy Statement](#).

## Risk Management

The Board has overall responsibility for risk oversight and focuses on the most significant risks facing GM. It discharges these responsibilities, in part, through delegation to its committees. The company's risk governance is facilitated through a top-down and bottom-up communication structure, with our CEO serving as chief risk officer. The Senior Leadership Team appoints members to our Risk Advisory Council, an executive-level body with delegates from each business unit, to discuss and monitor the most significant business and emerging risks in a cross-functional setting. They are tasked with championing risk management practices and integrating them into their functional or regional business units. We contemplate climate-related risks in our enterprise risk framework and continuously monitor changes to our overall risk landscape. See our approach to managing climate-related risks in our [Task Force on Climate-Related Financial Disclosures \(TCFD\) Report](#).

## ESG Governance

The Board oversees ESG principles throughout the enterprise and has delegated specific [ESG oversight responsibilities](#) to each of its committees.

At the management level, GM's Senior Leadership Team establishes and executes the company's ESG strategy. This cross-functional group of senior leaders drive GM's ESG initiatives throughout the company, from global product development, portfolio planning, manufacturing, and supply chain and purchasing to human resources (including DEI and other workforce matters), legal, compliance, social and community impact projects. The Senior Leadership Team is supported in this work by our Office of Sustainability and ESG Disclosure Committee.

GM's vice president sustainable workplaces and chief sustainability officer, reporting to the executive vice president of global manufacturing and sustainability, is the enterprise-wide leader for sustainability initiatives, and develops and coordinates sustainability strategy and efforts across the company. GM's chief of diversity, equity and inclusion, reporting to the senior vice president and chief people officer, is the enterprise-wide leader for DEI initiatives, and develops and coordinates DEI strategy and efforts across the company.

The Office of Sustainability is a cross-functional group that uses a "team of teams" approach to guide sustainability initiatives across the company. It is chaired by the vice president sustainable workplaces and chief sustainability officer. The ESG Disclosure Committee is a cross-functional group that oversees GM's ESG disclosures. It is chaired by our vice president global business solutions and chief accounting officer, vice president sustainable workplaces and chief sustainability officer, and assistant corporate secretary and lead counsel—corporate governance, finance and securities.

## External Stakeholder Dialogue

For the past decade, our Global Sustainability Team has engaged with stakeholders through Ceres, a nonprofit organization dedicated to transforming the economy to build a sustainable future for people and the planet.

In December 2022, Ceres convened a diverse group of stakeholders to provide recommendations and feedback that we will use to inform our goals and progress on climate, mobility and connectivity, human rights, diversity and governance.

The objectives of this dialogue were to:

- Understand what actions certain stakeholders expect GM to take and what influence they expect it to exert
- Determine areas where GM is seen as a sustainability leader and should continue its current strategy
- Identify any perceived gaps to continue to enhance GM's sustainability disclosure
- Highlight evolutions in stakeholder expectations and emerging sustainability trends for GM to consider



# Cybersecurity and Privacy

From electric vehicles (EVs) to connected, self-driving vehicles, transformative innovations are changing the nature of transportation and our relationships to the vehicles that move us. As connectivity becomes embedded in transport, new digital risks are emerging, making cybersecurity and data protection a critical aspect of our operations.

## Cybersecurity Risks

Software and connected services are key to GM's vision of a world with zero crashes, zero emissions and zero congestion, and with the increasing connectivity of our vehicles, cybersecurity risks continue to evolve. Already, we offer OnStar and connected services to more than 21 million connected vehicles globally. Safely and securely delivering these services is possible due to a strong cybersecurity focus throughout the company.

GM's vice president, chief cybersecurity officer leads a dedicated global team that works to protect the data and digital security of our employees, customers and vehicles. GM's Cybersecurity organization was recently restructured to report to the company's executive vice president—legal, public policy, cybersecurity and strategic technology initiatives and corporate secretary to reflect the best practice of creating an independent cybersecurity office. The team is supported by the Board's Risk and Cybersecurity Committee, senior leadership across the company and a centralized cybersecurity office.

