

W0. Introduction

W0.1

**(W0.1) Give a general description of and introduction to your organization.**

General Motors Company (“GM”) is a global company committed to pioneering the innovations that move and connect people to what matters. We design, build and sell trucks, crossovers, cars and automobile parts and provide software-enabled services and subscriptions worldwide. Our automotive operations meet the demands of our customers through our automotive segments: GM North America (GMNA) and GM International (GMI) with vehicles developed, manufactured and/or marketed under the Buick, Cadillac, Chevrolet and GMC brands. We also have equity ownership stakes in entities that meet the demands of customers in other countries, primarily in China, with vehicles developed, manufactured and/ or marketed under the Baojun, Buick, Cadillac, Chevrolet and Wuling brands. Cruise is our global segment responsible for the development and commercialization of autonomous vehicle technology.

With global headquarters in Detroit, Michigan, GM employs ~146,000 people. At December 31, 2021, we had over 100 locations in the U.S. (excluding Cruise, our automotive financing operations and dealerships), which are primarily for manufacturing, assembly, distribution, warehousing, engineering and testing. We have manufacturing, assembly, distribution, office or warehousing operations in 29 countries, including equity interests in associated companies, which perform manufacturing, assembly or distribution operations. The major facilities outside the U.S., which are principally vehicle manufacturing and assembly operations, are located in Brazil, Canada, China, Mexico and South Korea.

GM’s sustainability strategy is led at the enterprise level to ensure a holistic approach across the company. Our strategy is led by senior leaders throughout the organization. Our chief sustainability officer is the enterprise-wide leader of sustainability and directs initiatives through the Office of Sustainability (SO). The SO has been strategically designed to ensure accountability for key sustainability targets and initiatives at the highest levels of the company; nurture a culture of sustainability across the organization; track and measure progress through transparent disclosure; and engage with stakeholders on relevant matters.

GM is proud of its long-standing commitment to protect human health and the environment. We continually assess the environmental impacts of our activities, products, and services in accordance with our Global Environmental Policy and are committed to reducing or eliminating these impacts through the establishment of appropriate objectives and targets. GM’s Guiding Environmental Commitments are the foundation of this policy and have been in place for more than 25 years. These Commitments now serve as a guide for all GM employees and partners worldwide. They encourage environmental consciousness in both daily conduct and in the planning of future products and programs, and support and embrace GM’s purpose, values, and our vision. For example, our commitments include:

- Preventing deforestation, conserving water and taking actions that preserve water quality, caring for natural resources in and around our facilities and the communities where we operate.
- Using renewable energy at our facilities and sites globally and advocating for policies that promote renewable energy use and demand.
- Recognizing that the transportation sector is a leading contributor to global greenhouse gas emissions and our obligation to reduce them in the transition to a low carbon future. We have committed to an all-electric future with a core focus on zero emission battery EVs as part of our long-term strategy to reduce petroleum consumption and greenhouse gas (GHG) emissions.

GM is a signatory to the United Nations Global Compact, which endorses a framework of principles in the areas of human rights, labor, the environment, and anti-corruption. In 2021, GM signed the UN Global Compact - CEO Water Mandate to support global water security. In addition, GM’s commitment supports the Global Compact’s ten principles and the company’s intent to maintain the principles and to evaluate related global best practices that may be applicable to GM.

GM is reporting GHG emissions to CDP using the GHG Protocol, unless noted otherwise, for operations (Scope 1 & 2) where we have operational control for GHG emissions, owned or leased facilities, and joint ventures as applicable, as well as for indirect emissions (Scope 3) from upstream and downstream activities. We will be reporting Scope 1 and 2 emissions by North America, South America, and International (rest of world), and companywide for Scope 3.

Unless otherwise stated, GM Financial, our financing services provider, and Cruise, our autonomous vehicle subsidiary, are not included in the report. Dollar amounts presented within this report are stated in U.S. dollars.

W0.2

**(W0.2) State the start and end date of the year for which you are reporting data.**

	Start date	End date
Reporting year	January 1 2021	December 31 2021

## W0.3

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**(W0.3) Select the countries/areas in which you operate.**

Argentina  
Australia  
Brazil  
Canada  
Chile  
China  
Colombia  
Ecuador  
Egypt  
Ireland  
Japan  
Mexico  
Philippines  
Republic of Korea  
Russian Federation  
Switzerland  
United States of America

## W0.4

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**(W0.4) Select the currency used for all financial information disclosed throughout your response.**

USD

## W0.5

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**(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.**

Companies, entities or groups over which operational control is exercised

## W0.6

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**(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?**

Yes

## W0.6a

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**(W0.6a) Please report the exclusions.**

Exclusion	Please explain
Small facilities with insignificant water use are excluded.	GM has a robust utility management system operated by a third party globally with invoice verification and auto bill pay in some countries. Small facilities have minimal impact on cost and water security and are not included in the utility bill management system. Based on the water intensity of our included non-manufacturing facilities along with the number and size of our excluded facilities, we estimate that these exclusions represent 0.1% of our total withdrawal and are insignificant.

## W0.7

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**(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?**

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, an ISIN code	37045V1008

## W1. Current state

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### W1.1

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**(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.**

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Important	Direct Use: Water use in our direct operations is used for pre-treatment of vehicle bodies prior to painting as well as weld cooling, machining, and powerhouse operations making it vital for our operations. We cannot manufacture vehicles without sufficient amounts of good quality water. Also, our 146,000 employees rely on sufficient good quality water for drinking and sanitation purposes (WASH). In the future, as we transition to electric vehicles, production could increase resulting in additional water needs that will be vital to our production and employee use. Indirect use: Our supply chain manufactures automobile parts using raw materials that require significantly more water than our direct operations according to a life cycle analysis of auto parts in the supply chain. Painting operations at Tier 1 facilities require high quality water supply for welding operations and cooling water makeup, making availability extremely important. About 70% of water use in the supply chain is at tiers 2-6 with the majority needed for electric power generation, steel production, mining, and agriculture. Additionally, supply chain employees need safe water for drinking and sanitation. In the future, as we transition to electric vehicles, production and additional parts might be needed resulting in additional water needs for our supply chain that will be vital to their operations and employees.
Sufficient amounts of recycled, brackish and/or produced water available for use	Not very important	Not very important	GM plants are mostly located in water abundant areas, except for 5 facilities in water stressed areas representing less than 3.5%, therefore brackish and/or produced water is not very important in our overall planning.  Internally recycled water is important to GM. Within water stressed areas, we use recycled water for all manufacturing operations with Zero Liquid Discharge process, including paint pre-treatment of vehicle bodies since water supply is scarce and low quality.

**W1.2**

**(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?**

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	GM measures and monitors 100% of our major facilities water withdrawals using either invoices or meter data on a monthly basis. It is tracked in a global utility database and the data is verified by an independent third party annually. Some small facilities (offices) have water service included in their lease rate and we do not track the water withdrawal. Our estimate is that this represents 0.1% of our water withdrawal. As water management is integrated into our business plan, we set goals for each facility measured and track progress on a monthly scorecard at facility, region, and company level and report to senior management.
Water withdrawals – volumes by source	100%	GM measures and monitors 100% of our major facilities water withdrawals by source using either invoices or meter data on a monthly basis. It is tracked in a global utility database by source and the data is verified by an independent third party annually. Some small facilities (offices) have water service included in their lease rate and we do not track the water withdrawal. Our estimate is that this represents 0.1% of our water withdrawal.
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sector]	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	GM measures and monitors 100% of our major facilities water withdrawal quality either from supplier provided test results or our own lab testing on a monthly basis or more frequently as required by local regulations. Some small facilities (offices) have water service included in their lease rate and we request water quality from the supplier. Our estimate is that this represents 0.1% of our water discharge quality.
Water discharges – total volumes	100%	GM measures and monitors 100% of our major facilities industrial water discharges using either invoices, meter data, or engineering estimates. It is tracked in a global environmental database annually. Some small facilities (offices) have water service, including discharge included in their lease rate and we do not track the water discharged. Our estimate is that this represents 0.1% of our water discharge.
Water discharges – volumes by destination	100%	GM measures and monitors 100% of our major facilities industrial water discharges by destination using either invoices, meter data, or engineering estimates. It is tracked in a global environmental database annually. Some small facilities (offices) have water service, including discharge included in their lease rate and we do not track the water discharged. Our estimate is that this represents 0.1% of our water discharge.
Water discharges – volumes by treatment method	100%	GM measures and monitors 100% of our major facilities industrial water discharges by treatment method using either invoices, meter data, or engineering estimates. It is tracked in a global environmental database annually. Some small facilities (offices) have water service, including discharge by treatment method included in their lease rate and we do not track the water discharged by treatment method. Our estimate is that this represents 0.1% of our water discharge by treatment method.
Water discharge quality – by standard effluent parameters	100%	Where required by regulatory agency, GM measures and monitors 100% of our regulated discharges from major facilities. As specified within our regulatory obligations, frequency and analytical testing methods stated by the EPA (40CFR136) are utilized by our 3rd party laboratories. Some small facilities (offices) have water service, including discharge that are included in their lease rate and we do not track the water quality data. Our estimate is that this represents 0.1% of our water discharge by quality data by standard effluent parameters.
Water discharge quality – temperature	1-25	At facilities where discharge temperature is regulated, GM measures 100% of the discharge temperature. We estimate that about 2% our facilities have temperature monitoring included in their process data management parameters and the remainder are not applicable. We do not monitor temperatures where there is no possibility of elevated temperatures as is the case for most of our operations.
Water consumption – total volume	100%	Water Consumption is calculated from withdrawal by source and discharge by source data for 100% of our major facilities. We monitor it on an annual basis as our focus for water security is on withdrawal. Some small facilities (offices) have water service, including discharge that are included in their lease rate and we do not track the water withdrawal or discharge data. Our estimate is that small facilities represents 0.1% of our water consumption - total volume.
Water recycled/reused	1-25	At GM facilities where water is reused or recycled as part of the major supply, e.g., Zero-liquid discharge, we monitor the volume of recycled water. Where we recycle at a local process, e.g. phosphate tank in paint shop, metering is not always used as the volume is not an important parameter, just that we reuse 100% of water from the stage that has higher quality vs. lower quality. We estimate that about 2% of our facilities measure reuse or recycle water on a monthly basis.
The provision of fully-functioning, safely managed WASH services to all workers	100%	100% of our facilities provide clean water for drinking, sanitation, cooking and cleaning purposes to our 146,000 employees at over 300 facilities globally to the best of our knowledge. WASH is monitored on a monthly basis using water quality information to verify that clean water supply is provided to employees. GM has policies and procedures for WASH at all of our global facilities.

