
2024 Task Force on Climate-related Financial Disclosures (TCFD) Report



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Introduction

About This Report

General Motors Company (GM) has prepared this report guided by the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), reflecting our efforts to improve transparency around climate risks, governance, and strategy.

Using the TCFD framework, we disclose strategy and scenario analysis, governance, risk management, and metrics and targets. We assess our business against climate scenarios of global temperature increase of 1.5°C, 2–2.5°C, and 4°C—based on International Energy Agency (IEA) and United Nations Intergovernmental Panel on Climate Change (IPCC) data, helping us evaluate our resilience in a lower-carbon economy.

We remain committed to a profitable, all-electric future. As we move toward that vision, GM faces climate-related risks across multiple dimensions. These include physical risks such as extreme weather events that may disrupt operations and supply chains, and transition risks such as evolving regulations, carbon pricing, and shifts in consumer preferences. Our electric vehicle (EV) strategy, while central to our climate response, is also exposed to risks related to critical mineral availability, infrastructure readiness, increasing electricity costs, and policy uncertainty. We actively seek to manage these risks through scenario analysis, strategic planning, and stakeholder engagement to ensure long-term business resilience.

Scope and Boundaries

This report covers certain sustainability metrics and data for GM as of and during the year ended December 31, 2024, unless otherwise stated. In instances where select information is provided from an earlier period or early 2025, 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. This report includes all of GM's consolidated entities unless otherwise stated. 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 sum due to rounding. Unless otherwise stated, the information included in this report is current at the time of publication (October 9, 2025).

We have engaged an independent third party to verify a selection of the greenhouse gas (GHG) and certain sustainability data for our global operations presented in this report. A link to the verification statement is provided on page 27.

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.

Cautionary Note on Forward-Looking Statements and Disclaimer

This report and related comments by management 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 and 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, and 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.

This report provides an overview of some of GM's long-term aspirations, and some 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. This 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.

Strategy



Our Climate Strategy

As a responsive and responsible business, GM is committed to reducing carbon emissions and building resilience to climate-related risks through strategic action.

Climate change presents both business risks and opportunities to our operations, product portfolio, and supply chain. In response, and in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), we are embedding mitigation and adaptation strategies into our strategic planning and governance structures to drive long-term competitiveness and value creation.

We remain committed to an all-electric future with profitable electric vehicle (EV) production as our north star. In the long term, we believe our customers will choose our EVs because of their excellent quality, features, and benefits. We continue to make significant progress by broadening our EV portfolio and continuing to grow our EV sales and market share.

As a global company, the varied and evolving industry, regulatory landscape, and consumer demand are impacting the rate of EV adoption and, accordingly, our progress on greenhouse gas (GHG) emissions reductions. As we continue our long-term belief in EVs, we are re-evaluating our path to reduce emissions while remaining focused on our operations, our products, and our value chain.

Our Operations

In our operations, we have secured the contracts needed to match 100% of GM's electricity use for our U.S. facilities with renewable energy by the end of 2025.¹ We are also working with our suppliers to help them drive emissions reductions and build shared resilience through decarbonization.

Our Products

As we transition our product portfolio to meet evolving customer demand and regulatory requirements, we are focused on delivering a broad range of EVs and internal combustion engine (ICE) vehicles to meet consumer interests, advancing battery technology to deliver the best mix of range, performance, and affordability, expanding EV infrastructure to accelerate adoption, while implementing circular design principles across both our EV and ICE vehicles.

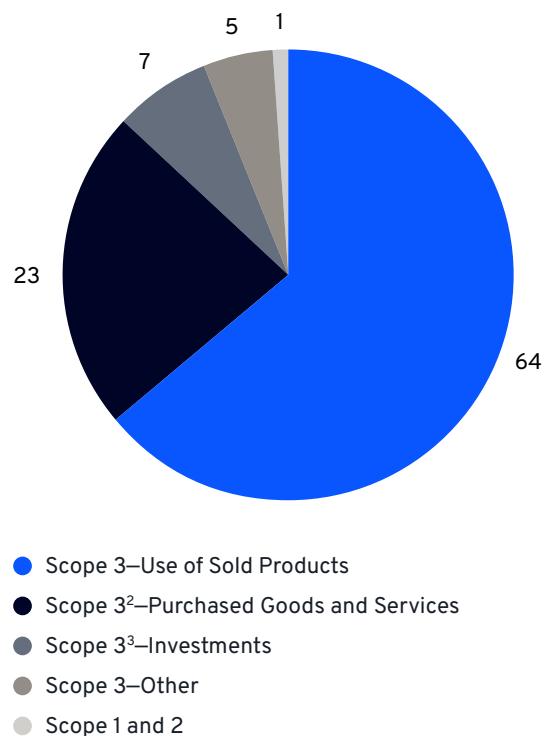
As we scale our EV portfolio, we foresee long-term market opportunities in meeting the growing global demand for zero emissions vehicles. Our investments in EV technology, manufacturing, and integrated energy solutions position GM to capitalize on new revenue streams and increase customer loyalty.

Our Value Chain

The vast majority of our comprehensive carbon emissions come from customer use of our ICE vehicles. We are taking action across our value chain, collaborating with suppliers to reduce upstream emissions and strengthen resilience, while supporting broader adoption of EVs through consumer education.

This path is not linear. Evolving consumer demand, technological challenges and regulatory uncertainty make it difficult to predict. While we have introduced the broadest EV lineup on the market and made progress in reducing emissions from our operations, we are falling behind on our emissions-reduction efforts—particularly our Scope 3 emissions. Ensuring that we can deliver on our long-term business strategy, inclusive of our zero emissions vision, will take continued adaptation and action. We remain committed to the challenge.

Our Global 2024 Footprint (%)



See more detailed performance in [Metrics and Targets](#).

¹ Based on forecasted renewable energy sourced through executed agreements, subject to change depending on actual future electric usage in operations and actual future renewable generation.

² Beginning in 2024, we updated our methodology for calculating emissions for Scope 3—Purchased Goods and Services from spend-based to hybrid, using supplier-specific emissions factors and average-data method with EcoInvent emission factors for purchased steel and aluminum, and using Comprehensive Environmental Data Archive (CEDA) emission factors to calculate remaining spend-based emissions.

³ Emissions from our China joint ventures (JVs) are classified as Scope 3—Investments.

Our Operations

We have developed a comprehensive energy strategy to support our operations and drive progress to a cleaner, more resilient energy future.

Scope 1 and 2 Emissions

Goal

Reduce Scope 1 and 2 GHG emissions from our operations by 72% by 2035 against a 2018 baseline

Approach

Our four key pillars to manage energy in our operations and reduce Scope 1 and 2 emissions are: (1) improving energy efficiency, (2) sourcing renewable electricity, (3) addressing supply reliability, and (4) advocacy work.

We continue to work on improving energy efficiency at our facilities through a global energy management system (EMS). We focus on the areas of highest use, such as reducing electricity consumption and using less fuel from nonrenewable sources. We are exploring technologies and innovative alternatives to natural gas for heating, paint processes, and foundries as we look to reduce Scope 1 emissions.

We continue to invest in energy-efficient systems and renewable energy strategies to reduce Scope 1 and 2 emissions, leading to a 46% decrease in GHG emissions since 2018.

Energy-Saving Programs and Initiatives

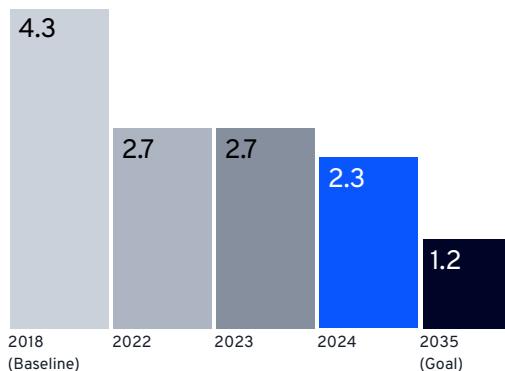
To address climate-related risks, we align our business strategy with energy-reduction initiatives, supported by robust data systems and transparent progress reporting. We continue to enhance our energy metering tools to improve heating, ventilation, and air conditioning (HVAC) efficiency and are integrating project tracking systems to accelerate the implementation of energy-saving initiatives.

In 2024, we implemented a heat pump pilot at Lockport Operations that uses 100% clean hydropower instead of natural gas, reducing annual energy use by over 3,600 MMBtu and avoiding more than 480 metric tons of CO₂ emissions. Projects like this are informed by internal audits and ENERGY STAR Treasure Hunts—in 2024 alone, 20 of these events were conducted globally, identifying more than \$11 million in potential utility cost savings.

One key initiative identified through this process is the Oshawa Assembly HVAC optimization project, which consolidates systems, upgrades controls, and eliminates a high-energy cooling method. The project is expected to save \$160,000 annually and reduce energy consumption by 3,000 MWh.

We have also begun researching the processes to understand the internal cost of carbon across select parts of our business to help identify low-carbon opportunities and drive energy efficiency.