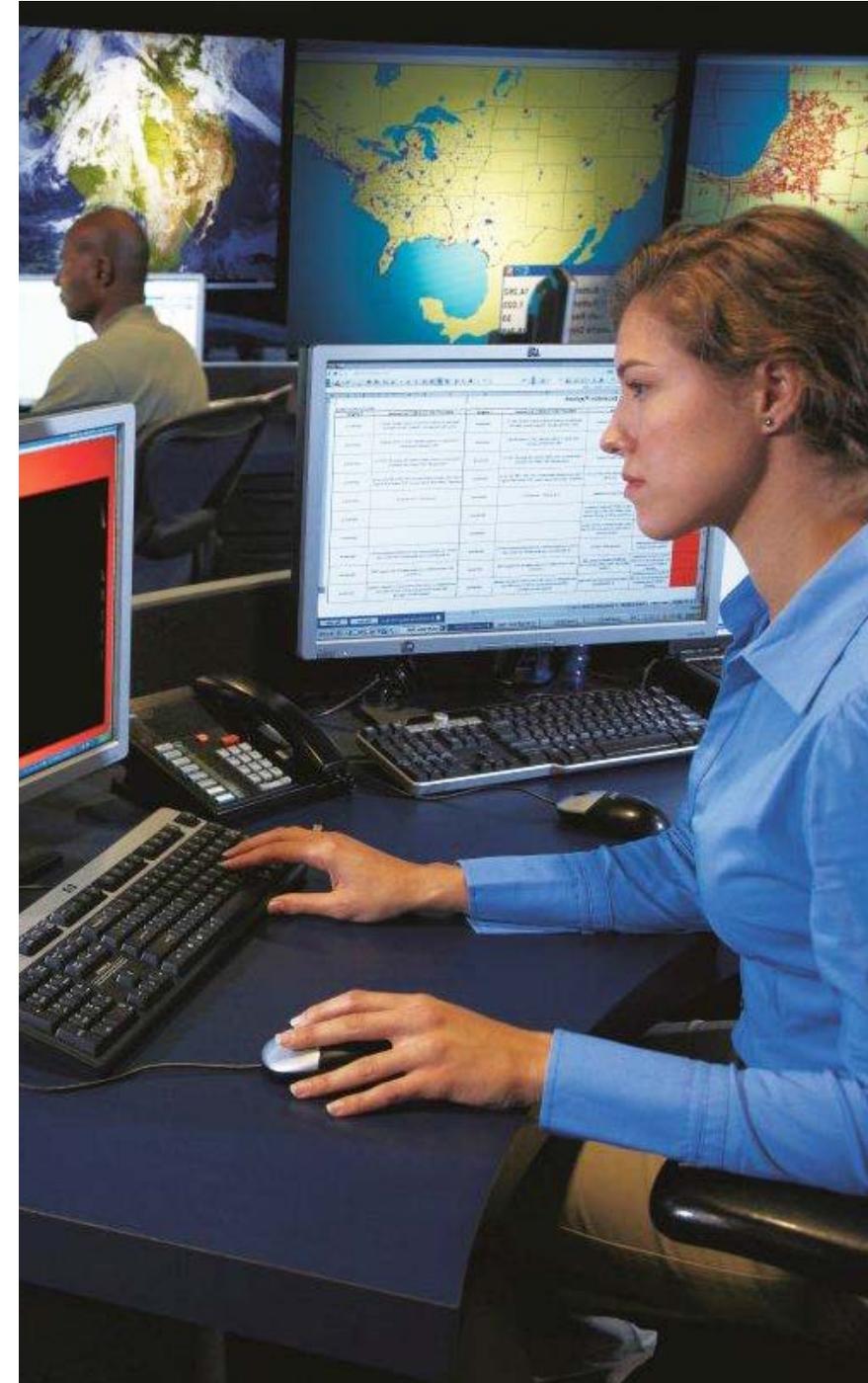
Using well-established risk frameworks and standards, we are focused on cybersecurity risks including information technology and intellectual property protection, vehicle and connected services, manufacturing safety and operations, supply chain and third-party security, merger and acquisition risks, and the secure integration of all new business models.