**W1.2b**

**(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?**

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	25340	About the same	Water withdrawal reduced by 1% from 2020. Although global production was lower in 2021, water withdrawal at these sites was higher than in previous years due to inefficiencies resulting from the semiconductor shortage and short-term planning to mitigate those effects. We currently expect withdrawal to increase with increased production based on early 2022 forecasts.
Total discharges	16046	Lower	Due to reduced volume in 2021, water discharge were reduced by 36% from 2020. Although global production was lower in 2021, water withdrawal at these sites was higher than in previous years due to inefficiencies resulting from the semiconductor shortage and short-term planning to mitigate those effects. We currently expect 2022 discharges to increase with increased production based on early 2022 forecasts.
Total consumption	7602	About the same	Water consumption reduced by 1% from 2020. Although global production was lower in 2021, water withdrawal at these sites was higher than in previous years due to inefficiencies resulting from the semiconductor shortage and short-term planning to mitigate those effects. We currently expect total consumption to increase with increased production based on early 2022 forecasts. Consumption is calculated using measured and engineering calculations from water balances conducted at various assembly plants and applied to all of GM's water consumption. Using the standard formula of Withdrawal minus Discharge is misleading for consumption due to the large amount of groundwater infiltration into water discharge meter data. Some years we would have shown negative consumption, which is not an accurate representation of consumption.

**W1.2d**

**(W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.**

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Row 1	Yes	11-25	Higher	WRI Aqueduct	GM used global water withdrawal data and location coordinates from 142 global sites to assess water stress using the WRI Aqueduct model. Both WRI Aqueduct and local knowledge identified 2 GM facilities in China (Qingdao and Dongyue) and 3 GM facilities in Mexico (San Luis Potosi, Silao, and Ramos Arizpe) as extremely high (>80%) water stressed, meaning the ratio of total water withdrawals to available renewable surface and groundwater supplies. Although global production was lower in 2021, water withdrawal at these sites was higher than in previous years due to inefficiencies resulting from the semiconductor shortage and short-term planning to mitigate those effects.

**W1.2h**

**(W1.2h) Provide total water withdrawal data by source.**

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Not relevant	<Not Applicable>	<Not Applicable>	GM facilities have minimal withdrawal of rainwater, water from wetlands, rivers, and lakes. Additionally, GM Assembly plant paint shops require high quality water and treatment costs are excessive for surface water use. Due to proximity and quality issues, we do not expect this source to be relevant in the future.
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	We have no sites near sources of Brackish/seawater. Additionally, GM Assembly plant paint shops require high quality water and treatment costs are excessive for brackish/sea water use. Due to proximity and quality issues, we do not expect this source to be relevant in the future.
Groundwater – renewable	Relevant	1223	Higher	Groundwater water - renewable is relevant based on GM manufacturing plant locations that can provide significant cost savings for groundwater-renewable compared to potentially more expensive third party supplied water. Groundwater-renewable use was 62% higher in 2021 vs. 2020. Although global production was lower in 2021, water withdrawal at these sites was higher than in previous years due to inefficiencies resulting from the semiconductor shortage and short-term planning to mitigate those effects. We expect an increase in use in the future based on forecasted increased production volume partially offset with water conservation.
Groundwater – non-renewable	Relevant	1426	Lower	Groundwater water - non-renewable is relevant based on GM manufacturing plant locations that can provide significant cost savings for groundwater-non-renewable compared to potentially more expensive third party supplied water. Groundwater-non-renewable use was 21% lower in 2021 vs. 2020. Groundwater-non-renewable is exclusively from our Mexico facilities. The production volume at our Mexico facilities decreased in 2021, resulting in decreased groundwater-non-renewable withdrawal. We expect an increase in use in the future based on forecasted increased production volume partially offset with water conservation.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	GM facility locations are not in close proximity to sources of Produced/Entrained water. Additionally, GM Assembly plant paint shops require high quality water and treatment costs are excessive for Produced/Entrained water use. Due to proximity and quality issues, we do not expect this source to be relevant in the future.
Third party sources	Relevant	22691	About the same	Third party water sources are relevant to GM based on GM manufacturing plant locations being near third party sources that can provide significant cost savings compared to other sources. In many instances, third party sources have higher quality levels providing cost savings for reduced pre-treatment costs. Third party water source use was 1% lower in 2021 vs. 2020. Although global production was lower in 2021, water withdrawal at these sites was higher than in previous years due to inefficiencies resulting from the semiconductor shortage and short-term planning to mitigate those effects. We expect an increased use in the future based on increased production volume that will be offset with water conservation.

**W1.2i**

**(W1.2i) Provide total water discharge data by destination.**

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Relevant	2682	Much lower	<p>Although global production was lower in 2021, fresh surface water discharge at certain relevant sites was higher than in previous years due to inefficiencies resulting from the semiconductor shortage and short-term planning to mitigate those effects. However, upon review of GM internal definition of wastewater, we reassessed the non-contact cooling water at our Tonawanda facility as not meeting the definition of wastewater which led us to a lower reported discharge volume this year than in prior years.</p> <p>Fresh water discharge is relevant to certain GM locations where GM discharges directly to bodies of water. Fresh Water discharge was 76% lower in 2021 vs. 2020 due to a reassessment of certain discharges.</p>
Brackish surface water/seawater	Not relevant	<Not Applicable>	<Not Applicable>	We have no sites in close proximity of Brackish/sea water for the possibility to discharge as a cost effective method. Additionally, treatment costs are excessive for discharges to brackish/seawater use. Due to proximity and pre-treatment costs, we do not expect this source to be relevant in the future.
Groundwater	Relevant	317	Much higher	Certain GM Manufacturing sites have implemented water reuse options whereby solar ponds treat / dry the effluent that has high salt content. Solar ponds or Groundwater discharge can provide significant cost savings, less discharge risk, and less energy use compared to potentially more expensive discharge treatment options. Groundwater discharge was 227% higher in 2021 vs. 2020 due to increased irrigation activities at our Mexico facilities. We expect increased discharge in the future based on increased production volume offset with water conservation.
Third-party destinations	Relevant	13047	Lower	Third party discharge is relevant to GM, as a majority of GM manufacturing sites are in close proximity to 3rd party sewers which further treat its wastewaters. Third Party discharge was 4% lower in 2021 vs. 2020 due to the combination of reduced production volume, , and water efficiency and conservation. We expect an increased discharge to third party destinations in the future based on increased production volume, offset with water conservation.

**W1.2j**

**(W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.**

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Relevant	15028	Much higher	91-99	<p>GM performs tertiary treatment as its highest level of treatment at a majority of its manufacturing and large non-manufacturing sites to remove metals, inorganics, and other contaminants through chemical and physical treatment methods. Tertiary treatment is also important at sites in Mexico, where we reuse wastewater as process water to reduce impact on non-renewable well withdrawal. As the water reuse is zero liquid discharge, the only water that is discharged is due to evaporation.</p> <p>The General Motors Environmental Performance Criteria (GM EPC) are universal performance requirements designed to protect human health and the environment. GM EPC establish minimum baseline performance requirements and supplement applicable laws and regulations. Each GM Operating Unit must comply with the performance requirements of its applicable laws and regulations and to the GM EPC when these requirements are more protective of the environment.</p> <p>One such EPC describes performance requirements to manage wastewater generated from GM Operating Units and storm water associated with the GM Operating Unit's activities in the absence of equally protective laws or regulations.</p> <p>Water treatment was reassessed this reporting year and more appropriately aligned with CDP definitions.</p>
Secondary treatment	Relevant	537	Much lower	1-10	<p>GM performs secondary treatment as its highest level of treatment for some of its wastewaters generated at its manufacturing and large non-manufacturing sites.</p> <p>The General Motors Environmental Performance Criteria (GM EPC) are universal performance requirements designed to protect human health and the environment. GM EPC establish minimum baseline performance requirements and supplement applicable laws and regulations. Each GM Operating Unit must comply with the performance requirements of its applicable laws and regulations and to the GM EPC when these requirements are more protective of the environment.</p> <p>Water treatment was reassessed this reporting year and more appropriately aligned with CDP definitions.</p>
Primary treatment only	Relevant	442	Much lower	1-10	<p>GM performs preliminary treatment as its primary treatment method to remove oils in its wastewater at some of its manufacturing sites prior to discharge to a publicly owned treatment facility in most instances.</p> <p>The General Motors Environmental Performance Criteria (GM EPC) are universal performance requirements designed to protect human health and the environment. GM EPC establish minimum baseline performance requirements and supplement applicable laws and regulations. Each GM Operating Unit must comply with the performance requirements of its applicable laws and regulations and to the GM EPC when these requirements are more protective of the environment.</p> <p>One such EPC describes performance requirements to manage wastewater generated from GM Operating Units and storm water associated with the GM Operating Unit's activities in the absence of equally protective laws or regulations.</p> <p>Water treatment was reassessed this reporting year and more appropriately aligned with CDP definitions.</p>
Discharge to the natural environment without treatment	Relevant	39	This is our first year of measurement	1-10	<p>Each GM Operating Unit must comply with the performance requirements of its applicable laws and regulations and to the GM EPC when these requirements are more protective of the environment. GM Operating Units must ensure that storm water is discharged in a manner protective of human health and the environment. GM has unmetered storm water discharges that are discharged directly to the natural environment. We don't consider these wastewater discharges and these unknown volumes of storm water are not included in the wastewater disclosures.</p> <p>Water treatment was reassessed this reporting year and more appropriately aligned with CDP definitions.</p>
Discharge to a third party without treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<p>GM has offices and other non-manufacturing locations that discharge domestic sewage directly to third parties without pre-treatment. Based on people counts at manufacturing and major manufacturing facilities, we estimate that these unmetered discharges represent 2% of our discharge and are not relevant to our water balance.</p> <p>Water treatment was reassessed this reporting year and more appropriately aligned with CDP definitions.</p>
Other	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	There are no other levels of treatment present.

## W1.3

(W1.3) Provide a figure for your organization's total water withdrawal efficiency.

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	11358400000	25340	4482399.36858721	We based the denominator on EBIT adjusted automotive net sales. We currently expect withdrawal efficiency to increase with increased production based on early 2022 forecasts.

## W1.4

(W1.4) Do you engage with your value chain on water-related issues?

Yes, our suppliers

Yes, our customers or other value chain partners

## W1.4a

(W1.4a) What proportion of suppliers do you request to report on their water use, risks and/or management information and what proportion of your procurement spend does this represent?