Absolute Scope 1 and 2 Emissions¹ (Million Metric Tons CO₂e)



Renewable Energy

Goal

Match 100% of our electricity use with renewable electricity for our U.S. sites by the end of 2025, and globally by 2035

Approach

Sourcing and supporting the growth of renewable electricity through direct investments, on-site generation, green tariffs, and power purchase agreements (PPAs) has been central to our renewable electricity goals and reducing Scope 2 emissions. Our scenario analysis of future energy usage and mix reinforced this approach, highlighting the importance of renewable sourcing and grid resilience across a range of climate pathways. We further strengthen our procurement by improving operational efficiency, addressing the reliability and resiliency of the grid, and leveraging our scale for advocacy in collaboration with key organizations.

Fort Wayne Reduces Natural Gas Use

Our Fort Wayne Assembly has received the U.S. Department of Energy's (DOE) 2024 Better Building Award for its innovative project that reduced natural gas consumption. The plant repurposed waste heat from gas-powered generators to heat the facility and protect emergency sprinkler systems from freezing. This system has reduced natural gas consumption by 30% compared to a 2019 baseline, resulting in carbon reductions equivalent to the energy needed to heat 4,900 houses for a year and saving GM over \$3 million annually.

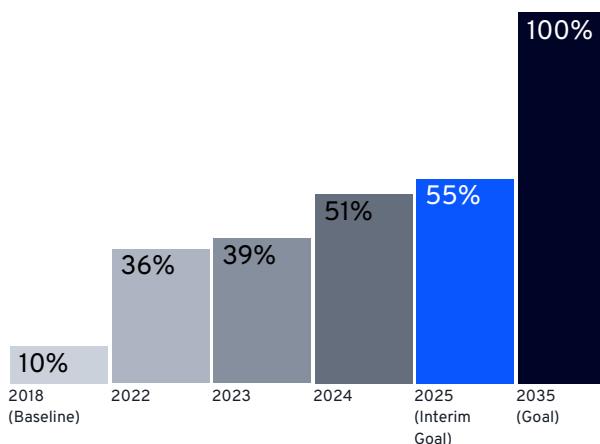
Our renewable energy investments have generated jobs and local tax revenue—and contributed lower emissions sources of electricity to the grids—in states such as Michigan, Texas, Mississippi, Kentucky, Arkansas, Nebraska, Ohio, and Illinois. These projects also help us secure independent sources of U.S. energy.

We continue to make progress toward our renewable electricity goals. Our 2024 U.S. renewable electricity consumption increased to 77%. With this consumption, we continue to rank highly on the Environmental Protection Agency's (EPA) Green Power Partnership list.

¹ GM's Scope 1 emissions are generated from use of fossil fuels, mostly natural gas for process. GM's Scope 2 emissions are mostly from electricity used in our operations for process and building with some purchased steam. Calculation includes CO₂, CH₄, and N₂O. The source of emission factors is regulatory or Intergovernmental Panel on Climate Change (IPCC) Good Practice Guidelines.

In 2024, our global renewable energy consumption totaled 2.9 million MWh, an increase compared to 2023. In addition, the share of our global renewable consumption increased to 51%, and we remain on track to meet our 2035 goal.

Renewable Electricity as a Percentage of Our Global Electricity Use¹



See our progress in [Metrics and Targets](#).

Our operating renewable electricity portfolio grew in 2024 with Ameren's Boomtown Solar Energy Center in Illinois, which began generating electricity in December. We procured a portion of this generation through Ameren's renewable solutions program. The procurement will support matching a portion of the electricity use for our Wentzville Assembly plant.

¹ GM's renewable electricity progress is in alignment with RE100 technical criteria. Includes generation and consumption of electricity from landfill gas.

Zero Waste

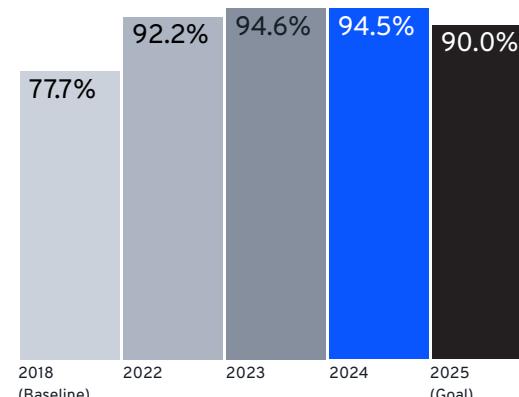
Approach

Our operational waste reduction initiatives support our climate strategy by improving resource efficiency and reducing life cycle emissions. Effective waste management strengthens our resilience to regulatory, supply chain, and cost risks while also advancing circularity and responsible material use. These initiatives create opportunities to reduce emissions, lower costs, and capture value from recycled and reused materials.

Aligned with the [Zero Waste International Alliance's \(ZWIA\)](#) definition, we measure our progress through the percentage of waste diverted from landfills, incinerators, and energy recovery facilities compared to our 2018 baseline. Since 2022, we've consistently exceeded our target to divert 90% of operational waste²—diverting 1.2 million metric tons of waste in 2024.

GM's Zero Waste Performance³

(Compared to Baseline)



² Operational waste is defined as all relevant waste streams ($\geq 98\%$ of reported operational waste) that are not generated due to construction, demolition, or remediation activities.

Water Management

Goal

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

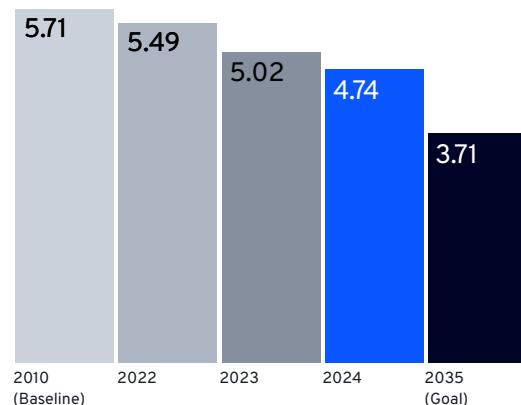
Approach

Effective water management is a key component of GM's climate strategy and risk management framework. As climate change increases the frequency and severity of droughts, flooding, and water stress, we are taking proactive steps to reduce water use, increase recycling, and improve water stewardship practices across our global operations. These efforts help ensure business continuity and resource security, particularly in water-stressed locations.

We assess site-specific water risks—including scarcity, flooding, and local regulatory pressures—during facility planning and operations. Tools such as the World Wildlife Fund (WWF) Water Risk Filter help inform decisions ranging from conservation measures to alternative sourcing strategies. By reducing our dependence on freshwater and expanding reuse, we are mitigating physical climate risks and supporting operational continuity.

Our water strategy focuses on high-consumption areas, such as paint shops and cooling towers. We integrate water-saving technologies into new processes and facility upgrades and track progress through internal targets and quality control plans.

Global Water Intensity³ (m³/Vehicle)



Water Projects in Mexico

At our San Luis Potosí facility in Mexico, we operate a Zero Liquid Discharge (ZLD) system that recycles water back into operations, reducing the need for additional withdrawals from deep wells. In 2024, we invested over \$4 million in capital and operational upgrades to improve the system's capacity and efficiency, helping ensure production continuity in a water-stressed region.

³ Excludes GM Financial and Cruise.

Our Products

The transition to EVs is a critical part of our business growth strategy, particularly in the United States, and an opportunity to mitigate climate risk by driving reductions in tailpipe emissions. As we continue on this journey, we remain committed to developing the technology and infrastructure for a lower emission future.

Innovating Battery Technology

Continued investment in battery technology and manufacturing is a key component of GM's climate strategy, enabling us to scale EV production volumes to meet customer demand as EV adoption evolves. This strategic focus on batteries helps reduce costs of EVs and improve performance while supporting progress toward our fleet GHG reduction trajectory.

Today, our battery platform powers the most diverse portfolio of EVs on the road, including crossovers like the Chevrolet Equinox EV, luxury vehicles like the Cadillac ESCALADE IQ, and work trucks like the Chevrolet Silverado EV.

To develop these systems, we operate and continue to invest in leading manufacturing and R&D facilities. Our world-class engineering team operates in state-of-the-art

facilities, including the Battery R&D Center and the Wallace Battery Cell Innovation Center, where we research new battery chemistries and form factors, and advanced battery manufacturing methods. Now under construction on our Global Technical Center campus in Warren, Michigan, GM's new Battery Cell Development Center is intended to accelerate the development and commercialization of new, more affordable EV batteries by serving as a bridge between low-volume prototyping and full-scale manufacturing.

In 2024, we announced that we are diversifying our supply chain by creating a partnership with Samsung SDI to manufacture cells jointly in the United States. We also unveiled our new battery technology roadmap, which will leverage additional cell chemistries, form factors, and suppliers to optimize EV performance, increase customer choice, lower costs, and enhance safety. As part of this effort, we are expanding our 14-year partnership with LG Energy Solution to include prismatic cell development, further enhancing vehicle performance while simplifying manufacturing.

GM, through its partnerships, intends to manufacture lithium manganese-rich (LMR) prismatic battery cells, designed to deliver approximately 33% greater energy density than lithium iron phosphate (LFP) cells, while maintaining comparable costs by incorporating more abundant and affordable manganese. Commercial production in the United States is expected to begin in 2028. When combining LMR chemistry with the prismatic form factor and our next-generation battery pack design, GM believes it is well-positioned to deliver cost effective battery packs in North America.

Sourcing Battery Raw Materials

We are developing battery technologies that optimize efficiency and performance, and we are collaborating with suppliers to identify socially responsible and low-carbon materials that can be incorporated into our vehicles.

To manufacture our EVs, we rely on various materials, including nickel, lithium, aluminum, copper, cobalt, manganese, and others. Elevated cost or reduced availability of critical materials for our EV propulsion systems could lead to higher production costs for our EVs and could impede our ability to successfully deliver on our EV strategy.

Investing in a Resilient Supply Chain

We have made investments to contractually secure the battery raw materials needed to support our EV future. In these contracts, we are also actively working to embed rigorous expectations and standards that are in alignment with our values of environmental stewardship and human rights.

- LG Chem—Long-term contract to supply cathode materials for EVs, coinciding with their new cathode plant in Tennessee to establish a local, optimized supply chain for North America.
- Lithium Americas—JV formed for the Thacker Pass lithium project in Nevada, with GM holding exclusive access to up to 100% of Phase 1 production, then 38% of Phase 2, supporting management of battery cell costs, job creation, and a sustainable U.S.-based battery supply chain.
- Element 25—Agreement to supply up to 32,500 metric tons of manganese sulfate annually from a future Louisiana facility.

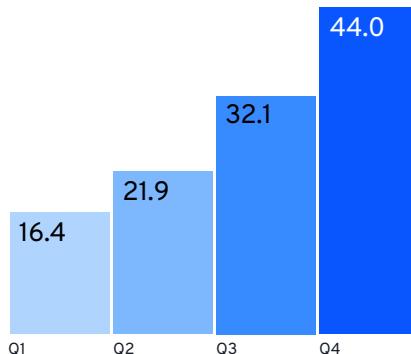
- Vianode—Supply agreement for low-CO₂ synthetic graphite anode from Vianode's upcoming North American plant, enabling large-scale EV material supply by 2030.

Our strategy focuses on building a sustainable and resilient EV supply chain in North America, from raw materials to battery cell manufacturing and recycling, aimed at mitigating risk and achieving scale, which reduces costs. The investments we've made, and will continue to make, toward battery innovation, vertically integrated cell development, and local production with a skilled workforce will strengthen GM's position to drive the future of transportation.

The Broadest Selection of EVs

We're creating EVs for every purpose and every wallet, whether it's performance vehicles or work trucks, daily commuters or commercial delivery. Our investments and product releases in 2024 positioned us well to meet the evolving demands of our customers amid fierce global competition—and move closer to our vision of a profitable, zero emissions future.

Our portfolio now features the broadest lineup of EVs in the industry. Models such as the Cadillac LYRIQ, GMC HUMMER EV, Chevrolet Equinox EV, Blazer EV, and Silverado EV all supported significant momentum in 2024.

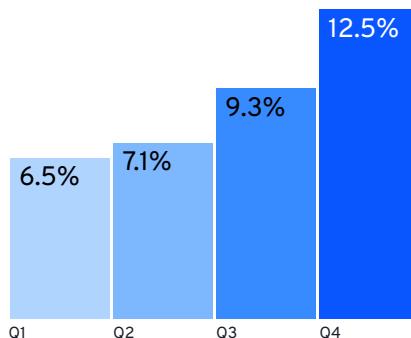
2024 GM U.S. EV Sales ('000s)

We are committed to growing responsibly and profitably, even as demand fluctuates. Our EV transformation is designed with multiple layers of flexibility, enabling us to adapt to changing market conditions. Our near-term profitability is dependent upon the success of our current line of ICE vehicles, particularly our full-size ICE SUVs and full-size ICE pickup trucks. We are also using the cash generated by our ICE vehicles to fund our growth strategy, including our EV technology and capacity—leveraging the strategic investments we have made in our own battery platform, a resilient supply chain and a scalable portfolio.

Investing in EV Production

GM's EV investments span the full value chain, from vehicle assembly and battery cell production to supply chain partnerships and charging infrastructure. These efforts are designed to drive long-term growth while enhancing our ability to adapt to shifting market dynamics and evolving regulations. By scaling domestic manufacturing and building strategic supplier relationships, we're preparing for the transition to a low-carbon economy.

Since 2019, GM has announced more than \$17 billion in EV investments to support production, research and development, and supply chain transformation. A core focus of this investment strategy is the expansion of GM's EV production footprint across North America. This includes the retooling of existing facilities and the development of new manufacturing capabilities to support a diverse range of vehicles.

2024 GM Share of U.S. EV Market¹

In 2021, we retooled our Factory ZERO Detroit-Hamtramck Assembly Center into a fully dedicated EV facility, producing a variety of vehicles, including the GMC HUMMER EV Pickup and SUV, GMC Sierra EV, Chevrolet Silverado EV, and Cadillac ESCALADE IQ. At Ramos Arizpe Assembly, we are producing the Chevrolet Equinox EV and Blazer EV. Additionally, Spring Hill Manufacturing is producing the Cadillac LYRIQ and the Cadillac VISTIQ. We are also investing in component, stamping, and propulsion plants to support EV production.

These strategic investments in infrastructure and the development of our next-generation battery platform are designed to create jobs, enhance North America's competitiveness in the global EV market, and secure a more resilient, localized supply chain down to raw materials.

Charging Infrastructure

Expanding EV infrastructure is key to reducing climate-related market risks and unlocking new opportunities in the shift to a low-carbon economy. As customer demand, policy, and emissions expectations evolve, we're investing in solutions that make EV ownership easier and more accessible. From at-home charging to public infrastructure and smart energy products, our efforts are designed to remove barriers to adoption, strengthen the EV ecosystem, and support long-term growth in a changing mobility landscape.

To evaluate the resilience of this strategy, we incorporate International Energy Agency (IEA) scenario analysis, which highlights the critical role of widespread charging infrastructure in achieving net zero emissions. Under the Net Zero Emissions (NZE) scenario, rapid expansion of reliable and accessible charging networks is essential to support projected EV adoption rates and enable a successful transition to a low-carbon economy.

Expanding Access to Public Charging

Access to convenient charging is essential, and GM has long championed a collaborative approach to integrate networks, products, and services. Our integration relationships with EV charging networks give GM drivers access to hundreds of thousands of chargers throughout the United States and Canada and more in global markets—helping to provide greater peace of mind on the road and more freedom to explore.

GM drivers have access to more than 231,000 [public chargers](#) in the United States and Canada. GM is enhancing EV charging access across North America through key collaborations:

- **EVgo:** 2,000+ fast-charging stalls installed
- **Pilot Travel Centers:** 500+ fast-charging stalls installed
- **ChargePoint:** Up to 500 ultra-fast chargers are planned
- **IONNA:** As a JV with seven other automakers, targeting 30,000 high-powered stalls by 2030

Reducing the Barriers to EV Ownership

To support EV education and engagement, we've introduced tools and programs for consumers and dealership staff, including courses, tours, and a support network. Through Explore EV, users of our vehicle brand apps can learn about the benefits of EV ownership. At the dealership level, Chevrolet and GMC leverage the Electric Vehicle Experience (EVX) program to designate EV specialists, while Cadillac supports training through its Pinnacle program.

Home Energy Solutions

GM Energy's vision is to simplify energy management and unlock the full potential of electrification—offering home energy solutions and consulting services that support EV adoption and contribute to broader decarbonization. By integrating connected technologies, renewable energy capabilities, and EV innovation, we empower customers to harness the potential of renewable power and EV technology to use their EVs as mobile energy assets, creating value beyond transportation.

In 2024, GM began offering vehicle-to-home (V2H) bidirectional charging capability in select EVs, enabled through GM Energy's residential product portfolio. The technology allows customers to store and transfer energy, helping reduce reliance on fossil fuel-powered generators during power outages. The 2024 Chevrolet Silverado EV RST was the first vehicle in GM's portfolio to feature V2H technology, which can power a properly equipped home for five days,¹ with GM planning to expand the offering across its retail portfolio in the coming years.

Vehicle Circularity

We are integrating circularity into vehicle design and development as a strategy to help mitigate climate-related transition risks, including emerging regulations, supply chain constraints, and evolving customer expectations.

By increasing the use of recycled and sustainable materials, designing for reuse and remanufacturing, and planning for end-of-life recovery, we can reduce reliance on virgin materials, lower material-related emissions, and build greater supply chain resilience. This approach supports long-term cost efficiency and ensures our products remain competitive in a more circular, low-carbon economy.

Sustainable Materials

Our approach relies on collaboration with our supply chain and data-driven strategies for key materials: plastics, steel, aluminum, textiles, EV battery materials, and more. Together, these represent the majority of the CO₂ emissions associated with the materials we use in our vehicles.

We are aiming to reduce the carbon footprint of new GM vehicles through material selection and sourcing decisions, including prioritizing sustainable materials in product design. We are also working to incorporate more recycled and renewable content to reduce their carbon footprint and dependence on nonrenewable resources.

Steel and Aluminum

We engage with select suppliers to identify, develop, and acquire lower GHG intensity materials and products. Strategies we leverage to achieve lower emissions include:

- 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 emission metals and other materials
- Working with suppliers to establish strategic purchase agreements, like our previously executed agreements with Nucor, U.S. Steel, and ArcelorMittal for lower emission steel

We are committed to supporting the growth of low-carbon steel, aluminum, concrete, and cement. GM plans to pursue opportunities, similar to the First Movers Coalition, to purchase these materials as they become available, reinforcing market demand for near-zero materials.

Textiles

Collaborating with our suppliers, we have successfully developed textiles from various items, including recycled plastic bottles, recovered fishing nets, and plant-based fibers. These efforts align with our goal of incorporating 50% recycled content in seat insert fabrics and up to 100% recycled content for overhead fabrics, carpets, and floor mats in our new vehicles.

Alternatives to Leather

We are advancing the development of leather alternatives using innovative, plant-based bio-materials that combine sustainability with uncompromised durability and quality. By replacing virgin plastic-based fibers with recycled content, we are working toward achieving up to 100% recycled polyester backings sourced from post-consumer waste, ensuring that these alternatives meet the highest performance standards while reducing environmental impact.

¹ Actual production will vary. The GM Energy PowerShift Charger and GM Energy V2H Enablement Kit shown requires an adequately charged and properly equipped GM EV having bidirectional charging capabilities, a properly equipped home, and proper grid interconnection. Some eligible 2024 Model Year EVs will require a dealership or over-the-air update to enable bidirectional charging. Weather conditions, life of the battery, vehicle variation and usage, and other external factors may impact the duration of power supply. Power supply may be interrupted. It is not recommended that the following devices be powered with the GM Energy PowerShift Charger and V2H Enablement Kit: Medical Devices.

Life Cycle Management

Extending the life of vehicles and their components is central to GM's commitment to a circular economy. From sharing and maintenance to reuse, remanufacturing, and recycling, each stage plays a role in reducing waste, conserving resources, and keeping vehicles and parts in use for as long as possible.

Share and Maintain

In 2024, GM provided nearly \$4 million to several nonprofit partners, including United Way Worldwide and Forth, to support car- and ride-sharing programs across the United States. GM's support provided rides to over 16,000 people.

GM provides tools to support vehicle life cycle management, improving efficiency and extending product life. Through OnStar diagnostics, customers receive real-time updates on key systems such as engines, transmissions, and brakes, ensuring proper maintenance that optimizes performance.

Reuse

GM's CarBravo platform enhances the shopping, buying, and ownership experience for used-vehicle customers. It offers customers access to an extensive inventory of certified used vehicles, both from GM and non-GM brands, located locally at dealerships. The platform aims to provide customers with the convenience to shop online, at the dealership or through a combination of both.

Remanufacture

GM's Customer Care and Aftersales (CCA) remanufacturing program helps reduce raw material needs and diverts waste from landfills, incinerators, and energy recovery facilities by enabling the reuse of vehicle parts through remanufacturing.

In 2024, CCA sold more than 600,000 remanufactured units in the United States, encompassing thousands of unique parts that meet engineering specifications, including engines, transmissions, and other offerings. More than 400 unique, high-quality, competitively priced remanufactured parts were introduced this year, expanding our ability to offer cost-effective repair options that help prolong vehicle life alongside new service parts.

Recycle

The CCA Team works with dealers and suppliers to encourage the recycling of parts that cannot currently be remanufactured. Examples include fascias, aluminum wheels, and catalytic converters, where all or part of the product is recovered for recycling or reuse. In 2024, we worked to ensure approximately 40 million pounds of these parts were sent for recycling.

EV Battery Circularity

Our EV battery life cycle management program supports circularity while helping mitigate transition and supply chain risks. By enabling reuse, repurposing, and recycling, we reduce reliance on critical materials, lower life cycle emissions, and strengthen supply resilience, supporting regulatory readiness and long-term cost efficiency.

Design for Circularity

The process of enabling battery circularity starts prior to production with a design approach that focuses on serviceability, remanufacturing, and ease of recycling. GM has a strong commitment to ensuring serviceability of vehicles through thoughtful design. By encouraging open communication between service and product design engineers, GM enhances the longevity of its vehicles and their batteries, keeping them on the road for as long as possible.

Design for recycling incorporates insights from recycling partners and the processes established through design for service to ensure that batteries are optimized for both longevity and economical recycling at end of life (EoL). The team is actively refining battery design for circularity by collaborating with industry partners, original equipment manufacturers (OEMs), and government entities. This includes a program aimed at working with industry collaborators to develop technologies for the safe and cost-effective transportation of EoL EV batteries.

Remanufacturing

The EV Battery Life Cycle and Aftersales Strategy Team is committed to extending the life cycle of GM batteries. To support this commitment, GM successfully launched a

new remanufacturing facility aimed at extending the life cycles of our vehicles and newest generation of batteries while reducing ownership costs. In 2024, more than 13,000 EV battery modules were reused, resulting in nearly 1,000 remanufactured packs, reducing new EV battery demand.

Secondary Use

Once a battery reaches EoL in a vehicle, secondary uses exist for the battery pack. We are currently working with Redwood Materials to reuse EoL batteries in utility grid-scale back-up applications. Once the batteries approach their second EoL, they can be recycled for their constituent properties.

EV Battery Recycling

GM recycles batteries from our manufacturing facilities and warranty returns. This year we expanded our relationship with Redwood Materials, working with Ultium Cells LLC to recycle all EV battery material scrap from GM's North American facilities. We are working toward a future with our cell and cathode partners to reintroduce recycled battery materials into our supply chain. These collaborations provide economic value to the EV battery recycling industry and align with our priority to ensure that EV batteries are recycled at the end of their useful lives.

Our [Recycle My Battery](#) website provides vehicle 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.

Our Value Chain

Our commitment to sustainability extends to the global supplier network that supports our operations and EV offerings.

Scope 3 Vehicle Emissions

Goal

Reduce Scope 3 GHG emissions from the use of sold products by 51% per vehicle kilometer by 2035 against a 2018 baseline

Approach

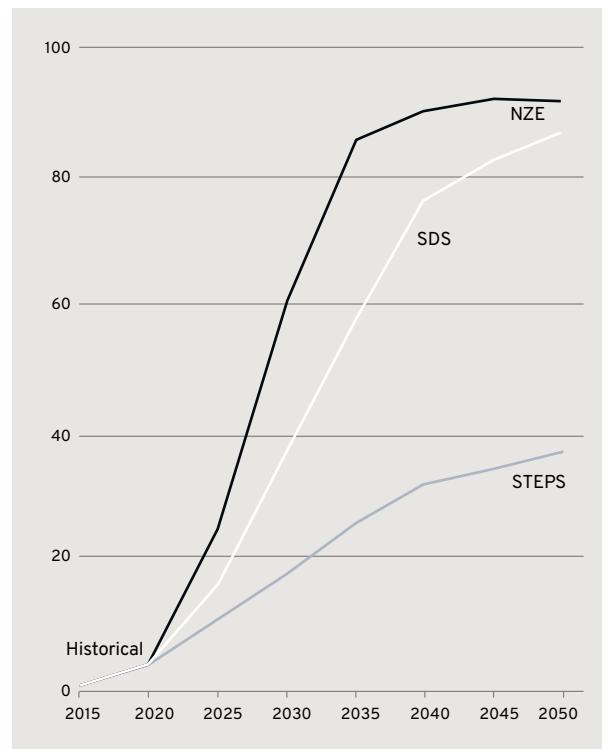
In addition to meeting customer needs, GM's portfolio of EVs helps mitigate risks such as shifting regulations, changing consumer demand, and emerging market pressures. By introducing more affordable EVs alongside luxury models, we aim to offer an EV for every budget and design sensibility. In 2024, EVs increased to 7% of our light-duty vehicle sales in the United States.

As we work toward eliminating tailpipe emissions from new U.S. light-duty vehicles, we are making adjustments to meet customer preferences, including through the addition of plug-in hybrid technology to our ICE lineup to help meet our regulatory and compliance requirements in the second half of the decade. These vehicles will give our customers a great driving experience and some of the benefits of electrification as the communities where we sell our vehicles continue to build out charging infrastructure.

Vehicle Emissions

To evaluate our strategic resilience under varying climate futures, we apply scenario analysis using multiple IEA pathways, including the NZE by 2050 scenario, the Sustainable Development Scenario (SDS), and the Stated Policies Scenario (STEPS). The NZE and SDS scenarios anticipate a rapid acceleration in EV adoption to meet global climate goals, while the STEPS scenario reflects a more gradual transition.

Global EV Sales Share in Stated Policies, Sustainable Development and Net Zero Scenarios, 2015–2040¹

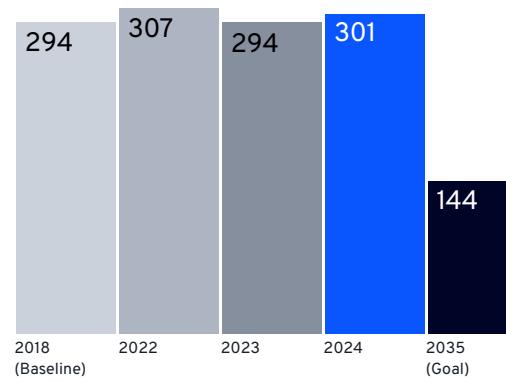


Our primary approach for reducing Scope 3 vehicle emissions is through the relative growth of our EVs, which have a significantly lower emissions intensity during the use phase of the vehicle. Additionally, we partner with our suppliers on emissions reductions and are integrating sustainability considerations further across our product portfolio.

Our path forward is guided by customer choice and demand. As we respond to our customers' needs, the mix of EV and ICE sales will fluctuate. In 2024, our performance reflected this dynamic: strong EV growth and a refreshed ICE portfolio drove overall sales, but sustained customer demand for ICE vehicles resulted in a 3% increase in emissions intensity compared to our 2018 baseline. We remain focused on delivering a world-class portfolio of EVs and building the ecosystem to support them.

Global Well-to-Wheel CO₂ Emissions Intensity² (gCO₂e/km)

Sales-Weighted Average



China JVs

GM's two JVs in China offer the most extensive portfolio of new energy vehicle (NEV) products among all global OEMs. Our NEV product mix has continued to improve, with models such as the Buick GL8 PHEV, Buick Electra E5, and Wuling Xingguang S growing shares in the market.

GM's China JV sales of NEVs, including EVs and plug-in hybrids (PHEVs), surpassed sales of ICE vehicles in China for the first time in the third quarter of 2024. NEV deliveries, including EVs and PHEVs, in 2024 were up 50% year over year, accounting for almost half of annual sales.

¹ IEA data as of 2021.

² GM's Scope 3 emissions are calculated in reference to the GHG Protocol. Use of Sold Products is calculated using the well-to-wheel method (from fuel production to vehicle driving) for vehicle intensity, consistent with SBTi requirements.

Supply Chain Resiliency

We are embedding climate resilience into our supply chain by working closely with suppliers to improve transparency, reduce emissions, and address both transition risks—such as regulatory and policy changes and evolving customer expectations—and physical risks, including weather-related disruptions and resource scarcity.

Our Global Purchasing and Supply Chain (GPSC) organization helps drive this transformation by partnering with a diverse range of suppliers to enhance our competitiveness, optimize quality and efficiency, and meet rising regulatory requirements—particularly around circularity and emissions disclosures. These efforts are essential to maintaining long-term business continuity and reducing the cost of compliance.

GM sets minimum standards and expectations for environmental stewardship through our Supplier Code of Conduct, which is incorporated into our contractual agreements with suppliers. This Code outlines key expectations, including the conservation of natural resources, maintenance of all required environmental permits, pollution prevention, responsible waste and water management, and reporting and reduction of GHG emissions. We have an established due diligence process to ensure compliance and engage in corrective actions as needed.

Measuring Supplier Sustainability and Engagement

To promote transparency and accountability, we invite suppliers to voluntarily report their Scope 1 and 2 emissions. We also utilize the EcoVadis platform, a third-party assessment tool, to evaluate suppliers' sustainability management. By the end of 2024, 90% of our direct and logistics suppliers, by budgeted annual purchase value, had enrolled in the EcoVadis platform. The average score of all GM-rated suppliers improved to 55 out of 100. We recommend corrective action plans for low-scoring suppliers.

We participate in the CDP Supply Chain Program and collaborate with CDP and our suppliers to disclose their environmental impacts. In 2024, direct and logistics suppliers representing 89% of our budgeted annual purchase value participated in CDP.

Building Supplier Community

GM's supply chain sustainability program enhances our supplier engagement. We lead the GM Supplier Sustainability Council, consisting of 14 key suppliers representing the broader supply chain. In 2024, we launched Supplier Sustainability Cohorts, where early adopters and highly engaged suppliers meet quarterly.

We provide external training and e-learning to support suppliers in the areas of environmental management and sustainability. In 2024, GM held two supplier symposiums focusing on energy and circular economy, involving 2,500 participants.

The Supplier Energy program is a key element of our supply chain sustainability efforts. We host monthly webinars that bring together suppliers and energy experts to discuss various energy topics and share insights on energy management strategies and best practices.

In 2024, GM expanded the Energy Treasure Maps tool to reduce Scope 3 upstream emissions through empowering suppliers to implement energy-saving projects. The GM Energy Treasure Maps program is a tool of more than 20 projects for suppliers to drive efforts to reduce energy, natural gas, and water usage at Tier I and Tier II supplier facilities.

Transform: Auto Launch

Industry collaboration is a crucial avenue for advancing our vision, exemplified by forums like the Suppliers Partnership for the Environment (SP). GM actively leads and participates in this group, working to develop and promote industrywide changes. By setting common standards for environmental stewardship and elevating industry benchmarks, we not only drive progress but also enhance our supply chain.

In September 2024, GM along with Honda, Ford, Magna, and Toyota, launched the “Transform: Auto” program in collaboration with SP and the sustainability advisory firm Trio. This initiative aims to drive the adoption of renewable energy across the automotive supply chain, specifically targeting the reduction of Scope 3 emissions. By providing tailored guidance and expert support, the program assists automotive suppliers in procuring renewable energy to lower their Scope 2 emissions.

Risk Management

[Divider page]



Climate Risk Management

GM incorporates climate-related risks into its risk management program to safeguard long-term business resilience, ensure regulatory compliance, and support the transition to a low-carbon economy.

Identifying and Assessing Climate-Related Risks and Opportunities

The Task Force on Climate-related Financial Disclosures (TCFD) categorizes climate-related risks into two main types: physical and transition risks. Physical risks refer to the direct impacts of climate change, such as extreme weather events or long-term shifts in climate patterns. Transition risks arise from the move toward a low-carbon economy and include policy and legal changes, technological disruptions, market shifts, and reputational challenges that may affect how businesses operate and are perceived. GM considers each of these risk categories when assessing climate-related risk.

Our Strategic Risk Management (SRM) function facilitates an enterprise risk assessment. This is conducted at least annually and is supplemented with a series of inputs throughout the year. This includes, but is not limited to, external benchmarking and insights, senior leader input through interviews and surveys, and various workshop results, such as strengths, weaknesses, opportunities, and threats (SWOT) analysis, to understand where our most critical risks and opportunities exist. Climate-related risks are considered as part of our enterprise risk assessment process.

We evaluate climate-related risks and opportunities based on both quantitative and qualitative criteria. We generally use 1% of revenue as a proxy to assess whether further analysis is warranted to determine the risks of highest priority, along with other qualitative factors that inform our final assessment. This qualitative evaluation includes prioritizing our risks with consideration of other relevant facts and circumstances, such as strategic significance, potential financial impact, potential impact on reputation, and vulnerability of occurrence, among others.

Managing Climate-Related Risks

Our chief sustainability officer (CSO) leads the efforts in integrating our most critical climate-related risks and opportunities into GM's strategic risk management process. This includes working with a cross-functional group of leaders to monitor for significant changes in our climate-related risk and opportunity landscape. Risk owners are assigned to assess identified risks, and they are tasked with evaluating the probability of occurrence and potential financial, strategic, and reputational impact. We then determine whether our current response is appropriate, given our appetite for the risk, or if further mitigation is required.

The enterprise risk owner works with the SRM team to periodically reassess the risk and monitor key risk indicators (KRIs). Enterprise-level risk updates are shared with the Board's Risk and Cybersecurity Committee (RCC). The RCC is regularly updated on changes to management risk responses, including if any trends increase or decrease throughout the year. Enterprise risks are also considered as we refine our strategies and long-term financial plans.

Definition of Time Horizons

We assess key climate-related risks and opportunities with the potential to impact our business over the short, medium, and long term.

- Short term (zero to three years):** GM defines short term for risks and opportunities as a period covering up to three years and including annual budgets for capital expenditures (CAPEX) and operating expenses (OPEX). This covers, for example, successfully sourcing 100% of our electricity for our U.S. sites from renewable sources by 2025.
- Medium term (three to five years):** GM's medium-term plan for risks and opportunities includes three to five years of resource allocation and funds. For example, research and development on next-generation cell chemistries and form factors, while extending our investment with LG Energy Solution to include prismatic cell development.
- Long term (greater than five years):** Long term is open-ended and is based on the type of risk or opportunity. For example, our targets for operations and sold products have a target year of 2035, and our goal to achieve carbon neutrality in global products and operations extends to 2040.

Scenario Planning

GM's qualitative climate risk assessment, conducted in 2024, considers three potential climate scenarios to identify, prioritize, and mitigate climate risks.

Understanding the different emissions pathways enables us to plan for a range of possible climate responses and associated impacts. Business units qualitatively evaluated GM's resilience under each scenario to inform our climate-related risks and opportunities. The analysis summarized in the table was informed by peer benchmarks, the Intergovernmental Panel on Climate Change (IPCC) to assess physical risks and the International Energy Agency (IEA) to assess transition risks over short-, medium-, and long-term time horizons.¹

GM also conducted a quantitative physical risk assessment for our manufacturing and essential nonmanufacturing facilities in 2024. The analysis incorporated emissions pathways from IPCC, including 1.5°C Paris Ambition, 2°C Paris Limit, 2.5°C Stated Policy, 3°C Current Policy, and >4°C No Policy. Physical hazard exposure from drought/water stress, flash floods, freeze, heatwaves, riverine floods, and temperate/tropical windstorms were assessed across short-, medium-, and long-term time horizons. Our substantive physical risks identified under the stated policy emission pathway are flash floods near term.