Cybersecurity—ensured through both hardware and software measures—is a high priority in the development of advanced driving features, semi and autonomous systems, in-market enhancements, connected services and many other software-defined services. See our [Product Cybersecurity Policy](#).

## Privacy Protection

Robust privacy policies and processes are critical to protecting our employees, our customers and our business. We rely on information technology systems and networked products, some of which are managed by third parties, to process, transmit and store electronic information, and to manage or support a variety of our processes, activities and products. We also collect and store sensitive data, including personally identifiable information of our customers and employees.

GM's Privacy Center publishes a [Global Privacy Policy](#) that covers all our operations. We also have a Third-Party Information Security Requirements Exhibit and Privacy Exhibit with additional privacy obligations that are required for all contracts involving personal information (PI), and we update these regularly. Our Board has approved the adoption of Global Privacy Principles, and we continue to be committed to the Alliance for Automotive Innovation's Consumer Privacy Protection Principles.



## Privacy Program

Our collaborative privacy practice is designed to ensure that our collection, use and sharing of PI is secure and compliant, and that it reinforces employee and customer trust and confidence.

The GM Privacy Center provides a privacy program framework that focuses on policies, procedures, tools, guidance and training. This framework also includes a Privacy-by-Design program that requires all data-dependent initiatives to receive a privacy-focused consultation throughout their life cycle. The Privacy Center is operated by our legal staff, who, when necessary, leverage additional nonlegal and external resources to help instill best practices across the company.

Our greatest resources in protecting PI are our employees and processes. Privacy compliance is part of GM's annual Corporate Required Training, which emphasizes the importance of employee and customer privacy to our business. In addition, the Privacy Center conducts awareness training on emerging privacy laws and regulations with key areas of our business.

## Privacy Practices

Our Information Security program is aligned to the National Institute of Standards and Technology Cyber Security Framework and International Organization for Standardization (ISO) Standards and includes elements to protect the confidentiality, integrity and availability of information. Our robust Information Lifecycle Management (ILM) Policy and record retention schedule applies globally to all GM employees and others (e.g., contract workers, purchased services, etc.) that create or manage GM records.

The ILM Policy requires that we retain only those records needed to meet business, fiscal and legal requirements. We require a Privacy Impact Assessment to be approved by a Privacy Center member before the implementation or change of any new product, service or process involving the use of PI. Additionally, our Information Security and Risk Management has implemented a risk-based framework to apply additional controls to high-risk systems containing PI.

Data exports outside GM must be approved through our cross-functional data export review process, which evaluates the privacy, security and business risks of all proposals.