Row 1

**% of suppliers by number**

1-25

**% of total procurement spend**

76-100

**Rationale for this coverage**

It is important at GM to recognize that our impacts go beyond the walls of our facilities and include our suppliers. In order to develop a long-term water reduction plan, we must understand the water consumption in our supply chain (SC), as well as the magnitude and at which tier and industry that consumption occurs. GM's supply chain makes up 76% of our total water use, so collaborating with our suppliers to address their own water usage is key to helping reduce GM's environmental impact. We work with CDP Water to engage our supply base on this issue. Over 300 suppliers were asked to respond to the CDP Water questionnaire in 2021; those suppliers were comprised of direct material strategic suppliers making up more than 83% of GM's supply chain spend in addition to suppliers identified as high water consumers through a Life Cycle Analysis (LCA) process).

GM's Supplier Sustainability Framework defines how we measure sustainability goals within our supplier purchasing program. GM's Supplier Sustainability Framework enables us to assess sustainability within our Tier I supplier community, including Strategic Supplier Engagement (SSE) and key indirect and logistic suppliers.

In scope direct Tier 1 suppliers are required to enroll in CDP as part of the supplier selection process. GM uses CDP scores to obtain sustainability data on current and potential suppliers. Scores from these tools may also be used in sourcing decisions.

Additionally, GM engages our SC in water-related areas collaboratively through AIAG & CSR Europe to provide practical guidance on water quality and consumption in a joint sustainability guidance statement. GM, AIAG, and CSR Europe emphasized the importance of water security. This guidance extends to GM's 18,940 global supplier count.

**Impact of the engagement and measures of success**

CDP SC data helps us calibrate our LCA data and gives us greater insight into the suppliers sustainability and compliance practices, collaborate and share best practices with our suppliers to strengthen progress toward shared goals, and enhances visibility into the lower tiers of our supply chain to further mitigate social and environmental risks.

In 2021, GM increased the number of suppliers asked to disclose water security measures to over 300; for many suppliers this was the first such ask and as a result our KPI performance has dropped slightly from 2020 levels. As we continue to engage with our suppliers in this area we anticipate continuous improvement. Disclosure to GM in 2021 dropped 3% from 2020. 144 suppliers were first-time respondents to the CDP Water Security questionnaire and these numbers may help explain the drop in water accounting. Within supplier responses, 76% communicated water security targets and 67% communicated risk assessment procedures are in place. GM believes that awareness drives success with 76% of suppliers reporting active targets and/or goals & 12% of our suppliers suggested collaborative opportunities.

**Comment**

With an increase in submission requests, 2021 results from the CDP SC questionnaire did not demonstrate the same level of continuous improvement shown in previous years, but GM believes that active collaboration and goal setting with our supply base will encourage improvement in 2022.

## W1.4b

#### (W1.4b) Provide details of any other water-related supplier engagement activity.

##### Type of engagement

Incentivizing for improved water management and stewardship

##### Details of engagement

Demonstrable progress against water-related targets is incentivized in your supplier relationship management

##### % of suppliers by number

1-25

##### % of total procurement spend

76-100

##### Rationale for the coverage of your engagement

GM understands that water security in our supply chain is an industry-wide issue, common to all automotive suppliers. As a result, GM's Supplier Code of Conduct lays out the expectation that all suppliers will increase efficiency and take measures to reduce their water use, in addition to establishing targets and being transparent in their progress. Suppliers are expected to agree to GM's Supplier Code of Conduct or similar code of their own to be eligible for sourcing, and this applies to the entirety of GM's supply base. In scope direct Tier 1 suppliers are required to enroll in CDP as part of the supplier selection process. GM uses CDP scores to obtain sustainability data on current and potential suppliers. Scores from these tools may also be used in sourcing decisions.

In addition, a select group of suppliers is required to complete the CDP Water questionnaire; the results from this questionnaire help provide GM with insight into the water stewardship performance of our most strategic suppliers, as well as those with high water consumption. GM has participated in the CDP supply chain since 2013. We are working with CDP and our suppliers to accelerate action on the environmental front. CDP supports companies in measuring and managing their impacts on climate change, deforestation and water-related risks. GM's participation in CDP goes beyond our own operational footprint to include information from select suppliers. Enrolled suppliers in the CDP initiative include all direct material strategic suppliers, a subset of indirect suppliers who are mainly manufacturing-based suppliers and our top strategic logistics suppliers. This group represents more than 83% of our supply chain spend. During the past two years, we have set a goal of increasing participation among in-scope SSE and key logistic suppliers year-over-year. We aim to achieve 100% participation for targeted suppliers in 2022.

##### Impact of the engagement and measures of success

GM's Supplier Code of Conduct is incorporated into all GM suppliers contracts, which lays out GM's expectations for water use efficiency and improvement. However, our most direct measurement on engagement in water security with our supply chain is through CDP Supply Chain; the CDP water questionnaire helps GM track progress and identify areas of improvement in addition to provide more precise feedback on supplier performance. In 2021, over 300 Tier 1 suppliers, comprised of suppliers of strategic importance as well and/or those identified as high-water consumers through a Life Cycle Analysis (LCA) process, were asked to respond to the CDP Water questionnaire. These suppliers represent approximately 83% of GM's spend.

##### Comment

Our 2021 CDP Water responses were not as robust as in previous years due to a widening of in-scope suppliers. Despite that, GM's supplier response rate was 78%, which is still above the average 70% response rate expected. GM sees the 2021 results as an opportunity to engage suppliers for whom this was their first time responding, and highlighted areas of focus for the future, including working with suppliers on discharge quality, long-term water use strategy, and risk assessment procedures.

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#### W1.4c

##### (W1.4c) What is your organization's rationale and strategy for prioritizing engagements with customers or other partners in its value chain?

In 2021, we furthered our commitment to create a more sustainable supply chain by working with EcoVadis to rate and understand the sustainability performance, including water, of our supply base. Suppliers answer questions regarding their water management and conservation efforts. In addition, GM hosts monthly webinars to support suppliers on their sustainability journey and ~2-3 of those webinars are related to water, where we share best practices and available technologies. GM also has a Sustainability Supplier Sub-Council that meets monthly to discuss sustainability strategies and initiatives and water topics are brought up as a priority.

CDP supports companies in measuring and managing their impacts on climate change and water-related risks. During the past two years, GM has set a goal of increasing CDP participation among in-scope SSE and key logistic suppliers year-over-year. Enrolled suppliers in the CDP initiative include all direct material strategic suppliers, a subset of indirect suppliers who are mainly manufacturing-based suppliers and our top strategic logistics suppliers. This group represents more than 83% of our supply chain spend.

GM also engages with students in local communities to promote learning about water quality. As water stress is a local issue that affects both GM and the communities where we operate, many employees volunteer with their site's local watershed. For example, employees in Flint and Grand Blanc Michigan are located within the Flint River watershed, and they ensure that their watershed stays pure by participating in river clean-up events and storm drain stenciling. GM also participates in the Flint River GREEN program and Eco-Green by mentoring local students, assisting with monitoring rivers to assess water quality and promoting STEM education. Engaging the local communities, including future potential GM customers in awareness, education, and action provides for positive impact on local communities and goodwill for GM.

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#### W2. Business impacts

##### W2.1

##### (W2.1) Has your organization experienced any detrimental water-related impacts?

Yes

##### W2.1a

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**(W2.1a) Describe the water-related detrimental impacts experienced by your organization, your response, and the total financial impact.**

**Country/Area & River basin**

Mexico	Panuco
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**Type of impact driver & Primary impact driver**

Technology	Transition to water efficient and low water intensity technologies and products
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**Primary impact**

Upfront costs to adopt/deploy new practices and processes

**Description of impact**

Increases in the frequency of drought conditions can further depress water availability for production in water-stressed areas. We continuously seek to reduce risk of lack of water for production and opportunities to continue production without interruption.

GM has production facilities in Mexico, an area that was hit hard by drought in recent years, and there is a risk that increases in the frequency of such events could temporarily disrupt production due to lack of water availability.

In order to adopt water efficiencies and reuse practices, we have developed a risk mitigation plan. Through the risk mitigation plan, Zero Liquid Discharge equipment has been installed within Mexico operations with frequent technological updates. The initial cost for this equipment was \$57,000,000 USD for installation with additional upgrades, improvements and an annual operating cost of \$1.41 million.

The scale of the impact related to the installation of these technologies in water stressed areas such as Mexico could be considerable. We assess replicability of this technology to other sites where appropriate (implementation cost vs water availability, water policy, cost, etc.), to mitigate production downtime due to a water-related risk.

**Primary response**

Adopt water efficiency, water reuse, recycling and conservation practices

**Total financial impact**

57000000

**Description of response**

GM integrated water management into its annual business planning process and set targets for each facility to reduce water use intensity by 35% by 2035. Reduction methods are implemented at a facility level and include conservation with behavioral activities, improving equipment efficiency, and reuse. When plants are located in water-stressed areas, special consideration is given to water treatment technologies. A Zero Liquid Discharge (ZLD) system was installed at our San Luis Potosi, Mexico facility that produces vehicles and transmissions and is being operated to reuse water in the process, reduce withdrawal from deep wells, and reduce the risk of lack of water for production while providing an opportunity to continue production without interruption. The installed capital expenditure cost for Zero Liquid Discharge equipment was \$57 M USD for initial installation and additional upgrades and improvements with annual operating cost of \$1.41 million.

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**W2.2**

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**(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?**

Yes, enforcement orders or other penalties

**W2.2b**

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**(W2.2b) Provide details for all significant fines, enforcement orders and/or other penalties for water-related regulatory violations in the reporting year, and your plans for resolving them.**

**Type of penalty**

Other penalty type, please specify (Administrative NOV)

**Financial impact**

0

**Country/Area & River basin**

United States of America	Not known
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**Type of incident**

Effluent limit exceedances

**Description of penalty, incident, regulatory violation, significance, and resolution**

Maximum daily Molybdenum exceedance. Identified possible causes and took appropriate corrective action. Resampled the effluent and determined the system returned to normal operations.

This was an administrative NOV and there is no cost associated with this penalty.

**Type of penalty**

Other penalty type, please specify (Administrative NOV)

**Financial impact**

0

**Country/Area & River basin**

United States of America	Not known
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**Type of incident**

Spillage, leakage or discharge of potential water pollutant

**Description of penalty, incident, regulatory violation, significance, and resolution**

Unauthorized discharge of propylene glycol to surface waters of the state. A rooftop chilled water unit pressure relief valve failed. The system was shut down and the pressure relief valve was replaced.

This was an administrative NOV and there is no cost associated with this penalty.