Climate Scenario Analysis

Scenario ²	Aggressive Climate Mitigation	Moderate Climate Mitigation	Business as Usual
Temperature Increase	1.5°C–Paris Agreement	2–2.5°C	4°C
Policy and Legal	Aggressive policy and regulatory actions to limit emissions are mandated, including cap-and-trade programs, carbon taxes, and limiting the extraction and use of fossil fuels in most sectors and all economies.	Moderate policy and regulatory actions to limit emissions are mandated to expand access to sustainable, affordable, and modern energy.	Lacking global coordination to tackle climate change. Considers only policies currently enacted and under development (e.g., emissions-reduction policies) and assumes slow implementation of policies based on the political, institutional, and societal barriers that exist.
Market	Accelerated transition to renewables/electrification. Drastic shift in consumer preferences for lower emission products and services and greater transparency alongside the phaseout of carbon-intensive products and services due to their unprofitability.	Gradual shift in consumer preferences for lower emission products and services and greater transparency.	Continued use of fossil fuels and energy-intensive activities. Slower adoption of lower emission products by customers.
Physical (Flooding, Drought, Heatwaves, Freeze, and Windstorms)	Intensity and frequency of acute physical risks remain relatively similar with moderate increases over the medium and long term.	Moderate effects of climate change requiring investment in adaptation measures, raw material and supply chain challenges, and some negative health effects on populations. Heavy precipitation and associated flooding events are projected to become more intense and frequent.	More visible effects of climate change, such as increased drought, flash floods, heatwaves, and windstorms necessitate investments in adaptation measures to protect production, assets, infrastructure, and communities. Stress on supply chain and challenges with sourcing raw materials, resulting in increased costs and disruptions. Negative health impacts on populations, including rise in heat-related conditions and mortality, and reduced productivity.
Technology	Accelerated support for low-carbon technological innovation through incentives and market opportunities. Increased investment in low-carbon technologies and development.	Gradual shift to low-carbon technology, with some opportunities for incentives and investments.	Slow shift to low-carbon technology with more limited incentives and investments.
Energy Usage and Mix	Substantial shift to renewable energy sources. Drastic reduction in fossil fuel usage requiring large-scale investments in clean energy infrastructure.	Gradual shift to renewable energy, but more investment will be in resilience measures to protect against climate-related disruptions.	Disruption to energy production, infrastructure, and distribution networks due to extreme weather-related events.

¹ Sources: IPCC Sixth Assessment Report (AR6), 2021, International Energy Agency World Energy Outlook 2021.

² IPCC Representative Concentration Pathways (RCP 8.5 and RCP 2.6)
Source: [TCFD Technical Supplement: The Use of Scenario Analysis in Disclosure of Climate-Related Risks and Opportunities](#).

Climate-Related Risks and Opportunities

The following tables outline GM's key climate-related risks and opportunities, categorized by type, time horizon, and potential impact on the business, in alignment with the TCFD framework.

Transition Risks

Risk	Title	Time Horizon	Description	Potential Impact on Business	Risk Mitigation Activities
Policy and Legal	Cost to comply with sustainability regulations (supply chain)	Medium term	Cost to comply with more stringent regulations and/or the increased number of regulations related to sustainability across the supply chain (e.g., circularity requirements, supplier carbon footprints).	Increased costs for new and existing suppliers to maintain compliance with regulatory requirements, which impacts cost to GM. Impacts to production schedule if compliance requirements cause delays for existing suppliers and/or a need arises to partner with new suppliers.	Supplier education, inclusive of capacity building/technical support. Tracking of applicable regulations and providing advanced notice to suppliers.
Policy and Legal	Rapid and uncertain policy changes (emissions)	Medium term	We are subject to state and federal governmental regulations, as well as regulations from governments outside of the United States, relating to fuel economy standards and greenhouse gas (GHG) emissions. Based on our current and forecasted sales mix, we expect in the near term to have shortfalls in complying with current U.S. regulations. There are several methods to comply with these regulations that we have utilized and may continue to utilize, including, but not limited to, increasing production and sales of certain vehicles, such as electric vehicles (EVs); curtailing production of certain vehicles, such as internal combustion engine (ICE) vehicles; certain technology changes; and/or the purchase of GHG/Corporate Average Fuel Economy (CAFE) credits from third parties. There is uncertainty around the future availability of credits and consumer demand for EVs, each of which could impact our ability to comply with these regulations. In addition, the U.S. Government has begun to take action to reduce the stringency and/or scope of these regulations, which could improve our compliance position.	In July 2025, the One Big Beautiful Bill Act set the civil penalties for noncompliance with CAFE standards to zero. Under other current regulations, shortfalls to certain other mandated fuel economy and emissions targets could result in legal or regulatory proceedings, the recall or decertification of one or more of our products, negotiated remedial actions, fines and penalties, and/or restricted product offerings. Additional compliance costs, including potential fines and penalties, are not reasonably estimable and could be substantial.	Maintain a diverse product portfolio—including a robust lineup of EVs and a strategic plug-in hybrid electric vehicle (PHEV) offering—to meet evolving customer needs and comply with regulatory requirements. While PHEVs support the transition in the near term, their role may diminish with changes to the regulatory environment.
Market	EV adoption by core customer base and dealers	Short term	EV adoption rate lags behind expectations due to lack of availability of EV infrastructure and customer and dealer sentiment.	Financial penalties incurred and regulatory actions (e.g., inability to sell in certain markets) if GM cannot achieve mandated emissions targets and decarbonization goals due to insufficient EV sales. Excess capacity and inefficiency at plants due to lag in demand. Reduction in revenue driven by loss of market share from lagging sales of EVs and constrained sales of ICE.	Investing in EV charging infrastructure development. Working with dealer network to expose customers to EVs. Advancing battery technology to deliver the best mix of range, performance, and affordability. Creating greater flexibility in EV product mix.
Technology	Selecting the wrong technology or adopting at the wrong time	Long term	Selecting the wrong technology or mistiming the adoption of technology (e.g., not selecting technology at right stage of maturity, adopting technology too late in relation to competitors).	High costs and financial losses associated with investing in a technology that becomes obsolete or fails to meet consumer needs, and incurring costs to switch to a more suitable solution. Missed strategic market opportunities due to investments in alternative technologies, leading to a competitive disadvantage. Damage to reputation, financial losses, and legal challenges due to higher warranty expense or a product recall caused by compressed timeline to transition.	Strategic planning and resource distribution to ensure software adaptability across different vehicle types and a versatile portfolio. Earlier testing and development diagnostics to resolve issues ahead of production. Monitoring technological advancements and market trends to make informed decisions about product and technology investments.

Climate-Related Risks and Opportunities

Physical Risks

Risk	Title	Time Horizon	Description	Potential Impact on Business	Risk Mitigation Activities
Acute Physical	Disruption of supply chain	Short term	Increased intensity, frequency, or duration of storms, droughts, wildfires, or other severe weather events as a result of climate change may disrupt GM's supply chain.	Reduction in revenue due to disruptions in supply chain caused by key supplier vulnerability to acute climate events, resulting in costs associated with unanticipated downtime or reduced capacity in vehicle manufacturing and/or servicing.	Incorporate site selection criteria to include climate risk. Working with high-risk suppliers on mitigation plans, which could include structural upgrades that can reduce asset vulnerability. 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). Report all potential impacts to regional command center.
Acute Physical	Disruption of operations	Short term	Increased intensity, frequency or duration of storms, droughts, wildfires, or other severe weather events as a result of climate change may disrupt our production.	Increased costs to address damage caused by acute physical risks and loss value from damaged inventory in manufacturing plants and parts distribution warehouses. Potential revenue loss from production disruption. Such weather events may also adversely impact the financial condition of our customers, and thereby reduce demand for our products and services.	Business continuity plans to reduce risk of impact to production. Evaluate risk and prioritize infrastructure funding for mitigation. Proactive and reactive strategies to mitigate impact of grid interruptions. Assessing tools and technologies to lower risks to critical equipment and minimize production downtime at sites prone to frequent outages. GM mitigates the financial impacts by insuring our facilities.

Opportunities

Opportunity	Title	Time Horizon	Description	Potential Impact on Business	Opportunity Leveraging Activities
Market	Customer attraction and retention	Short term	Through the continued expansion and evolution of GM's EV portfolio, the ability to expand into new markets and attract new customers, as well as demonstrate to existing customers that there is an EV to meet their needs.	Increased revenue and increase the number of "conquest sales" by meeting diverse customer needs by offering a range of EV models with different price points, features, and capabilities.	Producing compelling EVs and customer experiences. Increasing access to EVs by investing in charging infrastructure. Revamping marketing strategy and hosting EV demonstration events. Working with dealerships to market EVs by providing an enjoyable experience with the brand. Influencer events to build awareness and rebrand.
Technology	Value creation through innovation and investment in green tech	Long term	Through product advancement, investment in sustainable energy sources, and innovations in manufacturing technologies and energy-efficiency improvements.	Increased revenue, market share and customer satisfaction resulting from advanced battery technologies that provide longer driving ranges and quicker recharge times. Cost reduction in EVs through battery advancements. Cost savings through renewable energy sources and innovative technology that requires fewer resources.	Research and development for EV batteries and innovation in production processes and material science. Investing in alternative energy solutions beyond EVs. Leveraging evolving EV technology to facilitate GM Energy solutions.

Governance



Board Oversight

GM's Board of Directors is elected annually by shareholders to oversee the company's business and strategic direction and build long-term shareholder value. This includes oversight of climate-related risks and opportunities through the company's enterprise risk management (ERM) process.

As part of its strategic and risk oversight responsibilities, the Board—through its committees and full board meetings—receives updates on GM's sustainability priorities.

The Board collectively brings expertise in risk management, environmental, and governance—critical capabilities to oversee climate-related risks and opportunities. The Board reviews its skill matrix annually and has confirmed that its composition continues to maintain strong expertise and possesses a broad range of skills, qualifications, and attributes that will support the company's strategy.

Additional details on the Board's structure and governance practices are available in our [2025 Proxy Statement](#).

Committee Structure

Governance and Corporate Responsibility Committee (GCRC)	Audit Committee	Executive Compensation Committee	Finance Committee	Risk and Cybersecurity Committee
<ul style="list-style-type: none"> Oversees sustainability initiatives, strategies, and policies that have a material impact on the company. Oversees progress of GM's public global sustainability goals, including public policy, corporate philanthropy, and other sustainability initiatives. Manages the Board's shareholder engagement program. Reviews sustainability strategy and certain disclosures. 	<ul style="list-style-type: none"> Reviews the disclosure process and control procedures over financial and sustainability disclosures. 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 sustainability disclosures, including workplace and product safety, ethics and compliance, environmental, and cybersecurity risks. 	<ul style="list-style-type: none"> Oversees design and implementation of an executive compensation program that drives alignment with shareholder interests and retains the talent required to successfully execute the company's strategy. 	<ul style="list-style-type: none"> Reviews capital expenditures to support GM's growth strategy through new and continued investment in internal combustion engines (ICE) and electric vehicles (EVs) and other important initiatives. Regularly reviews the financial performance of the company's vehicle portfolio and recommends the Board approve certain vehicle programs, while also monitoring momentum on ICE and EV sales and franchise profitability. Supports the company's battery raw material strategy by reviewing strategic transactions that diversify the supply chain and enhance resiliency. Oversees the company's long-term plan to deliver sustainable earnings among ICE and EV profitability. 	<ul style="list-style-type: none"> Reviews GM's strategic, operational, and cybersecurity risks, including product safety, vehicle cybersecurity, climate change, and regulatory risk. Reviews the company's risk management framework.

Management Oversight

At the management level, GM uses a top-down and bottom-up approach to risk governance.

The management team appoints members to the Risk Advisory Council—an executive-level body with cross-functional representation from each business unit. This group monitors key business and emerging risks and champions the integration of risk management practices across their respective functions and regions.

The Environment, Social, and Governance (ESG) Disclosure Committee is a cross-functional group that oversees GM's sustainability disclosures. It is chaired by our vice president, global business solutions and chief accounting officer, chief sustainability officer (CSO), and assistant corporate secretary and assistant general counsel.

The CSO, who reports to the vice president of Battery, Propulsion & Sustainability, leads enterprise-wide sustainability efforts. This role is responsible for coordinating sustainability strategy across the company and ensuring alignment with EV product teams to enhance integration and execution.

Remuneration

GM's executive compensation program seeks to align our metrics with both our near- and long-term strategic priorities. These priorities include maximizing our winning ICE portfolio, growing our EV business profitably, delivering innovative software and services, and continuously advancing our autonomous vehicle (AV) technology.

Shareholder Engagement

Members of the Board and senior management regularly engage with institutional shareholders to collect feedback on various topics, including strategy, financial performance, executive compensation, Board composition and leadership, and key environmental and social issues. These constructive exchanges have helped the Board evaluate and assess key initiatives.

Public Policy

We continue to work closely with governments worldwide to implement policies that support our business goals and initiatives. Our focus is on selling vehicles, building infrastructure, developing pathways for low-carbon electricity, and supporting the overall manufacturing footprint necessary for the success of our zero emissions vision.

To reach these goals, GM's Global Public Policy organization leverages the expertise of the broader GM team, industry subject matter experts, coalitions, and industry trade associations. We develop informed policy positions in order to advocate for legislative and regulatory actions that support our vision. In addition, GM stresses how all of our industry and U.S. consumers benefit from a successful, durable, achievable, and aligned set of regulations, and our public comments typically provide detailed recommendations for alignment.

Further, we support policies to ensure the United States can remain globally competitive. New technologies take time to scale and reduce costs—EVs are no different. We are determined to ensure that the U.S. auto industry leads the way.

Political Contributions and Lobbying

We believe we should make meaningful contributions to shaping public policy and addressing legislation that impacts our company, industry, and stakeholders. We have and will continue to support candidates and public policies that drive our long-term, sustainable growth. Recent enhanced disclosures led the Center for Political Accountability (CPA) to award GM their highest “Trendsetter” status in their annual [CPA-Zicklin Index of Corporate Political Disclosure and Accountability](#).

The Board receives regular reports on priority policy issues, actively oversees our participation in the political process and has adopted a [U.S. Corporate Political Contributions and Expenditures Policy](#), overseen by the GCRC. Through the GCRC, the Board annually reviews 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 GCRC also oversees the company's direct and indirect lobbying activities and expenditures.

Metrics and Targets

[Divider page]



Image caption

Goal Status

In 2021, we announced our goal to achieve carbon neutrality in global products and operations by 2040. While our long-term vision has not changed, we are actively re-evaluating our path to reach it, while remaining focused on our business objectives, our operations, our products, and our value chain.

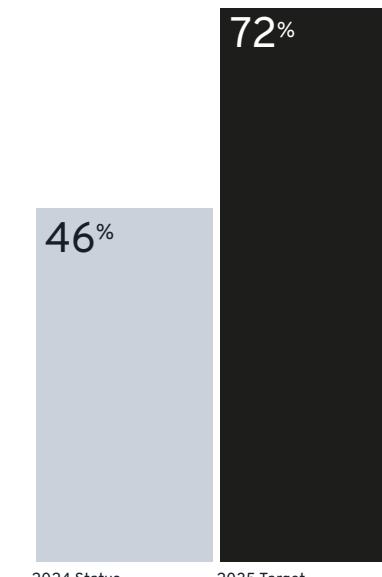
Reduce Scope 3 GHG¹ emissions from the use of sold products by 51% per vehicle kilometer by 2035 against a 2018 baseline



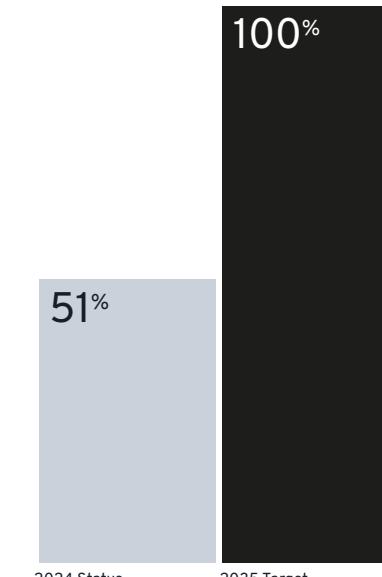
Eliminate tailpipe emissions from new U.S. light-duty vehicles by 2035



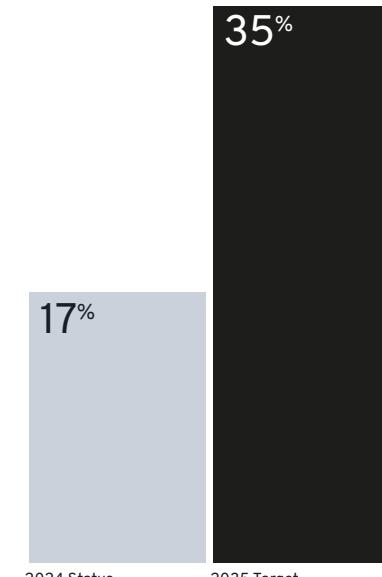
Reduce Scope 1 and 2 GHG emissions from our operations by 72% by 2035 against a 2018 baseline



Match 100% of our electricity use with renewable electricity globally by 2035



Reduce water intensity by 35% by 2035 against a 2010 baseline²



Scope 3 Vehicle Emissions

Scope 3 Vehicle Emissions

Scope 1 and 2 Emissions

Renewable Energy

Water Management

¹ Greenhouse gas (GHG) emissions.

² Excludes GM Financial and Cruise.

Key Metrics

Reporting is in reference to [GHG Protocol](#) and includes facilities under GM operational control. Certain amounts may not add due to rounding.

	2022	2023	2024
Global Emissions (metric tons CO₂e)			
Direct (Scope 1) GHG Emissions (gross direct)^{1,2}			
Direct (Scope 1) GHG Emissions	1,312,309	1,304,570	1,238,498
Indirect (Scope 2) GHG Emissions (gross indirect)^{3,4}			
Indirect (Scope 2) Location-Based GHG Emissions	2,268,964	2,341,276	2,365,886
Indirect (Scope 2) Market-Based GHG Emissions	1,338,298	1,410,047	1,071,159
Other Indirect (Scope 3) GHG Emissions (gross indirect)			
Total Other Indirect (Scope 3) GHG Emissions	327,269,768	347,272,911	388,443,359
Other Indirect (Scope 3) GHG Emissions Use of Sold Products ⁵	223,279,481	240,773,794	250,795,986
Other Indirect (Scope 3) GHG Emissions Investments ⁶	42,066,537	38,059,248	26,895,521
Other Indirect (Scope 3) GHG Emissions Purchased Goods and Services ⁷	49,388,347	55,183,666	90,183,315
Other Indirect (Scope 3) GHG Emissions Other	12,535,402	13,256,203	20,568,537
Other Emissions⁸			
NOx (nitrogen oxide emissions)	994	906	893
SOx (sulfur oxide emissions)	34	41	32
VOC (volatile organic compounds emissions) ⁹	9,161	9,399	9,571
Global Volume (thousands of units)¹⁰			
Total Number of Vehicles Manufactured Globally	6,094	5,886	5,374
Total Number of Vehicles Manufactured—Excluding China	3,397	3,533	3,663
Total Number of Vehicles Manufactured—China	2,697	2,353	1,711
Total Number of Vehicles Sold Globally	5,941	6,189	6,002
Total Number of Vehicles Sold—Excluding China	3,638	4,090	4,164
Total Number of Vehicles Sold—China	2,303	2,099	1,839

¹ Calculation includes CO₂, CH₄, and N₂O. Source of emission factors is regulatory or Intergovernmental Panel on Climate Change Good Practice Guidelines.

² GM's Scope 1 emissions are generated from use of fossil fuels, mostly natural gas for process.

³ Calculation includes CO₂, CH₄, and N₂O. Source of emission factors is regulatory or Intergovernmental Panel on Climate Change Good Practice Guidelines.

⁴ GM's Scope 2 emissions are mostly from electricity used in our operations for process and building with some purchased steam.

⁵ GM's Scope 3—Use of Sold Products emissions are calculated using the well-to-wheel method (from fuel production to vehicle driving) for vehicle intensity, consistent with Science Based Targets initiative requirements.

⁶ Emissions from our China JVs are classified as Scope 3—Investments.

⁷ Beginning in 2024, we updated our methodology for calculating emissions for Scope 3—Purchased Goods and Services from spend-based to hybrid, using supplier-specific emissions factors and average-data method with Ecoinvent emission factors for purchased steel and aluminum, and using Comprehensive Environmental Data Archive (CEDA) emission factors to calculate remaining spend-based emissions. Prior period data has not been restated.

⁸ Emissions from on-site stationary sources within reporting footprint boundaries, based on AP 42 factors or site-specific measured emission factors.

⁹ VOC emissions from ELPO, primer, topcoat, final repair, and cleaning solvents at our assembly plants within our footprint boundaries, which are considered the major sources of VOC emissions.

¹⁰ Vehicle volumes have been updated since previously published.

	2022	2023	2024
U.S. EV Portfolio			
Zero Emission Vehicles Sold	39,242	75,883	114,432
Global Well-to-Wheel CO2e Emissions Intensity, Light- and Heavy-Duty Vehicle (gCO2e/km)¹			
Total Sales-Weighted Average	307	294	301
Global Energy			
Global Energy Consumption Within the Organization (MWh)			
Total Energy Consumption	12,100,772	11,643,527	11,628,596
Electricity Consumption (including cooling)	5,364,991	5,458,002	5,535,438
Fuel Consumption From Nonrenewable Sources	6,223,628	5,742,126	5,727,937
Fuel Consumption From Renewable Sources	342,584	280,572	227,418
Steam Consumption	169,289	162,080	137,213
Cooling Consumption	281	745	590
Heating Consumption	—	—	—
Energy Intensity (MWh/vehicle)	3.56	3.30	3.17
Global Renewable Electricity	1,976,256	2,167,353	2,875,792
Renewable Electricity as a Percentage of Our Global Electricity Use ^{2,3}	36%	39%	51%
Renewable Electricity as a Percentage of Our U.S. Electricity Use ^{4,5}	55%	59%	77%
Global Water⁶			
Water Withdrawal by Source (megaliters)			
Total Water Withdrawal	18,665	17,724	17,357
Water Intensity (m ³ /vehicle)	5.49	5.02	4.74

¹ GM's Scope 3 emissions are calculated in reference to the GHG Protocol. Use of Sold Products is calculated using the well-to-wheel method (from fuel production to vehicle driving) for vehicle intensity, consistent with Science Based Targets initiative requirements.

² GM's renewable electricity progress is in alignment with RE100 technical criteria.

³ Includes generation and consumption of electricity from landfill gas.

⁴ GM's renewable electricity progress is in alignment with RE100 technical criteria.

⁵ Includes generation and consumption of electricity from landfill gas.

⁶ Water data, other than municipal and well water, is collected from global facilities. Global water calculations include our automotive operational and manufacturing facilities. Excludes GM Financial and Cruise.

Task Force on Climate-related Financial Disclosures (TCFD) Index

Disclosure Focus Area	Disclosure	Response/Comment
Governance		
Disclose the organization's governance around climate-related risks and opportunities.	<p>a) Describe the board's oversight of climate-related risks and opportunities.</p> <p>b) Describe management's role in assessing and managing climate-related risks and opportunities.</p>	<p>Climate Risk Management > Managing Climate-Related Risks Governance > Board Oversight 2025 Proxy Statement > Board and Committee Oversight of Risk, pages 26-27</p> <p>Climate Risk Management > Identifying and Assessing Climate-Related Risks and Opportunities Climate Risk Management > Managing Climate-Related Risks Governance > Management Oversight</p>
Strategy		
Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.	<p>a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.</p> <p>b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.</p> <p>c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.</p>	<p>Climate Risk Management > Definition of Time Horizons Climate Risk Management > Climate-Related Risks and Opportunities</p> <p>Strategy > Our Operations Strategy > Our Products Strategy > Our Value Chain Climate Risk Management > Managing Climate-Related Risks Climate Risk Management > Climate-Related Risks and Opportunities Governance > Board Oversight Governance > Public Policy 2024 Form 10-K > Research, Product Development and Intellectual Property, pages 4-5</p> <p>Strategy > Our Operations Strategy > Our Products Strategy > Our Value Chain Climate Risk Management > Scenario Planning</p>
Risk Management		
Disclose how the organization identifies, assesses and manages climate-related risks.	<p>a) Describe the organization's processes for identifying and assessing climate-related risks.</p> <p>b) Describe the organization's processes for managing climate-related risks.</p> <p>c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.</p>	<p>Climate Risk Management > Identifying and Assessing Climate-Related Risks and Opportunities Climate Risk Management > Scenario Planning</p> <p>Climate Risk Management > Identifying and Assessing Climate-Related Risks and Opportunities Climate Risk Management > Managing Climate-Related Risks</p> <p>Climate Risk Management > Identifying and Assessing Climate-Related Risks and Opportunities Climate Risk Management > Managing Climate-Related Risks Governance > Board Oversight</p>

Disclosure Focus Area	Disclosure	Response/Comment
Metrics and Targets		
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities.	<p>a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.</p> <p>b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.</p> <p>c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.</p>	Strategy > Our Operations Strategy > Our Products Strategy > Our Value Chain Metrics and Targets > Key Metrics Strategy > Our Operations Strategy > Our Value Chain Metrics and Targets > Key Metrics 2024 Assurance Statements Strategy > Our Operations Strategy > Our Value Chain Metrics and Targets > Goal Status
Cross-Industry, Climate-Related Metrics		
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities.	<p>GHG Emissions: Absolute Scope 1, Scope 2 and Scope 3; emissions intensity.</p> <p>Transition Risks: Amount and extent of assets or business activities vulnerable to transition risks.</p> <p>Physical Risks: Amount and extent of assets or business activities vulnerable to physical risks.</p> <p>Climate-Related Opportunities: Proportion of revenue, assets or other business activities aligned with climate-related opportunities.</p> <p>Capital Deployment: Amount of capital expenditure, financing or investment deployed toward climate-related risks and opportunities.</p> <p>Internal Carbon Prices: Price on each ton of GHG emissions used internally by an organization.</p> <p>Remuneration: Proportion of executive management remuneration linked to climate considerations.</p>	Metrics and Targets > Key Metrics Strategy > Our Products Strategy > Our Value Chain Climate Risk Management > Climate-Related Risks and Opportunities Climate Risk Management > Climate-Related Risks and Opportunities Climate Risk Management > Scenario Planning Strategy > Our Products Climate Risk Management > Climate-Related Risks and Opportunities Strategy > Our Operations Strategy > Our Products Strategy > Our Value Chain 2024 Form 10-K > Research, Product Development and Intellectual Property, pages 4-5 Strategy > Our Operations Governance > Management Oversight > Remuneration