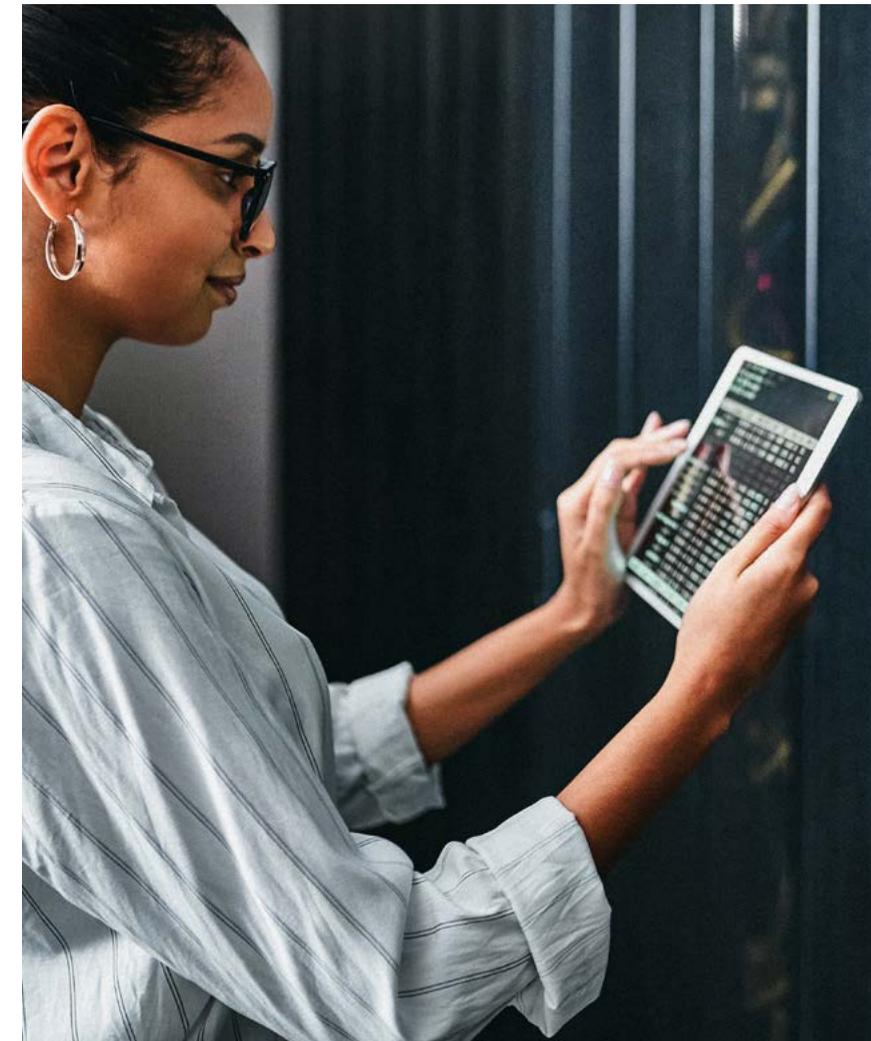
## Incidents

We have a robust process for employees to report incidents of possible wrongdoing, violations of GM's Code of Conduct, IT or other cybersecurity events, PI incidents or other concerns. This includes our toll-free GM Awareline hotline and a system for reviewing and investigating all alleged incidents. An employee who violates our Privacy Policy or Code of Conduct may be subject to discipline, including warnings, suspension with or without pay and/or termination of employment. Our Cyber Intelligence Team also continuously monitors publicly available information for cyber incidents or data spills that may impact us or our suppliers.

## Customer Privacy

We disclose our privacy statements on consumer-facing websites such as our corporate, vehicle brand and OnStar sites. We use an opt-in approach for the collection, use and sharing of consumer PI where legally required or appropriate, based on the nature of the data collected and its intended use. We also offer opt-out options where appropriate.

We comply with all privacy regulations, such as General Data Protection Regulation and the California Consumer Privacy Act. We honor data subject requests under these regulations, including requests to access, make corrections to and delete data. We do not allow the use of customer PI for secondary usage if it is not disclosed in the Privacy Statement or otherwise consented to by the customer. In 2022, we did not have any material customer privacy complaints from regulatory bodies or outside parties.



# Environmental Management and Compliance

GM is a global company with operations in diverse regions. In the course of our work, we must comply with multiple sets of regulations. To ensure we act in accordance with a wide spectrum of legislation, we develop internal commitments with an aim to match or exceed global best practice.



As a responsible corporate citizen, we provide global guidelines to help reduce the impact of our activities on the environment. GM's Management of Environmental Compliance and Guiding Environmental Commitments are the foundation of our updated [Global Environmental Policy](#). The commitments are a guide for all GM employees worldwide, encouraging environmental awareness in daily conduct and in the planning of future products and programs.

Although GM-owned and -operated facilities have their own operating plans, all function under the common Global Environmental Policy, which provides an effective foundation for environmental stewardship.

We have a robust process to enhance the integration of environmental sustainability practices into daily business decisions and to:

- Comply with applicable environmental laws and regulations globally
- Monitor our performance according to our own Environmental Performance Criteria (EPCs), which are universal corporate performance requirements designed to protect human health and the environment in accordance with the GM Global Environmental Policy
- Conform to key sustainability performance indicators and environmental performance metrics

Each GM manufacturing site has one or more environmental leaders, who are supported by a GM regional environmental leader and a team of subject matter experts in regional central offices. We also have an annual business planning process, known as Business Plan Deployment (BPD), to strengthen the management of environmental performance. This process links our Global Manufacturing salaried employees and their annual compensation to GM sustainability commitments. Performance on BPD metrics and goals is monitored monthly at all GM manufacturing sites. Action plans are developed as needed to keep performance on track.