**Type of penalty**

Other penalty type, please specify (Administrative NOV)

**Financial impact**

0

**Country/Area & River basin**

United States of America	Not known
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**Type of incident**

Effluent limit exceedances

**Description of penalty, incident, regulatory violation, significance, and resolution**

The limit for BOD was exceeded in January, February, and March of 2021. The limit for zinc was exceeded in April 2021. Upon investigation, it was determined that improper sampling collection methods were utilized resulting in a contaminated sample being analyzed. Sampling procedures were modified to avoid a repeat occurrence. This was an administrative NOV and there is no cost associated with this penalty.

**Type of penalty**

Other penalty type, please specify (Administrative NOV)

**Financial impact**

0

**Country/Area & River basin**

United States of America	Not known
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**Type of incident**

Effluent limit exceedances

**Description of penalty, incident, regulatory violation, significance, and resolution**

Exceedance of Total Petroleum Hydrocarbon (TPH) limit on April 21, 2021 from the Combined Sanitary/Wastewater Sewer Discharge. Treatment processes were modified to ensure proper treatment of TPH in the onsite wastewater treatment plant.

This was an administrative NOV and there is no cost associated with this penalty.

**W3. Procedures**

## W3.3

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### (W3.3) Does your organization undertake a water-related risk assessment?

Yes, water-related risks are assessed

## W3.3a

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### (W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

#### Value chain stage

Direct operations  
Supply chain

#### Coverage

Full

#### Risk assessment procedure

Water risks are assessed as part of an established enterprise risk management framework

#### Frequency of assessment

More than once a year

#### How far into the future are risks considered?

More than 6 years

#### Type of tools and methods used

Tools on the market  
Enterprise risk management  
Databases

#### Tools and methods used

WRI Aqueduct  
Other, please specify (Life cycle analysis, using environmental extended input/output analysis from the U.S. Environmental Protection Agency (U.S. EPA) EEIO 2.0 database. )

#### Contextual issues considered

Water regulatory frameworks  
Status of ecosystems and habitats  
Access to fully-functioning, safely managed WASH services for all employees

#### Stakeholders considered

Customers  
Employees  
Investors  
Local communities

#### Comment

Using water risk evaluation tool - WRI Aqueduct shows baseline water stress and forecasts out to 2040 providing a comparison of risks in 2021 to those in 2030 and 2040. Comparing future growth in our 6-year business plan, shows that the risks are getting worse in the water stressed areas in Mexico and China. Based on our current mitigation plan, future manufacturing planning will incorporate additional measures related to water efficiency and conservation. We use similar activities for our supply chain using life cycle analysis for the high water-users. The results of Aqueduct model are compared to local internal GM knowledge methods to calibrate the model.

GM conducts an analysis on auto parts for water consumption which is included in an annual evaluation using Aqueduct model to determine areas of extreme risk for water security. We analyzed over 100 top water users in the supply chain operating globally and found 16 in High Overall Water Stress areas (>80%) that were all in Mexico, except one in California, US. We used the risk analysis maps to forecast stress in 2030 and 2040 and as most suppliers are located near GM facilities in Mexico, it indicates a worsening of stress in Mexico and mitigation of risk required now and, in the future, as important for water security. As we have not been aware of any supplier disruptions due to water stress, the assumption is that suppliers are mitigating similar to GM in extreme water stress areas.

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#### Value chain stage

Other stages of the value chain

#### Coverage

Full

#### Risk assessment procedure

Water risks are assessed as part of an established enterprise risk management framework

#### Frequency of assessment

Annually

#### How far into the future are risks considered?

More than 6 years

#### Type of tools and methods used

Tools on the market  
Enterprise risk management  
Databases

#### Tools and methods used

WRI Aqueduct  
Other, please specify (Life cycle analysis, using environmental extended input/output analysis from the U.S. Environmental Protection Agency (U.S. EPA) EEIO 2.0 database. )

#### Contextual issues considered

Water availability at a basin/catchment level  
Water quality at a basin/catchment level  
Stakeholder conflicts concerning water resources at a basin/catchment level  
Implications of water on your key commodities/raw materials  
Water regulatory frameworks  
Status of ecosystems and habitats  
Access to fully-functioning, safely managed WASH services for all employees

#### Stakeholders considered

Customers  
Employees  
Investors  
Local communities  
NGOs  
Regulators  
Suppliers  
Water utilities at a local level  
Other water users at the basin/catchment level

#### Comment

GM conducts a life cycle analysis on auto parts from 18,936 suppliers for water consumption which is included in an evaluation using Aqueduct model to determine areas of extreme risk for water security. We analyzed over 100 top water users in the supply chain operating globally and found 16 in High Overall Water Stress areas (>80%) that were all in Mexico, except one in California, US. We used the risk analysis maps to forecast stress in 2030 and 2040 and as most suppliers are located near GM facilities in Mexico, it indicates a worsening of stress in Mexico and mitigation of risk required now and, in the future, as important for water security. As we have not been aware of any supplier disruptions due to water stress, the assumption is that suppliers are mitigating similar to GM in extreme water stress areas.

### W3.3b

#### (W3.3b) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

Water use in our direct operations is used for pre-treatment of vehicle bodies prior to painting and also for weld cooling, machining, and powerhouse operations making it vital for our operations as well as in our supply chain as identified using LCA. Water availability and quality thus requires identification and mitigation of risk in our own operations and in our supply chain to ensure continued production and parts supply. GM's water risk assessment begins with tracking internal water use information using a global system called GM2100 that monitors water use on a monthly basis. The next step is to evaluate the water supply to ensure that it is adequate to meet the demand and quality requirements. If there are any deficiencies, an action plan is developed and if funds are needed, they are included in our financial plan. Implementation of the corrective action to address any such deficiencies is done at the local plant level.

Water use data in the supply chain at tiers 1-6 is provided by Life Cycle assessment (LCA) using USEPA's EEIO database based on the input spend of approximately 18,940 suppliers. The analysis is performed by Climate Earth providing consumption at supplier, tiers 1-6, and by industry levels. The next step is modelling to identify risk. GM uses WRI Aqueduct models that provide a screening tool to identify potential water stressed areas globally in direct operations and prioritized by top 100 supply chains. GM uses LCA for supply chain water use data since it includes water use in all tiers. We use WRI models to provide global risk analysis of water for manufacturing in our own operations and in the supply chain. The time horizons for the assessment are current year, 2030, and 2040. Internal company methods are used at each GM site to review water risk and provide mitigation methods. Each GM site has a site utility manager that is responsible for assessing water risks and implementing mitigation methods, if needed. Using a supply chain visibility and mapping tool that provides a visualization of GM's entire footprint, including our own facilities, our Tier I suppliers, and many of our Tier II suppliers we can get answers to questions about supply chain risk by superimposing information like geopolitical events, hurricanes, water scarcity and other possible disruptions.

Our risk assessment through the Aqueduct Tool and LCA informs our internal decision making for our portfolio spending plans. For example, in 2021, GM spent \$20.7M on maintaining our water conditioning and water treatment assets at our high water stressed Mexico facilities.

GM has several stakeholders included in identifying and assessing water-related risks. Our customers, investors, and local communities are considered in our 35% reduction of water use intensity by 2035 target. GM strives to be a leader in reducing water use intensity to relieve water stress locally and globally. This is also reflected in our commitment to and endorsement of the CEO Water Mandate. Our employees are included and supported by our internal controls noted within WSS-PS16-TS01 Global Drinking Water Quality Rev 2019Mar01.pdf which outlines and establishes minimum requirements for the supply of potable water to General Motors. Through the establishment of site potable water sampling requirements and creating maximum constituent concentrations, GM will protect its employees and processes from harm. In addition to considering employees, GM also considers risk impact on local communities. A great example of this is our storm water capture and reuse at our Detroit Factory Zero facility. The project reduces water stress in the facility and benefits the city of Detroit, MI. By creating a 100-year pond to collect storm water, we reduce storm water discharge to the City which reduces water stress during storm events.

GM also considers several contextual issues in identifying and assessing water-related risks. Water regulatory framework is considered in our Global Drinking Water policy and our endorsement of the CEO Water Mandate both mentioned above. The Global Drinking Water policy also considers access to fully-functioning, safely managed WASH services for all employees. Lastly, GM considers the status of ecosystems and habitats. The Detroit Factory Zero storm water capture and reuse above reflects our consideration of community ecosystems and habitats. Also, in 2020 we met 100% of our goal to improve wildlife habitats by having a Wildlife Habitat Certification (or equivalent) at each GM manufacturing site, where feasible (2020 goal from a 2010 baseline). We ended the goal timeframe with a total of 77 wildlife habitats.

### W4. Risks and opportunities

W4.1

**(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes, only within our direct operations

W4.1a

**(W4.1a) How does your organization define substantive financial or strategic impact on your business?**

Within our enterprise risk management process, GM's risk assessment process includes both a quantitative and qualitative assessment of risks and opportunities. From a quantitative perspective, GM evaluates risks and opportunities based on their potential impact on certain key financial statement amounts and operating results (e.g., assets, revenues, earnings, cash flow, etc.). From a qualitative perspective, GM evaluates risks and opportunities based on the consideration of all of the other relevant facts and circumstances, including strategic significance, potential impact on reputation, and probability of occurrence. For example, while the water-related risks at any individual GM facility may not be substantive to GM as a whole, GM could face a substantive water-related risk related to its ability to build new manufacturing capacity in regions without sufficient water supply to support necessary production volumes. Therefore, risks identified in this report as having a "substantive" impact will vary from risk to risk in terms of quantitative and qualitative perspectives. The use of "significant," "substantive," "material," or "materiality" in this report and our other sustainability reporting is not related to or intended to convey matters or facts that could be deemed "material" to a reasonable investor as referred to under U.S. securities laws or similar requirements of other jurisdictions.

W4.1b

**(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?**

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	5	1-25	Using WRI Aqueduct high risk overall category, 5 GM direct operation facilities indicated substantive site risk for water stress. Three are located in Mexico and 2 are in our joint venture plants in China. The Silao Mexico Assembly facility uses deep non-renewable wells that are showing signs of stress and mitigation efforts with near zero liquid discharge are being implemented at the site. The risk at Silao was identified using internal company methods by the site utility manager and mitigated with installation of water reuse equipment. San Luis Potosi, MX site has similar, but deeper non-renewable wells and the risk was identified prior to construction with mitigation by installation of Zero-Liquid Discharge and water reuse. In Ramos Arizpe Mexico, we completed updating of the paint technology in April and are on track to increase the quantity of wastewater that is treated and reused in the process by June due to water stress in the area. The risks in the 2 GM JV Assembly plants in northern China are drought related that have recently been mitigated by the government from use of alternate water supplies and irrigation consumption reduction.

W4.1c

**(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive financial or strategic impact on your business, and what is the potential business impact associated with those facilities?**

**Country/Area & River basin**

Mexico	Other, please specify (Rio Grande - Bravo)
--------	--

**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

Less than 1%

**Production value for the metals & mining activities associated with these facilities**

<Not Applicable>

**% company's annual electricity generation that could be affected by these facilities**

<Not Applicable>

**% company's global oil & gas production volume that could be affected by these facilities**

<Not Applicable>

**% company's total global revenue that could be affected**

1-10

**Comment**

Ramos plant provides about 2% of our total production at GM that includes many key products.

**Country/Area & River basin**

Mexico	Other, please specify (Rio Lema)
--------	----------------------------------

**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

Less than 1%

**Production value for the metals & mining activities associated with these facilities**

<Not Applicable>

**% company's annual electricity generation that could be affected by these facilities**

<Not Applicable>

**% company's global oil & gas production volume that could be affected by these facilities**

<Not Applicable>

**% company's total global revenue that could be affected**

1-10

**Comment**

Silao plant manufactures about 6% of GM total volume, including key products for our company.

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**Country/Area & River basin**

China	Other, please specify (China Coast)
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**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

Less than 1%

**Production value for the metals & mining activities associated with these facilities**

<Not Applicable>

**% company's annual electricity generation that could be affected by these facilities**

<Not Applicable>

**% company's global oil & gas production volume that could be affected by these facilities**

<Not Applicable>

**% company's total global revenue that could be affected**

1-10

**Comment**

Qingdao provides about 10% of GM production volume, including a battery electric vehicle.

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**Country/Area & River basin**

China	Other, please specify (China Coast)
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**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

Less than 1%

**Production value for the metals & mining activities associated with these facilities**

<Not Applicable>

**% company's annual electricity generation that could be affected by these facilities**

<Not Applicable>

**% company's global oil & gas production volume that could be affected by these facilities**

<Not Applicable>

**% company's total global revenue that could be affected**

1-10

**Comment**

Dongyue (JV) provides about 4% of our total volume, including key products for China market.

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**Country/Area & River basin**

Mexico	Other, please specify (Mexico, Northwest Coast)
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**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

1-25

**Production value for the metals & mining activities associated with these facilities**

<Not Applicable>

---

**% company's annual electricity generation that could be affected by these facilities**

<Not Applicable>

**% company's global oil & gas production volume that could be affected by these facilities**

<Not Applicable>

**% company's total global revenue that could be affected**

1-10

**Comment**

San Luis Potosi, MX produces Crossover vehicles and transmissions and is about 2% of our production.

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**W4.2**

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**(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.**

**Country/Area & River basin**

Mexico	Other, please specify (Mexico, Northwest Coast)
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**Type of risk & Primary risk driver**

Acute physical	Drought
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**Primary potential impact**

Reduction or disruption in production capacity

**Company-specific description**

Increases in the frequency of drought conditions can further depress water availability for production in water-stressed areas. GM has production facilities in Mexico at Silao Assembly (Chevrolet Silverado/ GMC Sierra assembly, engine and transmission production), San Luis Potosi Assembly (Chevrolet Trax/GMC Terrain/Chevrolet Equinox assembly, Stamping and transmission production), and Ramos Arizpe Assembly (Chevrolet Cruze/Chevrolet Sonic/Chevrolet Blazer assembly, engine production), an area that was hit hard by drought in recent years, and there is a risk that increases in the frequency of such events could temporarily disrupt production due to lack of water availability.

**Timeframe**

More than 6 years

**Magnitude of potential impact**

Medium

**Likelihood**

Very unlikely

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

40000000

**Potential financial impact figure - minimum (currency)**

<Not Applicable>

**Potential financial impact figure - maximum (currency)**

<Not Applicable>

**Explanation of financial impact**

For illustrative purposes, we estimate a 5% reduction in our production of certain vehicles in North America could approximate a \$40 million reduction in earnings before interest and taxes (EBIT)-adjusted, using a one month impact in this example and assuming production could not be recovered. It should be noted that financial impacts vary depending on the plant and vehicles for which production is temporarily stopped.

**Primary response to risk**

Adopt water efficiency, water reuse, recycling and conservation practices

**Description of response**

GM integrated water management into its annual business planning process and set targets for each facility to reduce water use intensity by 35% by 2035. Reduction methods are implemented at a facility level and include conservation with behavioral activities, improving equipment efficiency, and reuse. When plants are located in water-stressed areas, special consideration is given to water treatment technologies. In 2008, a Zero Liquid Discharge (ZLD) system was installed at our San Luis Potosi, Mexico Complex. The Complex produces vehicles and transmissions. The ZLD is being operated to reuse water in our operating process, reduce withdrawal from deep wells, and reduce the risk of lack of water for production while providing an opportunity to continue production without interruption.

During 2021, GM replaced all membranes for well water osmosis and recycled water osmosis, all resin for WACs (Weak Acid Cation Regenerators) and sands for multimedia filters to recover the permeated levels (88% - 90%) and maintain water quality. This helps to reduce the amount of reject water sent to solar ponds.

**Cost of response**

57000000

**Explanation of cost of response**

A Zero Liquid Discharge (ZLD) system was installed at our San Luis Potosi, Mexico facility that produces vehicles and transmissions and is being operated to reuse water in the process, reduce additional withdrawal from deep wells, and reduce the risk of lack of water for production while providing an opportunity to continue production without interruption. The total cost of the response to risk, \$57 million, is the sum of two phases: ~\$41 million in initial development and installation, and an additional ~\$16M on upgrades to increase capacity and efficiency of the system.

The annual \$1.4 million operation and maintenance cost includes labor, chemicals needed to treat different water sources (DI, recycled, etc.), parts replacements (micro filtration, ultra-filtration, and RO membranes), extraction water and well maintenance as well as water sampling and analysis.

**W4.2c**

**(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?**

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	<p>WRI Aqueduct model identified 16 high risk GM suppliers for overall water risk in auto parts manufacturing, plastics, and casting industries, all located in Mexico, except for 1 in California, US. The majority of GM tier 1 suppliers in Mexico are in close proximity to GM Assembly or manufacturing facilities and are exposed to similar water scarcity risks as GM's direct operations. GM's experience with uninterrupted delivery from these 16 suppliers demonstrates that water risk is not substantive, in 2021, as their manufacturing operations have not been disrupted due to water security and they are meeting reliable supply requirements as a result of mitigating water risks. We plan to complete this assessment annually to assure continued reliability.</p> <p>Additionally, to ensure that there is no substantive risk due to water scarcity or other potential supply interruptions for these 16 suppliers and others, multiple suppliers are sourced for similar parts. We recently began using a supply chain visibility and mapping tool that provides a visualization of GM's entire footprint, including our own facilities, our Tier I suppliers, and many of our Tier II suppliers. Using this map as a base, we can get answers to questions about supply chain risk by superimposing information like geopolitical events, hurricanes, water scarcity, and other possible disruptions. With more than 200 incidents disrupting our supply chain every year, from earthquakes and floods to civil unrest and regulatory actions, we consider robust tracking and visibility tools essential to our operations.</p>

**W4.3**

**(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes, we have identified opportunities, and some/all are being realized

**W4.3a**

**(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.**

**Type of opportunity**

Efficiency

**Primary water-related opportunity**

Cost savings

**Company-specific description & strategy to realize opportunity**

GM is committed to finding ways to not only reduce water used in our operations, but to extend the benefits of more efficient processes to others. For example, GM identified an opportunity to reduce water stress in the City of Detroit at our Detroit Hamtramck Assembly plant, now renamed Detroit Factory ZERO, as well as to reduce our operating cost. Based on water stress in the City of Detroit during storm events, due to combined sanitary and storm drains, and the high cost to GM for discharging to the City combined sanitary and storm water system, GM began a project to capture and reuse storm water in 2016 with limited impact. This project was placed on hold in 2019 and re-started in 2021. Designed for a 100 year storm event, the onsite storm water storage capacity was increased in order to treat and reuse the rainwater back into the process. Beginning in early 2023, the savings are projected to equate to nearly \$1.68 million per year for GM. The project also benefits the city of Detroit. By creating a 100-year pond to collect storm water, we reduce storm water discharge to the City which reduces water stress during storm events. The collected water is treated and will be used in cooling towers and for other plant uses. GM is looking to replicate this concept at other sites with similar environmental and economic conditions.

**Estimated timeframe for realization**

1 to 3 years

**Magnitude of potential financial impact**

Low

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

1680000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact**

Cost savings per year in water and sewer cost through the reuse of storm water in direct operations will save GM \$1.68M annually. The annual \$1.68 million savings includes items such as storm water fees and direct water and sewerage offsets.

**W5. Facility-level water accounting**

**W5.1**

**(W5.1) For each facility referenced in W4.1c, provide coordinates, water accounting data, and a comparison with the previous reporting year.**

**Facility reference number**

Facility 1

**Facility name (optional)**

Silao Vehicle Assembly and Global Propulsion

**Country/Area & River basin**

Mexico	Other, please specify (Rio Lema)
--------	----------------------------------

**Latitude**

20.9514

**Longitude**

-101.388

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

**Total water withdrawals at this facility (megaliters/year)**

543

**Comparison of total withdrawals with previous reporting year**

Lower

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

543

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

0

**Total water discharges at this facility (megaliters/year)**

318

**Comparison of total discharges with previous reporting year**

Lower

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

17

**Discharges to third party destinations**

301

**Total water consumption at this facility (megaliters/year)**

163

**Comparison of total consumption with previous reporting year**

Lower

**Please explain**

GM's Silao Mexico assembly complex produces light duty trucks for GM customers and is located in the state of Guanajuato. Light duty trucks comprise a significant portion of our current earnings, so Silao is an important strategic part of our manufacturing portfolio. The sole water supply to our Silao facility is from 300-meter deep non-renewable wells. Over the last three years, we increased the amount of process water reuse and replaced one of the wells to reduce stress on the well water system. Operations of the completed project provided a reduction in water withdrawal of 13% and provided increased water security for the Silao manufacturing site.

**Facility reference number**

Facility 2

**Facility name (optional)**

JV 1 Dongyue

**Country/Area & River basin**

China	Other, please specify (China Coast)
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**Latitude**

37.4638

**Longitude**

121.448

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

**Total water withdrawals at this facility (megaliters/year)**

585

**Comparison of total withdrawals with previous reporting year**

Lower

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

585

**Total water discharges at this facility (megaliters/year)**

367

**Comparison of total discharges with previous reporting year**

Much lower

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

367

**Total water consumption at this facility (megaliters/year)**

175

**Comparison of total consumption with previous reporting year**

Lower

**Please explain**

Reduced vehicle production at our JV assembly plant in Dongyue due to pandemic and parts shortages resulted in reduced water consumption. Consumption is calculated using water balance and engineering estimates as standard calculation of withdrawal minus discharge is inaccurate as groundwater infiltrates into the wastewater treatment system causing the calculated consumption to be lower than actual, therefore, we are reporting consumption using an engineering estimate for evaporation of 30%.