## Environmental Compliance

Our global guidelines play a significant role in our overall environmental compliance, ensuring that local plant policies:

- Are appropriate to each plant's specific environmental impacts
- Reinforce a commitment to comply with applicable laws and regulations
- Include a framework for setting goals and delivering continuous improvement
- Are documented, implemented and communicated to all employees

It is imperative that we comply with all applicable statutory, regulatory and permit programs and other environmental requirements. Compliance issues occasionally arise, and we treat each allegation of noncompliance seriously. In 2022, we received 26 Notices of Violation, 22 of which were in the United States. We paid two penalties over \$10,000.

## Environmental Management System (EMS)

All manufacturing facilities that GM owns and operates, and most of our global nonmanufacturing sites, have implemented an EMS. Our EMS combines elements of ISO 14001 and management system elements that are unique to our operations.

From 2019 through 2022, we developed and implemented an aligned, global, third-party certified ISO 14001 enterprise program. This integration ensures we perform our environmental commitments as a normal part of our business activities.

We continue to expand our EMS program, introducing it into our operations where we see a clear benefit. In 2022, we added one manufacturing and 10 nonmanufacturing sites to it.

## Environmental Performance

We implement GM EPCs in support of our environmental compliance efforts under our Global Environmental Policy at our global facilities and major technology centers. The EPCs are internal performance requirements for the management of environmental matters at our facilities. In many cases, they supplement applicable legal requirements by setting minimum standards for environmental management and performance practices that may be more stringent than those required by law. This supports our work to achieve a base level of environmental performance, regardless of where a facility is located or whether there are local environmental programs in place or not.

We track environmental compliance and sustainability performance in manufacturing operations by using the Manufacturing Excellence Indexes system. This is an internal GM scoring tool which provides real-time, common data to measure performance, assess risk and drive continuous improvement.

## Managing Substances of Concern

We have a two-tier system for evaluating chemicals used in our facilities to reduce the risk of exposure to workers and releases into the environment. We have centralized and site-specific reviews where experts in industrial hygiene and environmental and human health toxicology evaluate new chemicals. In addition, we work with our suppliers to reduce the presence of chemicals that pose a significant health or environmental hazard.

GM has also established policies, procedures and supplier engagement to monitor banned substances and protect the health of our customers. We receive supplier data monthly and cross-reference it with known restricted substances lists to ensure compliance with regulations around the world. Our Vehicle Chemical Regulatory Compliance Team evaluates all materials, components and parts to verify they do not contain substances prohibited or restricted through GM internal standards, approval databases, the Global Automotive Declarable Substance List or the International Material Data System.

## Employee Environmental Training

Our employees are key stakeholders in our environmental stewardship and are critical to our environmental performance. In addition to specific facility, country or region training, we provide strategic training and guidance to our environmental professionals to help them keep pace with evolving environmental issues, changing regulations and best practices. Our training addresses a variety of areas specific to the regulatory requirements for air quality, waste management, water quality and other environment-related topics.

Every new employee working in a plant receives orientation training, which includes environmental training. Employees that need specific environmental management skills or knowledge for their role will receive additional training.

Environmental professionals develop training goals through Workday, our human capital management portal and seek personal and professional development through a range of channels. In North America, environmental professionals attend sessions with internal and external speakers. Outside North America, environmental professionals take a Global Environmental Certification and Training Program focused on our Guiding Environmental Commitments and internal EPCs and industry best practices.



# Ethics

GM is dedicated to maintaining an ethical performance culture and living up to our core values and behaviors in everything that we do.

Our business is built upon our vision, core values and core behaviors and we believe that the tone for our ethical performance culture starts at the top. Our Code of Conduct—Winning with Integrity—is a guide for how all employees, including the Board and Senior Leadership Team, play their part in fostering our ethical performance culture across GM and protecting our reputation for integrity in the marketplace. Our Chair and CEO and other members of our Senior Leadership Team regularly emphasize to all employees the importance of knowing the Code and striving to do the right thing, even when it is hard. We monitor the presence and practice of our ethical culture by conducting surveys every few years and will conduct the next survey in 2023.