**Facility reference number**

Facility 3

**Facility name (optional)**

JV 2 Qingdao

**Country/Area & River basin**

China	Other, please specify (China Coast)
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**Latitude**

36.0541

**Longitude**

120.305

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

**Total water withdrawals at this facility (megaliters/year)**

733

**Comparison of total withdrawals with previous reporting year**

Higher

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

733

**Total water discharges at this facility (megaliters/year)**

313

**Comparison of total discharges with previous reporting year**

Lower

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

313

**Total water consumption at this facility (megaliters/year)**

220

**Comparison of total consumption with previous reporting year**

Higher

**Please explain**

Although production was lower in 2021, operations were not as efficient due to chip shortage and short-term planning. Consumption is calculated using water balance and engineering estimates as the standard calculation of withdrawal minus discharge is inaccurate as groundwater infiltrates into the wastewater treatment system causing the calculated consumption to be lower than actual.

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**Facility reference number**

Facility 4

**Facility name (optional)**

Ramos Arizpe

**Country/Area & River basin**

Mexico	Other, please specify (River Grande Bravo)
--------	--

**Latitude**

25.51052

**Longitude**

-100.96924

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

**Total water withdrawals at this facility (megaliters/year)**

670

**Comparison of total withdrawals with previous reporting year**

Higher

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

670

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

0

**Total water discharges at this facility (megaliters/year)**

99

**Comparison of total discharges with previous reporting year**

Higher

**Discharges to fresh surface water**

66

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

33

**Discharges to third party destinations**

0

**Total water consumption at this facility (megaliters/year)**

201

**Comparison of total consumption with previous reporting year**

Higher

**Please explain**

GM's Ramos Arizpe vehicle complex in Mexico produces vehicles and powertrains and is an important, strategic, manufacturing asset. Although production was lower in 2021, operations were not as efficient due to chip shortage and short-term planning. Consumption is calculated using water balance and engineering estimates as withdrawal minus discharge method is inaccurate and we are using an engineering estimate for consumption. The water reuse capacity is being increased at GM Ramos Arizpe complex to reduce the impact on the deep wells and to ensure water supply to this important automotive manufacturing complex as shown in the small amount of discharge compared to withdrawal.

**Facility reference number**

Facility 5

**Facility name (optional)**

San Luis Potosi Assembly complex

**Country/Area & River basin**

Mexico	Other, please specify (Mexico, Northwest Coast)
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**Latitude**

24.0251

**Longitude**

-104.604

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

&lt;Not Applicable&gt;

**Oil & gas sector business division**

&lt;Not Applicable&gt;

**Total water withdrawals at this facility (megaliters/year)**

121

**Comparison of total withdrawals with previous reporting year**

Lower

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

121

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

0

**Total water discharges at this facility (megaliters/year)**

82

**Comparison of total discharges with previous reporting year**

Higher

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

82

**Discharges to third party destinations**

0

**Total water consumption at this facility (megaliters/year)**

36

**Comparison of total consumption with previous reporting year**

Lower

**Please explain**

GM's San Luis Potosi (SLP) vehicle complex in Mexico produces vehicles and powertrains and is an important, strategic, manufacturing asset. SLP plant had a decrease in vehicle production in 2021 compared to 2020 and therefore, water consumption decreased accordingly. Consumption is calculated using water balance and engineering estimates as withdrawal minus discharge method is inaccurate and therefore we are using an engineering estimate.. The mitigation method of Zero Liquid Discharge for process wastewater reuse helps to reduce the impact on the wells and to ensure water supply to this important automotive complex.

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W5.1a

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(W5.1a) For the facilities referenced in W5.1, what proportion of water accounting data has been third party verified?

**Water withdrawals – total volumes**

**% verified**

76-100

**Verification standard used**

The verification was conducted in accordance with ISO 14064:3, the AA1000 AccountAbility Principles Standard (2008) and Stantec's Standard Operating Procedures developed for accreditation to ISO 14065.

**Please explain**

<Not Applicable>

**Water withdrawals – volume by source**

**% verified**

Not verified

**Verification standard used**

<Not Applicable>

**Please explain**

**Water withdrawals – quality by standard water quality parameters**

**% verified**

Not verified

**Verification standard used**

<Not Applicable>

**Please explain**

**Water discharges – total volumes**

**% verified**

Not verified

**Verification standard used**

<Not Applicable>

**Please explain**

**Water discharges – volume by destination**

**% verified**

Not verified

**Verification standard used**

<Not Applicable>

**Please explain**

**Water discharges – volume by final treatment level**

**% verified**

Not verified

**Verification standard used**

<Not Applicable>

**Please explain**

**Water discharges – quality by standard water quality parameters**

**% verified**

Not verified

**Verification standard used**

<Not Applicable>

**Please explain**

**Water consumption – total volume**

**% verified**

Not verified

**Verification standard used**

<Not Applicable>

**Please explain**

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**W6. Governance**

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**W6.1**

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**(W6.1) Does your organization have a water policy?**

Yes, we have a documented water policy that is publicly available

**W6.1a**

**(W6.1a) Select the options that best describe the scope and content of your water policy.**

	Scope	Content	Please explain
Row 1	Company-wide	<p>Description of business dependency on water</p> <p>Description of business impact on water</p> <p>Description of water-related performance standards for direct operations</p> <p>Description of water-related standards for procurement</p> <p>Reference to international standards and widely-recognized water initiatives</p> <p>Company water targets and goals</p> <p>Commitment to align with public policy initiatives, such as the SDGs</p> <p>Commitments beyond regulatory compliance</p> <p>Commitment to water-related innovation</p> <p>Commitment to water stewardship and/or collective action</p> <p>Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace</p> <p>Acknowledgement of the human right to water and sanitation</p>	<p>GM operates under a water policy that provides clean water for all occupants of our facilities globally as well as sanitation. As we operate in various countries, some without standards, we set maximum contaminant levels in potable water to provide clean water to all. In countries without standards or with lower standards than GM's standards, GM operates under Guiding Environmental Commitments as stated in our Environmental Policy and in section W0.1. We are dedicated to:</p> <ul style="list-style-type: none"> <li>-responsibly using water while taking actions that preserve water quality and conservation across our operations, in our supply chain, and in the communities in which we operate</li> <li>-reducing water used in our operations and being mindful of how our water use affects our communities</li> <li>-communicating best practices on our water reduction and reuse initiatives globally</li> <li>-listening to our employees on ways to conserve water</li> </ul> <p>Consistent with UN Goal 6, GM has integrated water management into its business plan, developed a public goal for water intensity reduction of our direct operations, and implemented water efficiency projects and conservation measures at our facilities. GM's Guiding Environmental Commitments require conserving resources, including water at every stage of the product life cycle. Our policy and Guiding Environmental Commitments are publicly available and extend to all GM operations. Performance standards are established monthly to ensure that we achieve the goals.</p> <p>As global needs demand new facility construction or existing site improvements, we review our operations to design-in water efficient, reuse and recycling opportunities in order to minimize impact to water resources.</p> <p>Internal controls noted within the Global Drinking Water Quality safety standard outline the purpose of the standard as establishing minimum requirements for the supply of potable water to General Motors. Through the establishment of site potable water sampling requirements and creating maximum constituent concentrations, GM will protect its employees and processes from harm.</p>

**W6.2**

**(W6.2) Is there board level oversight of water-related issues within your organization?**

Yes

**W6.2a**

**(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.**

Position of individual	Please explain
Chief Executive Officer (CEO)	<p>The company's risk governance is facilitated through a top-down and bottom-up structure, with the tone established at the top by the Board Chair and CEO, who is also our chief risk officer, and other members of management, specifically the Senior Leadership Team (SLT).</p> <p>Management of environmental-related risks and opportunities, including water, ultimately resides with the CEO, who leads our SLT. Our EVP, Global Manufacturing and Sustainability reports to the CEO and is responsible for progress towards key environmental related indicators such as water and science-based targets.</p> <p>An example of a key initiative to support water security is GM endorsing the CEO Water Mandate. In 2021, GM committed to UN Global Compact - CEO Water Mandate to support global water security and management in key areas. Our CEO commits to support the Global Compact's ten principles and the company's intent to maintain the principles and to evaluate related global best practices that may be applicable to GM.</p>
Chief Sustainability Officer (CSO)	<p>GM's sustainability strategy is led by senior leaders throughout the organization. Our chief sustainability officer is the enterprise-wide leader of sustainability and directs initiatives through the Office of Sustainability. The Office of Sustainability has been strategically designed to ensure accountability for key sustainability targets and initiatives at the highest levels of the company; nurture a culture of sustainability across the organization; track and measure progress through transparent disclosure; and engage with both internal and external stakeholders on relevant matters. The Office of Sustainability leaders are charged with innovating and advocating as well as supporting social responsibility and transparent corporate practices.</p> <p>An example of a water related key sustainability target overseen by the CSO is to reduce water intensity by 35% by 2035, compared to 2010 baseline.</p>
Board-level committee	<p>The GM Board of Directors is committed to overseeing the company's integration of environmental, social and governance (ESG) principles throughout the enterprise, and oversees the company's ESG risks, priorities and opportunities.</p> <p>The Board discharges its risk oversight responsibilities, in part, through delegation to its committees: Audit; Executive; Executive Compensation; Finance; Governance and Corporate Responsibility (GCRC); and Risk and Cybersecurity. As a full Board, and through these committees, the Board is committed to overseeing the company's integration of ESG principles throughout GM's business and managing the related risks and opportunities.</p> <p>In 2021, each Board committee further incorporated ESG responsibilities into their charters in recognition that ESG risks are all-encompassing. As an example, in 2022, the GCRC and the Audit Committee approved the company's annual Sustainability Report and associated disclosures, which includes water related metrics.</p>

W6.2b

(W6.2b) Provide further details on the board’s oversight of water-related issues.