## GM received external recognition for our ethics and compliance program and ethical leadership, including:

### Recognized

In 2023, for the fourth year in a row, GM was the only original equipment manufacturer automaker recognized as one of the World’s Most Ethical Companies® by Ethisphere



### Won

GM won the Coalition for Integrity’s 2022 Corporate Leadership Award



### Recognized

In 2022, GM Mexico was recognized again as one of the Most Ethical Corporations in Mexico by AMITAI®



The Board’s Audit Committee has oversight responsibility for our ethics and compliance program, which promotes a culture of high performance and high integrity worldwide. It is supported in its work by the Global Ethics and Compliance Center (GECC).

The GECC supports GM’s efforts to prevent, detect and correct violations of law and corporate policies and helps promote our ethical performance culture. It is led by the assistant general counsel and chief compliance officer, who reports to the executive vice president—legal, policy, cybersecurity, strategic technology initiatives and corporate secretary, and to the Board’s Audit Committee. The chief compliance officer provides regular updates to the Audit Committee and attends annual private sessions without other members of management.

In addition to aligning GM’s ethics and compliance program with the recognized elements of an effective compliance program, the GECC manages GM’s Code of Conduct and other ethics- and compliance-related policies and processes such as training, communications and misconduct reporting.

We regularly conduct independent third-party assessments of our compliance program and completed our most recent review in 2022. We also recently developed a risk assessment protocol that will modernize the GECC’s ability to assess risk using quantitative and qualitative data, and plan to launch our first risk assessment survey using the new protocol in 2023.

The GECC has assumed certain anti-money laundering responsibilities and plans to publish an enhanced Global Anti-Money Laundering Policy. It will also continue to play an active role in supplier and strategic transaction due diligence in the EV supply chain, including by partnering cross-functionally in the development of our ESG-related investigations process.

## Compliance Liaisons

Compliance liaisons are GM team members that help business units and regions by supporting local leadership in promoting our ethical performance culture and assisting the GECC in its compliance risk management efforts. In 2022, we continued to expand the program to further localize compliance and to serve as an additional knowledgeable resource for identifying compliance issues.

The GECC has experienced regional compliance officers to ensure our global ethics and compliance program is implemented uniformly with local customizations as needed. We also have functional and geographic compliance advisors that provide legal advice and support on a variety of legal risk areas, including safety and export compliance, antitrust compliance, data privacy and cybersecurity compliance, and records management compliance.



## Code of Conduct

GM's Code of Conduct—Winning with Integrity—reinforces our commitment to maintain a work environment founded on integrity, mutual respect, trust and accountability. It outlines the policies and obligations that guide our conduct. The Code also includes information on the mechanisms available to report safety and other concerns and publicizes various points of contact, including local leadership, Human Resources, labor representatives, the GECC, Legal Staff, GM Audit Services and our Awareline.

Available in nine languages, the Code applies across our entire company, including to subsidiaries we control. In 2022, we refreshed it with our “Be Inclusive” behavior, a new CEO leadership message and other relevant content. We also expect third parties, including suppliers, to act in a manner that is consistent with the principles and values outlined in our Code when conducting business with, and on behalf of, GM.

## Conflicts of Interest

We maintain a robust conflict of interest disclosure process that applies to all salaried employees and members of the Board. Employees are required to complete an electronic conflict of interest questionnaire at least once during their employment and keep it updated as their personal circumstances change. Board members who are not employees provide written disclosure of any actual or potential conflicts of interest at least annually.



## Reporting Concerns

We encourage our employees to speak up and provide resources to do so. Our internal “Report Concerns” site helps employees quickly identify the most effective way to report their concern.

The GM Awareline—operated by an independent third party—allows employees and others to anonymously (where permitted by law) report concerns in over a dozen languages at any time by phone, web or email. In 2022, GM received 5,715 reports to the Awareline; 4,039 were classified as allegations, with the remaining classified as suggestions, inquiries and other issues.

We track all reports of misconduct, whether through Awareline or another channel, in a case management system that allows us to preserve a reporter’s anonymity while facilitating efficient investigation, follow-up and compliance trend analysis.

Allegations of misconduct are reviewed and prioritized based on a number of factors, including the type of misconduct, the position of the alleged wrongdoer within the company and whether the allegation entails any potential violations of law. We give high-priority cases special scrutiny and review, and a cross-functional committee meets monthly to discuss their progress and resolution. Processes are in place to determine which cases require reporting to the Board or Audit Committee.

Speak Up!, GM’s Non-Retaliation Policy, protects GM employees from retaliation when they raise a concern in good faith. Since the majority of misconduct reports are made to an employee’s manager, we have developed a website with a range of helpful compliance tools for managers. We also offer a scenario-based course for managers.

The GECC developed and launched a post-investigation anti-retaliation survey in 2021. Its purpose is to initiate outreach to known reporters following an investigation, to identify and respond to potential retaliation and improve the investigative process. The survey was successfully piloted in the United States through 2022 and we plan to expand it globally in 2023.

## 2022 Allegations Received

Category	Proportion of total
<b>Accounting, Auditing and Financial Reporting</b> Examples: Fraud relating to accounting procedures, internal controls or auditing matters	<0.1%
<b>Business Integrity</b> Examples: Fraud, conflicts of interest, corruption	5%
<b>Human Resources, Diversity and Workplace Respect</b> Examples: Interpersonal conflicts, harassment, discrimination, retaliation	68%
<b>Environment, Health and Safety</b> Examples: Threats and violence, substance abuse, environmental concerns, workplace safety	13%
<b>Misuse, Misappropriation of Corporate Assets</b> Examples: Theft, property damage, information or IP loss, computer misuse	14%



## Ethics Training and Education

To reinforce our ethical culture, we educate employees about how to apply our standards and principles at work. The GECC uses insights from external ethics and compliance thought leaders and internal subject matter experts to develop multi-year training, education and policy certification plans, which are reviewed by a cross-functional training governance board.

To ensure the effectiveness of our training, we regularly conduct third-party assessments of our training program against Department of Justice and benchmarking resources, such as Ethisphere’s World’s Most Ethical Companies® Evaluation Framework.

We require all eligible salaried employees to complete Corporate Required Training courses annually. This is available in seven languages and we deploy new or refreshed content every year. In 2022, we achieved a 100% completion rate across our salaried employees for the required courses, which were:

- GM Code of Conduct: Winning with Integrity
- Cybersecurity
- Product and Workplace Safety
- Anti-Corruption Compliance

In addition to Corporate Required Training, we require our salaried employees to annually complete Code of Conduct training, certify their agreement to it, and declare that they have disclosed any new potential conflicts of interest and reported any suspected Code violations or safety issues. Board members receive in-person Code of Conduct training delivered by the chief compliance officer.

## 2022 Ethics & Compliance Training

**~360,000**

online courses delivered



**~23,000**

in-person advanced compliance training modules delivered

**~70,000**

employees and select contractor workers who completed ethics and compliance training



**One**

customized contract worker course

**Four**

required courses for employees



Beyond Corporate Required Training and Code of Conduct training, we use risk-based principles to provide live and remote training to thousands of employees each year on topics such as export compliance, antitrust, Foreign Corrupt Practices Act, privacy, working with third parties, winning in the marketplace without sacrificing our values, the Speak Up! policy and other relevant compliance topics. We also use on-demand microlearning modules so that employees can access refresher training on gifts and entertainment and conflicts of interest processes as needed. In 2022, we launched a People Leader Ethics Toolkit that contains guidance on how to apply GM’s ethics and values.

## Winning With Integrity at the Speed of Business

2022’s Compliance and Ethics Week, held in May, connected Winning with Integrity with our need to rapidly embrace and realize our EV and AV future. During Compliance and Ethics Week we engaged employees through leadership messages and interviews, a pulse survey, compliance toolkits, Speak Up! video and infographic and other measures to promote our Winning with Integrity behavior.



(Above) Preproduction model shown. Actual production model will vary. Model Year 2024 Silverado EV available Fall 2023.



# Public Policy

Our global commitment to advancing an all-electric, zero-emissions future is unwavering. GM has consistently and publicly advocated for policies that support the adoption of EVs and help to address climate change.

We continue to work closely with governments worldwide to implement complementary policies and nonmonetary incentives, and build out infrastructure, low-carbon electricity and the overall manufacturing footprint necessary to the success of our all-electric vision and carbon neutral goals.

To reach our goals, GM's Global Public Policy (GPP) organization leverages the expertise of the GM team, industry subject matter experts, coalitions and industry trade associations. We carefully consider public policy challenges and opportunities and develop informed policy positions to effectively advocate for legislative and regulatory action that will support decarbonizing on-road transportation and the grid.

In September 2022, GM and the Environmental Defense Fund (EDF) [announced a set of principles](#) that seek to accelerate a zero-emissions, all-electric future for passenger vehicles in the United States. The recommendations were developed to support the critical next generation of national tailpipe emission standards, scheduled to begin in 2027. We encourage the Environmental Protection Agency (EPA) to establish standards aimed at ensuring that at least 50% of new vehicles sold by 2030 are EVs, so that the nation can achieve a 60% reduction in GHG emissions from new vehicles in Model Year 2030, compared to 2021.

We strongly support policies that will allow the EV transition to accelerate so the United States can be globally competitive. New technologies take time to scale and reduce costs. EVs are no different, but we are determined to ensure that the U.S. auto industry leads the way.

In August 2022, GM was the first automaker to publicly support the Inflation Reduction Act (IRA). The IRA incentivizes domestic production and sourcing of EVs and their components. We also engaged with trade associations on the economic advantages and climate benefits provided by the clean energy provisions, particularly the on-shoring and ally-shoring of the EV supply chain. For more examples of our work to advance our climate policy agenda, see our [2022 Sustainability Advocacy Report](#).

## Advocating for Technologies to Improve Mobility

GM envisions a future where we can all enjoy the freedom and convenience of vehicle use while also striving for a world with zero congestion. A combination of autonomous vehicle (AV) technology, new mobility solutions and supportive public policy will enable reductions in congestion as we continue to push toward a future of zero crashes, zero emissions and zero congestion.

We are engaging in policy discussions and relentlessly working on technologies that will make this future possible. We have a strong track record of collaboration with the public sector and community partners, such as the deployment of sustainable last-mile solutions and community-based EV ride-hailing programs. We will continue building on this foundation through engagement with a diverse array of stakeholders, crafting meaningful pilots and using our knowledge and experience to drive innovative policymaking.

As we explore future markets for our AV and fleet offerings, we work closely with communities to find solutions together. Gains in efficiency and safety create opportunities for more community access to employment, education and health care.

We are also optimistic that innovations in vehicle connectivity will help optimize traffic flows and reduce traffic crashes, ultimately easing congestion. To help achieve these objectives, we are focused on deploying advanced driver assistance technologies such as Super Cruise and Ultra Cruise, and self-driving technology through applications such as the Cruise Origin.

We have many examples that demonstrate the immediate benefits the deployment of our products can present, including our technologies in last-mile urban delivery solutions such as [BrightDrop](#).

## Corporate Political Contributions and Lobbying Expenditures

We believe we should have a role in shaping public policy and addressing legislation that impacts our company, industry and stakeholders. We have and will continue to support public policies that drive our long-term, sustainable growth. Recent enhanced disclosures led the Center for Political Accountability to award GM "Trendsetter" status in their annual [CPA-Zicklin Index of Corporate Political Disclosure and Accountability](#).

Our Board receives regular reports on the most pressing public policy issues and actively oversees our participation in the political process, for example by:

- Adopting a [U.S. Corporate Political Contributions and Expenditures Policy](#), overseen by the Governance and Corporate Responsibility Committee (GCRC).
- Through the GCRC, annually reviewing the Sustainability Advocacy Report, as well as all corporate political contributions, GM Political Action Committee contributions (which are funded entirely by voluntary employee contributions) and the process by which contributions are made. The committee also receives regular updates each year regarding the company's direct and indirect lobbying activities and expenditures.

Learn more in our [2022 Sustainability Advocacy Report](#).



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