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Overseeing acquisitions and divestiture Overseeing major capital expenditures Providing employee incentives Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing and guiding corporate responsibility strategy Reviewing innovation/R&D priorities Setting performance objectives	<p>Through the Board as a whole and each of its committees, the Board is committed to overseeing the company’s integration of ESG principles throughout GM’s business and managing the related risks and opportunities. The key responsibilities, recent activities and focus areas of each committee can be found in our 2022 Proxy Statement. Each committee has a written charter setting forth its purpose, authority and duties. Overall, the committees enhance the Board’s oversight of areas that are critical to GM’s corporate responsibility and sustainability efforts, including: transparent and reliable financial reporting; risk identification and mitigation (including climate change and other ESG issues); ethics and compliance; product and workplace safety; supply chain and human rights; pay-for performance; data security; diversity, equity and inclusion; Board and management succession planning; consideration of shareholder proposals; and political and lobbying priorities and expenditures.</p> <p>Governance and Corporate Responsibility Committee (GCRC): The GCRC oversees the Company’s development of ESG initiatives, strategies, policies and practices related to matters of sustainability and corporate responsibility that have a material impact on the company. The GCRC is responsible for tracking GM’s ESG scorecard and conducts annual reviews of ESG reporting standards, lobbying activities, corporate philanthropy and human rights (including responsible sourcing practices and policies)</p> <p>Risk and Cybersecurity Committee (RCC): The committee oversees risks related to the company’s key strategic, enterprise and cybersecurity risks, including climate change, workplace and product safety and privacy. The RCC considers ESG-related risks as part of the company’s enterprise risk profile. This includes, but is not limited to, transitions associated with climate change and achieving our vision of an all-electric future. The committee is regularly updated on enterprise risk trends and emerging risks, as well as management’s response and/or mitigation plans that are being executed.</p>

W6.2d

(W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues	Primary reason for no board-level competence on water-related issues	Explain why your organization does not have at least one board member with competence on water-related issues and any plans to address board-level competence in the future
Row 1	Yes	<p>Last year, the Board conducted a formal ESG self-evaluation. The evaluation was designed to ensure that the Board possesses the requisite skills and expertise to oversee the Company’s ESG opportunities, priorities, and risks. The Governance Committee, led by our Independent Lead Director, spearheaded this effort by asking directors to consider their expertise across the following key ESG subject matter areas:</p> <ul style="list-style-type: none"> <li>• Environmental: Greenhouse gas emissions; raw material sources; the physical impacts of climate change; air quality; waste and hazardous materials management; product design and lifecycle management; water and wastewater management; energy efficiency management; and ecological impacts.</li> <li>• Social: DE&amp;I; data privacy; human rights; community relations; workplace health and safety; supply chain management; human capital management; consumer privacy; product quality and safety; and labor practices.</li> <li>• Governance: Public company board governance; legal and regulatory matters; executive compensation; compliance and business ethics; anti-competitive practices; risk management; and ESG reporting principles and frameworks (e.g., Task Force on Climate-Related Financial Disclosures; Value Reporting Foundation). Upon the conclusion of this evaluation, the Board determined that it has strong ESG expertise and possesses a broad range of skills, qualifications, and attributes that will support the Company’s ambitious EV transition, growth strategy, and sustainability and DE&amp;I goals. The Board further determined it would not benefit at this time from adding a “special purpose” director exclusively on the basis of ESG criteria. The Board believes that it makes decisions as a group and has a collective responsibility to make informed decisions on a deliberative basis on all issues, including those related to ESG.</li> </ul> <p>As an example, one of our Board members developed environmental expertise addressing reductions in greenhouse gases, waste, effluents, and consumption of natural resources for various manufacturing facilities during their career as a pharmaceutical executive. GM benefits from their experience in this area as it transitions its manufacturing capabilities for an EV future.</p>	<Not Applicable>	<Not Applicable>

W6.3

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

**Name of the position(s) and/or committee(s)**

Chief Sustainability Officer (CSO)

**Responsibility**

Assessing future trends in water demand  
 Assessing water-related risks and opportunities  
 Managing water-related risks and opportunities

**Frequency of reporting to the board on water-related issues**

Quarterly

**Please explain**

Management of water risks and opportunities ultimately resides with the CEO, who leads our SLT. This group includes the EVP of global manufacturing to whom our CSO reports. The group is responsible for ensuring water related considerations are incorporated into GM's overall business strategy and that water-related risks are considered in GM's enterprise risk management framework and decision-making processes. The CSO chairs the Sustainability Office (SO) and works to integrate sustainability across the enterprise including water management and target progress for direct operations, risk mitigation, and infrastructure/capacity improvements.

The GCRC board committee and SLT are linked to the (SO) encompassing all aspects of GM's business with daily functional lead from CSO. On a monthly basis GM's performance to its public water goals are reviewed by the MLT and by the CSO. If water KPIs are not on the target pathway, countermeasures are developed and reviewed by the MLT.

W6.4

(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

	Provide incentives for management of water-related issues	Comment
Row 1	Yes	The Executive Compensation Committee annually: <ul style="list-style-type: none"> <li>• Evaluates whether the company's ESG and sustainability goals and milestones are effectively integrated into the compensation programs.</li> <li>• Reviews compensation plans for executives to confirm alignment to sustainability risks and opportunities.</li> <li>• Considers shareholder feedback relative to the alignment of sustainability goals with respect to the annual shareholder say-on-pay vote.</li> </ul>

W6.4a

(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?

	Role(s) entitled to incentive	Performance indicator	Please explain
Monetary reward	Corporate executive team Chief Sustainability Officer (CSO)	Reduction of water withdrawals Reduction in consumption volumes	Water use per vehicle reduction of 35% from 2010 to 2035 is one of GM's public sustainability goals. The Executive Compensation Committee of the Board of Directors oversees the compliance of the Company's executive compensation programs with applicable legal requirements and makes an annual determination as to whether the Company's ESG and sustainability goals and milestones are effectively integrated into the programs.  The 2021 Short Term Incentive Plan (STIP) focuses leadership on key financial measures (75% of STIP) and strategic goals (25% of STIP). The total payout for the STIP ranges from 0 to 200 percent based on performance against pre-established targets. The Compensation Committee determines performance to strategic goals using a rigorous assessment process that evaluates final results against pre-established operational goals, safety results, and other measures, including ESG outcomes such as progress made toward achieving GM's environmental goals. Payout for strategic goals performance occurs only if threshold performance of at least one financial measure is met.
Non-monetary reward	Other, please specify (GM employees reporting to CSO)	Reduction of water withdrawals Reduction in consumption volumes Improvements in efficiency - direct operations Implementation of employee awareness campaign or training program Implementation of water-related community project	The newly appointed Chief Sustainability Officer (CSO) directs the Sustainable Workplaces team that provides services to plants to meet water reduction activities, employee awareness, and leads community projects related to water security. We have a GM Recognition program that is used to recognize exceptional performance and use our internal communications platform, Socrates, to feature exceptional performance. An example is a focused article in Socrates in 2021 that highlighted three water saving projects including; the zero liquid discharge system in San Luis Potosi Assembly plant in Mexico, a storm water reuse process implemented at Factory Zero in Detroit, and water treasure hunts performed across the organization.

W6.5

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

Yes, direct engagement with policy makers

## W6.5a

### (W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

Engagement with policy makers is done appropriately at the local level by our site Environmental Leaders (EL) who are part of a central team, Sustainable Workplaces (SW). In addition, SW works with our Global Public Policy team for consistency in activities to influence policy with local municipal entities and state and global country policy makers to ensure we support our Guiding Environmental Commitments.

Site ELs report to the VP of Sustainable Workplaces and identify any inconsistencies in activities related to our water policy and company environmental commitments for guidance and corrective action. Corrective action plans are tracked in a GM workflow system managed in the software EtQ Reliance to ensure implementation. An example is if a GM facility receives a notice of violation for water discharge, a corrective action plan is developed, tracked, and has regular follow-up actions until resolved.

## W6.6

### (W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

Yes (you may attach the report - this is optional)

GM 2021 10K.pdf

*GM identifies water-related risks in Item 1A Risk Factors in the 10-K filing: "Increased intensity, frequency or duration of storms, droughts or other severe weather events as a result of climate change may disrupt our production and the production, logistics, cost and procurement of products from our suppliers and timely delivery of vehicles to customers, and could negatively impact working conditions at our plants and those of our suppliers. Any of the foregoing could have a material adverse effect on our financial condition and results of operations."*

## W7. Business strategy

### W7.1

#### (W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	11-15	Strategic planning for facilities includes evaluation of water security in the local areas where new facilities are being planned. Along with other planning activities, water availability and quality are considered. If an area has water stress, then the business plan will include additional capital for water reuse, e.g. Zero Liquid Discharge or other reuse technologies to reduce the stress on local water supplies as needed. Similarly, for existing facilities that discover water stress issues, capital planning will include mitigation for water reuse. An example is at our Assembly plant in Silao, Mexico that is served by deep non-renewable wells where wells began showing stress and a plan was developed and is currently being implemented to increase the amount of water reuse to relieve the stress on the wells. The long term horizons coincide with GM's long term planning cycles for facilities and our future water goal planning will be to 2035.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	GM's water intensity reduction goals are long term (2010-2035) and are integrated into our medium and long-term objectives. Targets are established for regions and sites and progress is evaluated monthly as water withdrawal per unit of production metrics are integrated into our Global Manufacturing System (GMS). We implemented targets at all of our global manufacturing facilities for water. If targets are not met, countermeasures are developed to meet the targets and reviewed by management regularly. An example is in North America, where some facilities did not meet their targets and using root cause analysis, countermeasures were developed including employee activities, such as water treasure hunts, repairing leaks and exploring additional water reuse. For example, at one manufacturing site in the US the team determined they could save an estimated 2,676 m3 of water annually by replacing a Steam condensate Tank.
Financial planning	Yes, water-related issues are integrated	11-15	Strategic planning for facilities includes evaluation of water security in the local areas where new facilities plans reveal, a need for capital investment for water security, including water scarcity, quality, and discharge at facilities, the required funds are included in our 5-year portfolio spending plans. An example is at our Engine & Transmission plant in Ramos Arizpe Mexico that is served by deep non-renewable wells. When the well treatment plant began showing stress, a plan was developed and included in our portfolio plan to spend \$7.3M to upgrade the well water treatment plant. Our 5-year portfolio spending plans is used in combination with our Asset Condition & Planning Tool (ACAP) which tracks the remaining useful life of our equipment through its entire lifecycle. The ACAP data is used to foresee end of life 11-15 years. The long-term planning horizons coincide with GM's long term planning cycles for facilities, which last for 15 or more years.

### W7.2

**(W7.2) What is the trend in your organization’s water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?**

Row 1

**Water-related CAPEX (+/- % change)**

69

**Anticipated forward trend for CAPEX (+/- % change)**

-8

**Water-related OPEX (+/- % change)**

169

**Anticipated forward trend for OPEX (+/- % change)**

-33

**Please explain**

In 2021, we had 24 projects that were related to water and wastewater treatment infrastructure with capital and operating expense in millions of dollars. The year over year variation in project selection depends on facility priorities and asset performance. In 2021 we prioritized water projects compared to 2020 to minimize risk and improve infrastructure. For example, one project was to upgrade a non-renewable well water treatment plant in water stressed GM manufacturing complex in Ramos Arizpe, MX. Our anticipated OPEX forward trend decreased for 2022, could be associated with efficiencies gained with the implementation of water projects in 2021.

**W7.3**

**(W7.3) Does your organization use scenario analysis to inform its business strategy?**

	Use of scenario analysis	Comment
Row 1	Yes	The integration of sustainability and climate change into our business continues to be a focus. In 2021, GM partnered with a third-party consultant to begin a journey to better define the company’s climate-related risks and opportunities. The focus is to identify climate-related risks, exposure, potential impacts and key performance indicators. In particular, this journey will include climate change scenarios and business alignment with various climate-related scenarios. Progress on this exercise will be shared in our 2023 CDP disclosure. We categorize risks as physical and transition risks. Transition risks result from the global transition to a low-carbon and climate-resilient economy, while physical risks result from extreme weather events and increasing average global mean temperatures. Transition risk related to technology results from availability of technology to address climate impacts.

**W7.3a**

**(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization’s business strategy.**

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Climate-related	In 2021, GM partnered with a third-party consultant to begin a journey to better define the company’s climate-related risks and opportunities. The focus is to identify climate-related risks, exposure, potential impacts and key performance indicators. In particular, this journey will include climate change scenarios and business alignment with various climate-related scenarios. Progress on this exercise will be shared in our 2023 CDP disclosure.  We categorize risks as physical and transition risks. Physical risks result from extreme weather events and increasing average global mean temperatures. Transition risk related to technology results from availability of technology to address climate and water impacts.	Increased intensity, frequency or duration of storms, droughts or other severe weather events that may result from climate change could disrupt our production and the production, logistics, cost and procurement of products from our suppliers and timely delivery of vehicles to customers and could negatively impact working conditions at our plants and those of our suppliers. Any of the foregoing could have a material adverse effect on our financial condition and results of operations.  We manage these risks based on the location of our operations around the world and the risk profile for a particular region. As an example, increases in the frequency of drought conditions can depress water availability for production in water-stressed areas. GM has production facilities in Mexico, an area hard hit by drought in recent years. There is a risk that increases in the frequency of such events could disrupt production due to lack of water availability.	GM has integrated water management into our annual business planning process and has set a target to reduce the water intensity of our operations 35% by 2035 compared to a 2010 baseline. We also have signed the CEO Water Mandate—a UN Global Compact Initiative—joining other global business leaders to address key challenges around water security and further aligning the UN Sustainable Development Goals.  Water consumption is managed on a local basis, with each facility working toward its own targets for year-over-year improvement. Innovative approaches have allowed facilities to continue production without disruptions, even in water-stressed areas. As an example, at our San Luis Potosí assembly plant in Mexico, GM uses a zero liquid discharge system to minimize the reliance on well water. The system purifies and transforms wastewater into reusable water for the facility’s paint and machining processes, as well as for landscape irrigation.

**W7.4**

**(W7.4) Does your company use an internal price on water?**

Row 1

**Does your company use an internal price on water?**

Yes

**Please explain**

GM considers the "True cost of water" when evaluating a business case for water. The True cost includes water supply, energy cost to pump and heat, disposal costs, maintenance, infrastructure, and risk factor cost. We are actively participating with the DOE on their Plant Water Profiler Tool that calculates true cost of water by plant. We are also working with the DOE to analyze the results and compare plants in different regions. We are currently doing a comparison study on our Silao (MX) and Arlington (TX, USA) assembly plants. An example using a total cost of water was at a Water Treasure Hunt workshop at our GM Korea Assembly site in Bupyeong, South Korea. We justified water efficiency using Total cost of water and the added heat savings added was enough to meet our project hurdle rate for approvals.

W7.5

(W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Definition used to classify low water impact	Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
Row 1	No, and we do not plan to address this within the next two years	<Not Applicable >	Other, please specify (We are working toward our long term goal to reduce the water intensity of our operations by 35% by 2035, compared to a 2010 baseline. )	We are working toward our goal to reduce the water intensity of our operations by 35% by 2035, compared to a 2010 baseline. This target builds on the water conservation work we have done in our GM facilities over the past decade.. There is a fixed amount of water that our operations need to run, regardless of the number of vehicles we produce so lower production impacts our water intensity measures. Our water conservation work continues to tackle that underlying water usage and drive down total water usage.

W8. Targets

W8.1

(W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals Business level specific targets and/or goals Site/facility specific targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	One of GM's Environmental Principles is to conserve resources as stated in our 2020 Corporate Sustainability Report, page 42 - "Water Conservation and Quality - We are committed to responsibly using water while taking actions that preserve water quality and conservation across our operations, in our supply chain and in the communities in which we operate". GM has publicly committed to reduce Water withdrawal intensity (M3/Vehicle), including all manufacturing and non-manufacturing facility water withdrawal (municipal, surface, well), normalized by vehicle production by 35% from 2010 baseline to 2035. The goal was set based on consideration of the previous 10-year reduction of over 40% (2000-2010). A straight-line extrapolation would equate to 100% reduction by 2022, which is not feasible. We used aggressive, but reasonable estimates of reduction based on the law of diminishing return to set the 2035 goal. Targets are set each year to meet the 2035 goal at global, regional, and site levels. We are currently not on track to meet the pathway for 2035 in 2021 due to pandemic vehicle volumes with 5% reduction in 2021 since 2010 and a pathway target of 17%. With production volumes forecasted to increase in 2022, we expect to get back on our pathway to 2035.

W8.1a

**(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.**

**Target reference number**

Target 1

**Category of target**

Product water intensity

**Level**

Company-wide

**Primary motivation**

Reduced environmental impact

**Description of target**

We measure and manage resources, including water use, at all manufacturing locations, engineering centers, parts distribution centers and, proving ground sites around the world. The target is to reduce water withdrawal intensity (M3/Vehicle) aggregated at all global facilities by 35% from 2010 to 2035. Our strategy across these facilities, however, has common attributes:

-It's holistic, in that we approach resource conservation from a systems perspective to develop optimal strategies.

-It's heavily reliant on innovation, using as much creativity and out-of-the-box thinking in our conservation efforts as we do in innovating new vehicle technologies. In fact, we often work across functions, such as manufacturing and vehicle development, as we work to realize new resource efficiencies.

-Water conservation and efficiency is integrated into our business plan with dedicated resources, funding, and monthly scorecard monitoring and countermeasures requirements for non-conformance.

**Quantitative metric**

% reduction per product

**Baseline year**

2010

**Start year**

2010

**Target year**

2035

**% of target achieved**

14

**Please explain**

GM has reduced 2021 water intensity by 5% since 2010 with water efficiency projects, water reuse, and conservation activities. We are performing 14% performance to goal of 48%. The gap between performance and goal for 2021 is in large part due to decreased volumes due to the pandemic and associated semiconductor chip shortage. If you remove volume, the % of target achieved for absolute water (M3) is 27%. With aggressive 2035 targets GM is planning, Water Treasure Hunts, conservation, and efficiency projects in future years and are forecasting to meet our 2035 goal.

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**W8.1b**

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**(W8.1b) Provide details of your water goal(s) that are monitored at the corporate level and the progress made.**

**Goal**

Engagement with suppliers to reduce the water-related impact of supplied products

**Level**

Company-wide

**Motivation**

Reduced environmental impact

**Description of goal**

We are committed to responsibly using water while taking actions that preserve water quality and support conservation across our operations, in our supply chain and in the communities in which we operate. GM is also a signatory to the CEO Water Mandate—a U.N. Global Compact Initiative— joining other global business leaders to address key challenges around water security and further aligning to the UN SDGs. 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 Engagement; and Transparency.

From the supply chain perspective, we are working towards understanding their environmental impact, including water usage. Enrolled suppliers in the CDP initiative include all direct material strategic suppliers, a subset of indirect suppliers who are mainly manufacturing-based suppliers and our top strategic logistics suppliers. This group represents more than 83% of our direct material supply chain spend. During the past few years, we have aimed to increase participation among in-scope SSE and key logistic suppliers year-over-year.

**Baseline year**

2013

**Start year**

2013

**End year**

2021

**Progress**

In 2021, over 300 Tier 1 suppliers, comprised of suppliers of strategic importance as well and/or those identified as high-water consumers through a Life Cycle Analysis (LCA) process, were asked to respond to the CDP Water questionnaire. These suppliers represent approximately 83% of GM’s direct material spend.

Our 2021 CDP Water responses were not as robust as in previous years due to a widening of in-scope suppliers. Despite that, GM’s supplier response rate was 78%, which is still above the average 70% response rate expected. GM sees the 2021 results as an opportunity to engage suppliers for whom this was their first time responding, and highlighted areas of focus for the future, including working with suppliers on discharge quality, long-term water use strategy, and risk assessment procedures.

**W9. Verification**

**W9.1**

**(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?**

Yes

rpt\_fnl\_gm\_global\_2021\_20220322.pdf

**W9.1a**

**(W9.1a) Which data points within your CDP disclosure have been verified, and which standards were used?**

Disclosure module	Data verified	Verification standard	Please explain
W8 Targets	Water withdrawal at GM operations globally using AA1000 standards	AA1000AS	GM contracted with an independent third party to verify 100% of our water withdrawal at our global operations. (see page 5&6 of the attachment, Table 3)
W8 Targets	Water withdrawal year over year reduction at GM operations globally using AA1000 standards	AA1000AS	GM contracted with an independent third party to verify 100% of our water withdrawal reduction year over year at our global operations to confirm continuous improvement. (see page 5&6 of the attachment, Table 3)
W8 Targets	Vehicle production volume (number of vehicles produced) was verified by an independent 3rd party in 2021.	AA1000AS	GM contracted with an independent third party to verify 100% of our vehicle production at our global operations to confirm the denominator for Water intensity calculation. (see page 5&6 of the attachment, Table 3)

**W10. Sign off**

**W-FI**

**(W-FI) Use this field to provide any additional information or context that you feel is relevant to your organization’s response. Please note that this field is optional and is not scored.**

**W10.1**

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(W10.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	Vice President of Sustainable Workplaces and Chief Sustainability Officer of General Motors Company	Chief Sustainability Officer (CSO)

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## W10.2

(W10.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

Yes

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## Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms