

Welcome to your CDP Forests Questionnaire 2020

F0. Introduction

F0.1

(F0.1) Give a general description of and introduction to your organization.

General Motors Company ("GM") is a global company committed to delivering safer, better and more sustainable ways for people to get around. With global headquarters in Detroit, Michigan, GM employs 164,000 people in over 400 facilities across five continents.

GM offers a comprehensive range of vehicles and services in more than 84 countries around the world. The largest national market for its products is China, followed by the U.S., Brazil, Canada and Mexico. Along with its strategic partners, GM produces cars and trucks, and sells and services these vehicles through the following brands: Chevrolet and Cadillac globally, and Baojun, Buick, GMC, Wuling, OnStar, and Cruise in certain regions or specific countries.

GM also maintains equity stakes in major joint ventures including SAIC-GM, SAIC-GM-Wuling, in China, and GM Korea, as well as subsidiaries such as OnStar, a recognized industry leader in vehicle safety, security, and information services, and Cruise Automation, a leader in autonomous driving technology.

GM's commitment to sustainability applies to every part of our business and creates value for customers. It underscores GM's philosophy of "Customer-Driven Sustainability" – an approach for meeting customers' needs through sustainability by making the mobile experience safer, more efficient, and better integrated with everyday life. As part of that commitment and philosophy, GM continually assesses and takes steps to reduce the environmental impact of its products and operations.

For example, GM is focusing on energy management; carbon and waste intensity reduction; resource preservation; and developing more efficient vehicles through our technological advances, global scale and employee innovation. These areas help the company reduce its environmental footprint and share best practices worldwide for broad results.



Sustainability is also an important part of GM's people and culture. The company integrates sustainability across every business function and through each level of the organization. GM is actively engaged in cross-functional efforts to seize environmental and social opportunities to improve our Company and the communities in which we operate.

GM's Guiding Environmental Commitments, within this document, are the foundation of this policy and were established from the core Environmental Principles and values that were in place for more than 25 years. GM's Guiding Environmental Commitments now serve as a guide for all GM employees worldwide. UNITED NATIONS GLOBAL COMPACT In 2015, GM became 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.

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. Of these ten principles, Environment is specifically tied to Principles 7, 8 and 9, which state: • UNGC Principle 7 – Businesses should support a precautionary approach to environmental challenges. • UNGC Principle 8 – Businesses should undertake initiatives to promote greater environmental responsibility. • UNGC Principle 9 – Businesses should encourage the development and diffusion of environmentally friendly technologies. This Environmental Policy applies globally to all of GM's employees and its operations, consultants, agents, sales representatives, distributors, independent contractors, and contract workers when they perform work for GM. GM's Guiding Environmental Commitments encourage environmental consciousness in both daily conduct and in the planning of future products and programs. The Guiding Environmental Commitments support and embrace GM's purpose, values and our vision of a future world with zero crashes, zero emissions and zero congestion. We are committed to actions that restore and preserve the environment. We are dedicated to:

- Preventing deforestation, conserving water, caring for natural resources in and around our facilities and the communities where we operate.
- We believe climate change is real and are committed to the public disclosure of our greenhouse gas emissions and taking actions to reduce them.

We aspire to be a zero-waste company by:

- Treating waste as a resource out of place.
- Promoting landfill free practices in all our operations and at all our sites.
- Advancing a circular economy/circularity by eliminating waste and designing for continued use.
- Beneficially reusing by-products generated at our facilities.
- Incorporating sustainable materials management and the increasing use of recycled content in our products and processes.

General Motors is reporting on actions related to deforestation related to Climate Change for our operations where we have operational control for deforestation for owned and joint ventures as applicable, as well as in our Supply Chain.



F0.2

(F0.2) State the start and end date of the year for which you are reporting data.

	Start Date	End Date
Reporting year	January 1, 2019	December 31, 2019

F0.3

(F0.3) Select the currency used for all financial information disclosed throughout your response.

USD

F0.4

(F0.4) Select the forest risk commodity(ies) that you are, or are not, disclosing on. For each forest risk commodity selected, identify the stages of the supply chain which best represents your organization’s area of operation.

	Commodity disclosure	Stage of the value chain	Explanation if not disclosing
Timber products	Disclosing	Production Manufacturing	
Palm oil	Not disclosing	Manufacturing	We have minimal use of Palm Oil in vehicle manufacturing
Cattle products	Disclosing	Manufacturing	
Soy	Not disclosing	Manufacturing	We have minimal use of Soy in vehicle manufacturing
Other - Rubber	Disclosing	Manufacturing	



Other - Cocoa	This commodity is not produced, sourced or used by our organization		
Other - Coffee	This commodity is not produced, sourced or used by our organization		

F0.5

(F0.5) Are there any parts of your direct operations or supply chain that are not included in your disclosure?

No

F1. Current state

F1.1

(F1.1) How does your organization produce, use or sell your disclosed commodity(ies)?

Timber products

Activity

Distributing/packaging

Form of commodity

Tertiary packaging

Source

Multiple contracted producers

Country/Area of origin

Ecuador

Germany

India

% of procurement spend

<1%

Comment

The countries listed are not the origin of the timber, but the country of origin of the manufacturer. Spend on packaging is tracked as an indirect material as it is not part of the vehicle sold for the majority of packaging. The total spend on indirect materials for packaging is tracked by two commodity teams - "Packaging" and "Containerization" or 0.01% of total supply chain spend.

Cattle products

Activity

Using as input into product manufacturing

Form of commodity

Hides/leather

Source

Contracted suppliers (processors)

Country/Area of origin

Argentina

Brazil

China

Germany

Mexico

United States of America

% of procurement spend

<1%

Comment

As GM does not procure leather directly, but it is part of the vehicle parts manufacturing process for seats and interiors in some models from our tier 1 suppliers. We used an estimate of 80 million square feet or 1.8 million hides in a typical year. The percentage of total procurement for leather is estimated at 0.2% of our total procurement spend. The countries listed are major manufacturing sites for seats and users of leather products and not specific to our leather procurement as we track seats and interiors manufacturing locations, not the country of origin of the cattle hides necessarily, but inclusive of seat manufacturing and likely locations of tanneries and cattle ranches.

Other - Rubber

Activity

Buying manufactured products

Form of commodity

Other, please specify

Rubber is the main raw material used in manufacturing tires, and both natural and synthetic rubber are used. Natural rubber is found as a milky liquid in the bark of the rubber tree, *Hevea Brasiliensis*.

Source

Contracted suppliers (manufacturers)

Country/Area of origin

China

India

Thailand

% of procurement spend

1-5%

Comment

GM buys tires manufactured in 21 countries. The three countries listed are tire manufacturing locations for GM suppliers in Asia. This is not the origin of the rubber commodity, but the origin of the manufacturing of the tire from our tier 1 suppliers that coincides with countries in Asia, where 90% of the world's natural rubber supply originates. The spend is calculated based on tires procured compared to total supply chain spend or 2%.



F1.2

(F1.2) Indicate the percentage of your organization’s revenue that was dependent on your disclosed forest risk commodity(ies) in the reporting year.

	% of revenue dependent on commodity	Comment
Timber products	<1%	Packaging material purchased as an indirect material that is used in manufacturing and is not part of our direct material use (materials that leave with the sold vehicle) is tracked in Commodity Teams under "Packaging" and "Containerization" The revenue dependent on timber is calculated based on spend on packaging compared to our total spend on purchased goods and services or 0.01%.
Cattle products	1-5%	As GM does not procure leather directly, but it is part of the vehicle manufacturing for seats and interiors in some models from our tier 1 suppliers. We used an estimate of leather use in interiors for 1.8 Million vehicles or 23% of our revenue is currently partially dependent on leather. The percent of revenue value is based on a high level estimate of company revenue and allocation by total vehicle sales in 2019 of 7.7 Million vehicles.
Other - Rubber	81-90%	Natural rubber used to manufacture tires by our supply chain is essential to selling vehicles. 89.4% of our revenue is from vehicle sales and dependent on rubber as a raw material for tires.

F1.3

(F1.3) Provide details on the land area you control and/or manage that is used for the production of your disclosed commodity(ies)?

Forest risk commodity

Timber products

Type of control

Own land

Country/Area

Brazil

Area (Hectares)

33

% Area certified

0

Certification scheme

No certified area in this country/area

Conversion of natural ecosystems during the reporting year

No

Area converted during the reporting year (hectares)

% covered by natural forests

Please explain

GM has planted trees and vegetation at our proving grounds (test track) site in Indaiatuba, Sao Paulo, Brazil for land conservation. As part of the conservation efforts, we contract to have timber removed as needed to maintain the site.

F1.4

(F1.4) Provide details on the land you control and/or manage that was not used for the production of your disclosed commodity(ies) in the reporting year.

Forest risk commodity



Timber products

Country/Area

Brazil

Type of control

Own land

Land type

Other land type, please specify

Conservation area is part of our vehicle test track site where we test vehicles.

Area (hectares)

563

% covered by natural forests

16

Please explain

The test track site land has various areas of permanent preservation totalling 2,255,000 m². More than 500,000 tree seedlings, including native species, have been planted since 1972. We currently contract to have the area cultivated to preserve the area and prevent fires.

F1.5

(F1.5) Does your organization collect production and/or consumption data for your disclosed commodity(ies)?

	Data availability/Disclosure
Timber products	Consumption data available, disclosing
Cattle products	Consumption data available, disclosing
Other - Rubber	Consumption data available, disclosing

F1.5a

(F1.5a) Disclose your production and/or consumption data.

Forest risk commodity

Timber products

Data type

Consumption data

Volume

147,068

Metric

Metric tons

Data coverage

Partial commodity production/consumption

Please explain

GM tracks waste by type, including Corrugated containers, paper, and dimensional lumber as well as it's disposition - reuse, recycle, incinerated, or landfilled globally. The information on waste disposition is used in US EPA's WasteWise model to calculate carbon emissions and how much carbon we avoided by reuse and recycling. The avoided GHG is about the same as our operations scope 1 & 2 emissions, proving that reuse and recycling helps decarbonize our industry. The consumption data disclosed is based on disposition data from the WasteWise model inputs and corrected for amount of timber in various products, e.g. 2 tons in 1 ton of recycled corrugated cardboard, 3 tons/ton for paper, and 1.4 ton/ton of dimensional lumber.

Forest risk commodity

Other - Rubber

Data type

Consumption data

Volume

55,724

Metric

Metric tons

Data coverage

Partial commodity production/consumption

Please explain

The amount of natural rubber was calculated based on 4 X 2019 vehicle sales X 19% natural rubber content multiplied by the average weight of a tire at 9.5 KG. We did not include other minor uses in other rubber auto parts, e.g. hoses and weather-stripping.

Forest risk commodity

Cattle products

Data type

Volume

7,432,243

Metric

Square meters

Data coverage

Partial commodity production/consumption

Please explain

Consumption is estimated from our design group based on area of leather used, including waste, in seats and interiors multiplied by vehicle sales volumes. As it did not include a comprehensive search for all leather use, we are disclosing partial commodity consumption, but are including the waste component from our tier suppliers.

F1.5b

(F1.5b) For your disclosed commodity(ies), indicate the percentage of the production/consumption volume sourced by national and/or sub-national jurisdiction of origin.

Forest risk commodity

Timber products

Country/Area of origin

Unknown origin

State or equivalent jurisdiction

% of total production/consumption volume

100

Please explain

In 2019 we have established a companion sustainable materials workstream that is dedicated to sustainable packaging. A multidisciplinary group has been tasked with developing a packaging goal and collecting data to better understand GM packaging specifications and requirements. The group is working closely with suppliers and external partners to innovate current practices and embed circular economy principles in packaging procurement and design. The current priority for this new group is to develop our road map for success that takes into account the full life cycle



of our packaging and carbon analysis of the various opportunities. As part of this work, GM has partnered with WestRock as the preferred supplier for all consumer-facing packaging. WestRock prioritizes recycled content input in their sourcing, averaging 35 to 55 percent recycled content in corrugated boxes and 100 percent recycled content in coated boards. Any virgin material used in our packaging going forward is certified by the Sustainable Forestry Initiative (SFI).

A recent packaging success story has been around the ventilators, masks and face shields that GM is producing in response to the COVID-19 pandemic. Working with Menasha as our supplier, the five packaging boxes used for these products contain 33 to 95 percent recycled content with remaining materials coming from SFI-certified sources.

Although the country of origin is unknown to GM at this time as we buy packaging, manufactured from timber, not timber directly, we are committing to use of recycled content and sustainable virgin materials certified by SFI in our future customer outward facing packaging.

Forest risk commodity

Cattle products

Country/Area of origin

Unknown origin

State or equivalent jurisdiction

% of total production/consumption volume

100

Please explain

GM procures seats and other interior parts that may contain leather, but we do not currently track the country of origin of leather production from our tier 4 and beyond suppliers at the cattle ranches. We are in the early stages of working with suppliers at the country of origin for sustainability and traceability. We do have the ability to trace leather products to the tannery and use the information for quality purposes currently.



Forest risk commodity

Other - Rubber

Country/Area of origin

Unknown origin

State or equivalent jurisdiction

% of total production/consumption volume

100

Please explain

GM does not track each Tire suppliers supply chain source for natural rubber at this time. However, GM is a founding member of GPSNR. Their Code of Conduct is in alignment with ours in protecting human rights. GPSNR has finalized standards that will help protect human rights, uphold fair business practices, protect biodiversity and water resources and improve yields, and increase supply chain transparency and traceability. Tire suppliers, rubber refiners, NGOs and further upstream actors also held a collaborative role in the group's creation. GM visited one of our tier 1 tire suppliers' upstream supplier of natural rubber in Thailand to observe operations in 2018 and further understand the process of supplying natural rubber.

F1.6

(F1.6) Has your organization experienced any detrimental forests-related impacts?

No

F2. Procedures

F2.1

(F2.1) Does your organization undertake a forests-related risk assessment?

Yes, forests-related risks are assessed

F2.1a

(F2.1a) Select the options that best describe your procedures for identifying and assessing forests-related risks.

Timber products

Value chain stage

Direct operations

Coverage

Partial

Risk assessment procedure

Assessed as part of other company-wide risk assessment system

Frequency of assessment

Annually

How far into the future are risks considered?

3 to 6 years

Tools and methods used

External consultants

Please explain

GM has not experienced detrimental impacts related to lack of cardboard supply. Our focus for improving the sustainable supply of cardboard is increasing use of returnable containers, recycled content, reuse, and recycling to reduce impact on forests, landfills, and climate change due to carbon emissions. We have an active recycling program for cardboard and track volumes we reuse, recycle, incinerate, and landfill and the associated carbon emissions from landfills and the amount we offset with recycling. As an example, GM recycles 50% of corrugated containers avoiding about 375,000 tons of CO₂e emissions compared to landfill. We also have established a companion sustainable materials

workstream that is dedicated to sustainable packaging. A multidisciplinary group has been tasked with developing a packaging goal and collecting data to better understand GM packaging specifications and requirements. The group is working closely with suppliers and external partners to innovate current practices and embed circular economy principles in packaging procurement and design. The current priority for this new group is to develop our road map for success that takes into account the full life cycle of our packaging and carbon analysis of the various opportunities. As part of this work, GM has partnered with a supplier for all consumer-facing packaging. They prioritize recycled content input in their sourcing, averaging 35 to 55 percent recycled content in corrugated boxes and 100 percent recycled content in coated boards. Any paper fiber-based virgin material used in our merchandized packaging going forward will be certified by the Sustainable Forestry Initiative (SFI).

A recent packaging success story has been around the ventilators, masks and face shields that GM is producing in response to the COVID-19 pandemic. Working with Menasha as our supplier, the five packaging boxes used for these products contain 33 to 95 percent recycled content with remaining materials coming from SFI-certified sources.

Cattle products

Value chain stage

Supply chain

Coverage

Partial

Risk assessment procedure

Assessed as part of an established enterprise risk management framework

Frequency of assessment

Annually

How far into the future are risks considered?

3 to 6 years

Tools and methods used

Internal company methods

Please explain

Over the past few years, we have developed a robust in-house, customized supply chain visibility tool, which integrates GM plants, Tier I suppliers, known Tier II suppliers and logistics nodes. This tool gives us the capability to map geographic locations and relationships across the GM supply chain. The tool also incorporates 24/7 monitoring and Global Incident Mapping (GIM) of potential disruptive events that could impact our supply chain partners worldwide. Although the risk assessment is not focused on forestry risks, supply chain risks for vehicle parts, e.g. seats with leather content is included. Currently the leather market supply greatly exceeds the demand.

Other - Rubber

Value chain stage

Supply chain

Coverage

Full

Risk assessment procedure

Assessed as a standalone issue

Frequency of assessment

Annually

How far into the future are risks considered?

> 6 years

Tools and methods used

External consultants

Please explain

GM performs a life cycle assessment on the auto parts that are manufactured by our suppliers using a 3rd party, Climate Earth, for supply chain impacts in GHG, Water, Energy, and Land Use. Land Use Forests in square meters is analyzed on a commodity basis and tires with natural rubber as a key ingredient was the highest impact of all of our parts. That led us to further investigate the impact of natural rubber by our supply chain on land use and deforestation.

There's no denying the importance of rubber production globally. The industry supports more than 5 million people in Southeast Asia who benefit from the jobs created by its value chain. However, thanks to GM's connection with the World Wildlife Fund, we now more fully understand the consequences of rubber production. For example, it is one of the leading contributors to deforestation, especially in Southeast Asia. The industry also is susceptible to human rights violations and unethical business practices, including land grabbing and the threatening of wildlife and endangered species across the region.

Over the past few years, we have developed a robust in-house, customized supply chain visibility tool, which integrates GM plants, Tier I suppliers, known Tier II suppliers and logistics nodes. This tool gives us the capability to map geographic locations and relationships across the GM supply chain. The tool also incorporates 24/7 monitoring and Global Incident Mapping (GIM) of potential disruptive events that could impact our supply chain partners worldwide. Although the risk assessment is not focused on forestry risks, supply chain risks for vehicle parts, e.g. tires with natural rubber content is included.

F2.1b

(F2.1b) Which of the following issues are considered in your organization's forests-related risk assessment(s)?

Availability of forest risk commodities

Relevance & inclusion

Relevant, always included

Please explain

Over the past few years, we have developed a robust in-house, customized supply chain visibility tool, which integrates GM plants, Tier I suppliers, known Tier II suppliers and logistics nodes. This tool gives us the capability to map geographic locations and relationships across the GM supply chain. The tool also incorporates 24/7 monitoring and Global Incident Mapping (GIM) of potential disruptive events that could impact our supply chain partners worldwide. Although the risk assessment is not focused on forestry risks, supply chain risks for vehicle parts, e.g. tires with natural rubber content and seats with leather content is included.

Quality of forest risk commodities

Relevance & inclusion

Relevant, always included

Please explain

As quality of supply chain parts is critical to vehicle quality, the same process for supply capabilities considers quality of supply chain parts as well.

Over the past few years, we have developed a robust in-house, customized supply chain visibility tool, which integrates GM plants, Tier I suppliers, known Tier II suppliers and logistics nodes. This tool gives us the capability to map geographic locations and relationships across the GM supply chain. The tool also incorporates 24/7 monitoring and Global Incident Mapping (GIM) of potential disruptive events that could impact our supply chain partners worldwide. Although the risk assessment is not focused on forestry risks, supply chain risks for quality vehicle parts, e.g. tires with natural rubber content and seats with leather content is included.

Impact of activity on the status of ecosystems and habitats

Relevance & inclusion

Relevant, sometimes included

Please explain

An example of recognizing the impact on ecosystems and habitats is our activity on natural rubber production in our supply chain for tires. General Motors became the first automaker to commit to sustainable natural rubber in 2017, and in 2018 became a founding member of the Global Platform for Sustainable Natural Rubber (GPSNR). GPSNR is an international, multistakeholder organization, with a mission to lead improvements in the socioeconomic and environmental performance of the natural rubber value chain. Members of the platform include rubber suppliers and processors, tire manufacturers, automakers and NGOs. GM appreciates the opportunity to collaborate with peers, suppliers and civil society

organizations to collectively move the needle on sustainable natural rubber.

GM believes that sourcing tires produced using sustainable natural rubber has a number of community, business and environmental benefits, including:

- Preserving and restoring primary forests and high conservation value and high carbon stock areas that are critical to addressing climate change and protecting wildlife.
- Improving yield and quality for natural rubber farmers, further supporting the small businesses that contribute 85 percent of this material.
- Mitigating business risk related to supply chain sourcing and performance and helping assure long-term availability of a key commodity.

GM actively participates in two working groups: the Strategy and Objectives Working Group and the Policy Toolbox Working Group. In the former, we work to define the theory of change and ensure strategic alignment across the other working groups; and in the latter, we are

working with NGOs and suppliers on crafting specific policy commitments and disclosures that company members will be expected to adopt. We want to make sure that every tire mounted on every General Motors vehicle meets the highest standards for safety and quality. Through our involvement in the GPSNR, we want to also ensure that the natural rubber in every tire is produced in a way that's consistent with our environmental and social commitments. We recognize that in today's complex global marketplace, no one can do it all by themselves, which is why we're proud to be part of this collaborative, multistakeholder initiative.

Regulation

Relevance & inclusion

Relevant, always included

Please explain

The Risk and Cybersecurity Committee of the Board is responsible for overseeing the company's management of enterprise-level risks, including climate-related risks such as climate-related policies and regulations that can impact products, services and operations, along with the SRM program and processes. The Committee is supported by the Executive Director of Strategic Risk Management (SRM), who is fully dedicated to risk management at GM. All top risks, including climate-related risks, such as increased and more stringent greenhouse gas (GHG) emission regulations, have approved mitigation plans and are reviewed regularly by the Senior Leadership Team (SLT) and the Board.

Climate change

Relevance & inclusion

Relevant, always included

Please explain

The Risk and Cybersecurity Committee of the Board is responsible for overseeing the company's management of enterprise-level risks, including climate-related risks such as climate-related policies and regulations that can impact products, services and operations, along with the SRM program and processes. The Committee is supported by the Executive Director of Strategic Risk Management (SRM), who is fully dedicated to risk management at GM. All top risks, including climate-related risks, such as increased and more stringent greenhouse gas (GHG) emission regulations, have approved mitigation plans and are reviewed regularly by the Senior Leadership Team (SLT) and the Board.

Impact on water security



Relevance & inclusion

Relevant, always included

Please explain

The Risk and Cybersecurity Committee of the Board is responsible for overseeing the company’s management of enterprise-level risks, including climate-related risks such as climate-related policies and regulations that can impact products, services and operations, along with the SRM program and processes. The Committee is supported by the Executive Director of Strategic Risk Management (SRM), who is fully dedicated to risk management at GM. All top risks, including climate-related risks, such as increased and more stringent greenhouse gas (GHG) emission regulations, have approved mitigation plans and are reviewed regularly by the Senior Leadership Team (SLT) and the Board.

Tariffs or price increases

Relevance & inclusion

Relevant, always included

Please explain

The Risk and Cybersecurity Committee of the Board is responsible for overseeing the company’s management of enterprise-level risks, including climate-related risks such as climate-related policies and regulations that can impact products, services and operations, along with the SRM program and processes. The Committee is supported by the Executive Director of Strategic Risk Management (SRM), who is fully dedicated to risk management at GM. All top risks, including climate-related risks, such as increased and more stringent greenhouse gas (GHG) emission regulations, have approved mitigation plans and are reviewed regularly by the Senior Leadership Team (SLT) and the Board.

Loss of markets

Relevance & inclusion

Relevant, always included

Please explain

The Risk and Cybersecurity Committee of the Board is responsible for overseeing the company’s management of enterprise-level risks, including climate-related risks such as climate-related policies and regulations that can impact products, services and operations, along with the SRM program and processes. The Committee is supported by the Executive Director of Strategic Risk Management (SRM), who is fully



dedicated to risk management at GM. All top risks, including climate-related risks, such as increased and more stringent greenhouse gas (GHG) emission regulations, have approved mitigation plans and are reviewed regularly by the Senior Leadership Team (SLT) and the Board.

Brand damage related to forest risk commodities

Relevance & inclusion

Not relevant, explanation provided

Please explain

We have not experienced Brand damage potential risk related to forest commodities of timber, cattle, or rubber.

Corruption

Relevance & inclusion

Relevant, always included

Please explain

The Risk and Cybersecurity Committee of the Board is responsible for overseeing the company's management of enterprise-level risks, including climate-related risks such as climate-related policies and regulations that can impact products, services and operations, along with the SRM program and processes. The Committee is supported by the Executive Director of Strategic Risk Management (SRM), who is fully dedicated to risk management at GM. All top risks, including climate-related risks, such as increased and more stringent greenhouse gas (GHG) emission regulations, have approved mitigation plans and are reviewed regularly by the Senior Leadership Team (SLT) and the Board.

Social impacts

Relevance & inclusion

Relevant, always included

Please explain

The Risk and Cybersecurity Committee of the Board is responsible for overseeing the company's management of enterprise-level risks, including climate-related risks such as climate-related policies and regulations that can impact products, services and operations, along with the SRM program and processes. The Committee is supported by the Executive Director of Strategic Risk Management (SRM), who is fully



dedicated to risk management at GM. All top risks, including climate-related risks, such as increased and more stringent greenhouse gas (GHG) emission regulations, have approved mitigation plans and are reviewed regularly by the Senior Leadership Team (SLT) and the Board.

Other, please specify

Relevance & inclusion

Please explain

F2.1c

(F2.1c) Which of the following stakeholders are considered in your organization's forests-related risk assessments?

Customers

Relevance & inclusion

Not relevant, explanation provided

Please explain

In 2019 General Motors had a third party conduct a materiality assessment related to sustainability issues based on a process outlined in GRI Technical Protocol. Two online surveys were deployed to GM employees and external stakeholders globally. Internal respondents were asked to rate the level of impact each topic would have on GM's business over the next five years, as well as selecting topics that represented the greatest leadership opportunities and greatest business risks for GM.

Among the key learnings from this most recent materiality assessment is that Climate change-related topics emerged as a key area of concern, but forest related and biodiversity risks were not identified as a main material issue at this time.

Employees

Relevance & inclusion

Not relevant, explanation provided

Please explain

In 2019 General Motors had a third party conduct a materiality assessment related to sustainability issues based on a process outlined in GRI Technical Protocol. Two online surveys were deployed to GM employees and external stakeholders globally. Internal respondents were asked to rate the level of impact each topic would have on GM's business over the next five years, as well as selecting topics that represented the greatest leadership opportunities and greatest business risks for GM.

Among the key learnings from this most recent materiality assessment is that Climate change-related topics emerged as a key area of concern, but forest related and biodiversity risks were not identified as a main material issue at this time.

Investors

Relevance & inclusion

Relevant, always included

Please explain

CDP investors requested that GM respond to CDP Forests in 2019, indicating relevance to the investor community. A significant number of GM's institutional investors are among CDP investors further indicating relevance of deforestation, water security, and climate change.

Local communities

Relevance & inclusion

Relevant, always included

Please explain

In 2019 General Motors had a third party conduct a materiality assessment related to sustainability issues based on a process outlined in GRI Technical Protocol. Two online surveys were deployed to GM employees and external stakeholders globally. Internal respondents were asked to rate the level of impact each topic would have on GM's business over the next five years, as well as selecting topics that represented the greatest leadership opportunities and greatest business risks for GM.

Among the key learnings from this most recent materiality assessment is that Climate change-related topics emerged as a key area of concern, but forest related and biodiversity risks were not as high a priority at this time.

GM is a founding member of Global Platform for Sustainable Natural Rubber (GPSNR). Their Code of Conduct is in alignment with ours in protecting human rights. GPSNR has finalized standards that will help protect human rights, uphold fair business practices, protect biodiversity

and water resources and improve yields, and increase supply chain transparency and traceability. Tire suppliers, rubber refiners, NGOs and further upstream actors, like communities, also hold a collaborative role in GPSNR.

NGOs

Relevance & inclusion

Relevant, always included

Please explain

Thanks to GM's connection with the World Wildlife Fund, we now more fully understand the consequences of rubber production. For example, it is one of the leading contributors to deforestation, especially in Southeast Asia. The industry also is susceptible to human rights violations and unethical business practices, including land grabbing and the threatening of wildlife and endangered species across the region.

Other forest risk commodity users/producers at a local level

Relevance & inclusion

Relevant, always included

Please explain

Thanks to GM's connection with the World Wildlife Fund and role as founding member of the Global Platform for Sustainable Natural Rubber (GPSNR), we now more fully understand the consequences of rubber production. For example, it is one of the leading contributors to deforestation, especially in Southeast Asia. The industry also is susceptible to human rights violations and unethical business practices, including land grabbing and the threatening of wildlife and endangered species across the region.

Regulators

Relevance & inclusion

Relevant, sometimes included

Please explain

GM is a consumer of forest risk related commodities and regulations for forestry are directed at companies that have operations in growing forestry products, not consumers. Where we own land that grows timber, we follow all local laws and regulations.



Suppliers

Relevance & inclusion

Relevant, always included

Please explain

Thanks to GM's connection with the World Wildlife Fund and role as founding member of the Global Platform for Sustainable Natural Rubber (GPSNR), we now more fully understand the consequences of rubber production. For example, it is one of the leading contributors to deforestation, especially in Southeast Asia. The industry also is susceptible to human rights violations and unethical business practices, including land grabbing and the threatening of wildlife and endangered species across the region.

While GM does not itself conduct any formal forest risk assessments with natural rubber, we do encourage our tire suppliers to conduct such assessments, and are working within the GPSNR platform to establish formal forest risk assessment procedures and reporting across the supply chain. When fully finished and implemented, this should result in greater transparency about forest risks from natural rubber.

Other stakeholders, please specify

Relevance & inclusion

Please explain

F3. Risks and opportunities

F3.1

(F3.1) Have you identified any inherent forests-related risks with the potential to have a substantive financial or strategic impact on your business?

	Risk identified?
--	------------------



Timber products	No
Cattle products	No
Other - Rubber	Yes

F3.1a

(F3.1a) How does your organization define substantive financial or strategic impact on your business?

GM assesses risks based on management’s professional judgment, the relevant case law, definitions and guidance from the U.S. Securities and Exchange Commission (the “SEC”) and discussions with external auditors. This includes both a quantitative and qualitative assessment. From a quantitative perspective, GM considers the risk as a percentage of various financial statement amounts (e.g., assets, liabilities, revenues, earnings, etc.). From a qualitative perspective, GM considers all of the relevant circumstances including whether the risk is strategically integral or important to the Company’s business plan, whether the risk will have an impact on future results of operations or financial condition, and whether the risk is important to an understanding of the company’s business. As a result, risks that we have identified as having a substantive impact will vary from risk to risk in terms of quantitative and qualitative perspectives.

F3.1b

(F3.1b) For your disclosed forest risk commodity(ies), provide details of risks identified with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Forest risk commodity

Other - Rubber

Type of risk

Reputational and markets

Geographical scale

Global

Where in your value chain does the risk driver occur?

Supply chain

Primary risk driver

Availability of certified sustainable material

Primary potential impact

Supply chain disruption

Company-specific description

Rubber production and its economic impact are important worldwide, as 85 percent of natural rubber comes from the work of 6 million farmers, most operating at a small scale. And, thanks to General Motors' connection with the World Wildlife Fund, we fully understand the consequences of rubber production. For example, it's a leading contributor to deforestation, especially in Southeast Asia, where 90 percent of the world's natural rubber originates.

Members of our global purchasing and supply chain, supplier quality, product development and sustainability teams joined other corporate partners from the tire industry and NGOs to trace the value chain in Southeast Asia from rubber plantations, dealers and processors all the way to a tire manufacturing plant.

"Meeting some of the farmers who make up the more than 84,000 natural rubber farms and actually tapping a rubber tree was a revelation for our team," said Matt Wilson, global commodity team lead for tires at General Motors. "We source more than 30 million tires each year. Understanding where and how tires are produced instills greater focus on ensuring ethical business practices are followed in our supply chain and in the industry."

Timeframe

>6 years

Magnitude of potential impact

Low

Likelihood

Unlikely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial

GM is in the early stages of identifying the risk impact from a business and financial perspective. The first General Assembly of the Global Platform for Sustainable Natural Rubber (GPSNR) took place on March 21, 2019, in Singapore with General Motors participating as a proud founding member. GPSNR is an independent, multi-stakeholder platform developed to lead improvements in socioeconomic and environmental performance of the natural rubber value chain. Through this partnership we hope to gain more insight on risks and mitigation methods for the tire industry. The second general assembly of GPSNR is scheduled to take place in September 2020

Primary response to risk

New product/technology development

Description of response

Our response to the forestry risk of rubber are multi-faceted, including personal involvement with our suppliers and visiting raw material suppliers in Thailand, to joining GPSNR as a founding member, to joining with one of our tire suppliers, Michelin, to develop airless tires that could reduce the dependence on rubber as a key raw material for tires.

Michelin and General Motors presented a new generation of airless wheel technology, the MICHELIN Uptis Prototype (or “Unique Puncture-proof Tire System”), at the Movin’On Summit for sustainable mobility. GM intends to develop this airless wheel assembly with Michelin and aims to introduce it on passenger vehicles as early as 2024.

“General Motors is excited about the possibilities that Uptis presents, and we are thrilled to collaborate with Michelin on this breakthrough



technology,” said Steve Kiefer, senior vice president, Global Purchasing and Supply Chain, General Motors. “Uptis is an ideal fit for propelling the automotive industry into the future and a great example of how our customers benefit when we collaborate and innovate with our supplier partners.”

Airless technology makes the Uptis Prototype eliminate flats and blowouts. This means Uptis offers significant potential for reducing the use of raw materials and waste , linked to the manufacture of spare tires and replacement tires that are no longer required.

Cost of response

0

Explanation of cost of response

As we are in the early stages of the response, we are not sure of the cost or savings for the initiatives described.

F3.1c

(F3.1c) Why does your organization not consider itself to be exposed to forests-related risks with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Timber products	Not yet evaluated	Although we feel there is risk of timber use in packaging, we have not yet evaluated it as we have not experienced any impacts. Our approach to mitigation is to maximize the cost effective elimination of cardboard for packaging or recycle it to reduce the impact on timber as a raw material.
Cattle products	Not yet evaluated	Although we feel there is risk of Cattle products use in leather commodities (seats) , we have not yet evaluated it as we have not experienced any impacts. on the contrary, the leather market supply is currently much greater than demand. Our approach to mitigation is to optimize the design of leather containing products to minimize waste as our suppliers currently waste a large percentage of the leather used in the parts during their manufacturing phase. As an example, GM's Sustainable Workplaces team conducted a TACKLE Challenge using iHub to ask employees: What can you do in your role to reduce, reuse, and recover? Over 120 ideas centered on sustainable materials, manufacturing, process changes, and more were submitted to the iHub platform between June and August. The dynamic submissions represent 69 cross-department collaborations with 268 participants from 11 locations globally. The top idea moving forward came from a GM creative designer in Color & Trim, involves repurposing scrap



		leather from our supply chain into accessory parts. We are in the early stages of reaching out to leather suppliers to understand the root causes of leather waste better and to see if there are any other markets that can help develop a circular economy. There should be cost savings as leather suppliers usually have to donate waste scraps of leather or pay for disposal.
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F3.2

(F3.2) Have you identified any forests-related opportunities with the potential to have a substantive financial or strategic impact on your business?

	Have you identified opportunities?
Timber products	No
Cattle products	Yes
Other - Rubber	Yes

F3.2a

(F3.2a) For your selected forest risk commodity(ies), provide details of the identified opportunities with the potential to have a substantive financial or strategic impact on your business.

Forest risk commodity

Cattle products

Type of opportunity

Efficiency

Where in your value chain does the opportunity occur?

Supply chain

Primary forests-related opportunity

Cost savings

Company-specific description & strategy to realize opportunity

An example of an opportunity to reduce leather waste and save cost was identified during a GM Sustainable Workplaces event with a TACKLE Challenge using iHub to ask employees: What can you do in your role to reduce, reuse, and recover? Over 120 ideas centered on sustainable materials, manufacturing, process changes, and more were submitted to the iHub platform between June and August. The dynamic submissions represent 69 cross-department collaborations with 268 participants from 11 locations globally. The top idea moving forward came from a GM creative designer in Color & Trim, and involves repurposing scrap leather from our supply chain into accessory parts.

Estimated timeframe for realization

4-6 years

Magnitude of potential impact

Low

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Reusing GM's supply chain waste leather for other commodities is being studied for feasibility and we started to reach out beyond tier 1 to leather suppliers to more fully understand the waste issue and root cause.

Forest risk commodity

Other - Rubber

Type of opportunity

Products & services

Where in your value chain does the opportunity occur?

Supply chain

Primary forests-related opportunity

Increased security of production

Company-specific description & strategy to realize opportunity

GM joined with one of our tire suppliers, Michelin, to develop airless tires that could reduce the dependence on rubber as a key raw material for tires. Michelin and General Motors presented a new generation of airless wheel technology, the MICHELIN Uptis Prototype (or “Unique Puncture-proof Tire System”), at the Movin’On Summit for sustainable mobility. Through a joint research agreement, GM and Michelin have partnered to co-develop the MICHELIN Uptis Prototype (Unique Puncture-Proof Tire System) with a goal to make the Uptis a mainstream reality on passenger vehicles as early as 2024. The partnership began testing the prototype on a fleet of Chevrolet Bolt EVs in 2019. This collaborative innovation features airless wheels. The Uptis Prototype mitigates costly problems and unsafe conditions related to flats and blowouts. Additionally, the technology enables airless tires to last longer than standard ones. It also presents an opportunity for substantial reduction in raw materials, energy, emissions and waste related to tire manufacturing, use and repair. The airless wheel directly supports our vision of Zero Crashes, given that 20 percent of drivers annually suffer an air loss that causes crashes and large amounts of tire waste and congestion on roads. Over 99 percent of these issues will be eliminated with an airless wheel assembly. Also, part of the work in Global Platform for Sustainable Natural Rubber (GPSNR) is geared around ensuring the long term sustainability of natural rubber production (e.g. ensuring a secure supply by minimizing land use conversion, employing high yield practices and trees, and promoting local community development).

Estimated timeframe for realization

4-6 years

Magnitude of potential impact

Medium

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The opportunities for cost savings and reducing risk in the supply chain are under investigation and not ready for disclosure at this time.

F3.2b

(F3.2b) Why does your organization not consider itself to have forests-related opportunities?

Timber products

Primary reason

Opportunities exist, but none with potential to have a substantive financial or strategic impact on business

Please explain

From a sustainability perspective, we feel that eliminating cardboard packaging or at least recycling it in a cost-effective manner is best for the environment as it reduces the use of timber as a raw material input to packaging. Our waste tracking shows that we recycle 98% of our



corrugated containers and office paper. Additionally, we have initiatives to reduce office paper use with communications from top leadership and badge printing methods. With Badge printing, a person has to use their badge to print paper reducing the amount of waste from printing.

F4. Governance

F4.1

(F4.1) Is there board-level oversight of forests-related issues within your organization?

No

F4.1c

(F4.1c) Why is there no board-level oversight of forests-related issues and what are your plans to change this in the future?

	Primary reason	Board level oversight of forests-related issues will be introduced in the next two years	Please explain
Row 1	Rubber has only been recently identified as a deforestation risk and our participation in Global Platform for Sustainable Rubber will help us further quantify risks and opportunities.	Yes	In March of 2019 General Motors joined with a wide range of stakeholders that included tire makers, rubber producers, other OEMs and representatives of civil society, to officially launch the Global Platform for Sustainable Natural Rubber (GPSNR). GM believes that sourcing tires produced using sustainable natural rubber has a number of community, business and environmental benefits, including: <ul style="list-style-type: none"> • Preserving and restoring primary forests and high conservation value and high carbon stock areas that are critical to addressing climate change and protecting wildlife. • Improving yield and quality for natural rubber farmers, further supporting the small businesses that contribute 85 percent of this material.



			<ul style="list-style-type: none"> • Mitigating business risk related to supply chain sourcing and performance and helping assure long-term availability of a key commodity. GM actively participates in two working groups at GPSNR: the Strategy and Objectives Working Group and the Policy Toolbox Working Group. In the former, we work to define the theory of change and ensure strategic alignment across the other working groups; and in the latter, we are working with NGOs and suppliers on crafting specific policy commitments and disclosures that company members will be expected to adopt. We expect further developments in the future.
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F4.2

(F4.2) Provide the highest management-level position(s) or committee(s) with responsibility for forests-related issues (do not include the names of individuals).

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on forests-related issues	Please explain
Chief Procurement Officer (CPO)	Managing forests-related risks and opportunities	As important matters arise	<p>GM's Senior Vice President Global Purchasing and Supply Chain approved our participation in Global Platform for Sustainable Natural Rubber (GPSNR).</p> <p>GM believes that sourcing tires produced using sustainable natural rubber has a number of community, business and environmental benefits, including:</p> <ul style="list-style-type: none"> • Preserving and restoring primary forests and high conservation value and high carbon stock areas that are critical to addressing climate change and protecting wildlife. • Improving yield and quality for natural rubber farmers, further supporting the small businesses that contribute 85 percent of this material. • Mitigating business risk related to supply chain sourcing and performance and



			helping assure long-term availability of a key commodity. GM actively participates in two working groups at GPSNR: the Strategy and Objectives Working Group and the Policy Toolbox Working Group. In the former, we work to define the theory of change and ensure strategic alignment across the other working groups; and in the latter, we are working with NGOs and suppliers on crafting specific policy commitments and disclosures that company members will be expected to adopt.
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F4.3

(F4.3) Do you provide incentives to C-suite employees or board members for the management of forests-related issues?

	Provide incentives for management of forests-related issues	Comment
Row 1	No, not currently but we do plan to introduce them in the next two years	Depending on research and development outcomes with the UPTIS airless tire for future GM vehicles, incentives for C-suite employees may be applicable for implementation of this important product development.

F4.4

(F4.4) Did your organization include information about its response to forests-related risks in its most recent mainstream financial report?

No, but we plan to do so in the next two years

GM.2019 SR.FINAL.pdf


F4.5

(F4.5) Does your organization have a policy that includes forests-related issues?

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

F4.5a

(F4.5a) Select the options to describe the scope and content of your policy.

 GM Supplier Code of Conduct (English).pdf

	Scope	Content	Please explain
Row 1	Company-wide	Commitment to transparency	<p>GM is a signatory to the UN Global Compact, which has a section on the Environment. Our Supplier Code of Conduct also has a section on the Environment that references principles 7-9.</p> <p>Two areas of the code address policy related to supply chains and sustainable materials:</p> <p>1. Continuous Improvement Suppliers will increase efficiency throughout their companies and take measures to reduce their carbon footprint, energy use, water use, wastes, and other emissions. Over time, GM expects suppliers will establish targets and be transparent in their progress toward their targets.</p> <p>2. Responsible Stewardship Suppliers will look to conserve resources and protect the communities and environment that surround them. GM encourages its suppliers to develop and diffuse environmentally friendly technologies and to increase the use of renewable energies.</p>

F4.5b

(F4.5b) Do you have commodity specific sustainability policy(ies)? If yes, select the options that best describe their scope and content.

	Do you have a commodity specific sustainability policy?	Scope	Content	Please explain
Timber products	Yes	Company-wide	Commitment to transparency	<p>Our Supplier code of conduct relates to all commodities. Two areas of the code address policy related to supply chains and sustainable materials:</p> <p>1. Continuous Improvement Suppliers will increase efficiency throughout their companies and take measures to</p>



				<p>reduce their carbon footprint, energy use, water use, wastes, and other emissions. Over time, GM expects suppliers will establish targets and be transparent in their progress toward their targets.</p> <p>2. Responsible Stewardship Suppliers will look to conserve resources and protect the communities and environment that surround them. GM encourages its suppliers to develop and diffuse environmentally friendly technologies and to increase the use of renewable energies.</p>
Cattle products	Yes	Company-wide	Commitment to transparency	<p>Our Supplier code of conduct relates to all commodities. Two areas of the code address policy related to supply chains and sustainable materials:</p> <p>1. Continuous Improvement- Suppliers will increase efficiency throughout their companies and take measures to reduce their carbon footprint, energy use, water use, wastes, and other emissions. Over time, GM expects suppliers will establish targets and be transparent in their progress toward their targets.</p> <p>2. Responsible Stewardship- Suppliers will look to conserve resources and protect the communities and environment that surround them. GM encourages its suppliers to develop and diffuse environmentally friendly technologies and to increase the use of renewable energies.</p>
Other - Rubber	Yes	Company-wide	Commitment to transparency	<p>Our Supplier code of conduct relates to all commodities. Two areas of the code address policy related to supply chains and sustainable materials:</p> <p>1. Continuous Improvement- Suppliers will increase efficiency throughout their companies and take measures to reduce their carbon footprint, energy use, water use, wastes, and other emissions. Over time, GM expects suppliers will establish targets and be transparent in their progress toward their targets.</p> <p>2. Responsible Stewardship- Suppliers will look to conserve resources and protect the communities and environment that surround them. GM encourages its suppliers to develop and diffuse environmentally friendly technologies and to increase the use of renewable energies.</p>

F4.6

(F4.6) Has your organization made a public commitment to reduce or remove deforestation and/or forest degradation from its direct operations and/or supply chain?

Yes

F4.6a

(F4.6a) Has your organization endorsed any of the following initiatives as part of its public commitment to reduce or remove deforestation and/or forest degradation?

Other, please specify

Global Platform for Sustainable Natural Rubber has finalized standards that help protect human rights, uphold fair business practices, protect biodiversity & water resources, improve yields, and increase supply chain transparency and traceability.

F4.6b

(F4.6b) Provide details on your public commitment(s), including the description of specific criteria, coverage, and actions.

Forest risk commodity

Other - Rubber

Criteria

Other, please specify

GM is a founding member of the Global Platform for Sustainable Natural Rubber

Operational coverage

Direct operations

% of total production/ consumption covered by commitment

100%

Cutoff date

2019

Commitment target date

>2030

Please explain

General Motors' vision is to create a world with Zero Crashes, Zero Emissions and Zero Congestion.

In 2017, General Motors announced a focus on sourcing sustainable natural rubber for tires. We continued to make progress in 2018 by helping bring together the automotive industry and global natural rubber stakeholders to encourage the movement to help transform the rubber supply chain.

The first General Assembly of the Global Platform for Sustainable Natural Rubber took place on March 21, 2019, in Singapore with General Motors participating as a proud founding member. GPSNR is an independent, multi-stakeholder platform developed to lead improvements in socioeconomic and environmental performance of the natural rubber value chain.

The GPSNR was formed after a series of global meetings between tire manufacturers and other rubber users, suppliers, processors, automakers and NGOs working to identify a comprehensive set of priorities for the natural rubber supply chain. It will seek to align standards to help protect human rights, uphold fair business practices, protect biodiversity and water resources and improve yields, while increasing supply chain transparency and traceability.

Rubber production and its economic impact are important worldwide, as 85 percent of natural rubber comes from the work of 6 million farmers, most operating at a small scale. And, thanks to our connection with the WWF, we fully understand the consequences of rubber production. For example, it's a leading contributor to deforestation, especially in Southeast Asia, where 90 percent of the world's natural rubber originates.

Members of our global purchasing and supply chain, supplier quality, product development and sustainability teams joined other corporate partners from the tire industry and NGOs to trace the value chain in Southeast Asia from rubber plantations, dealers and processors all the way to a tire manufacturing plant.

The GPSNR has finalized standards that will help protect human rights, uphold fair business practices, protect biodiversity and water resources and improve yields, and increase supply chain transparency and traceability. Tire suppliers, rubber refiners, NGOs and further upstream actors also held a collaborative role in the group’s creation.

F5. Business strategy

F5.1

(F5.1) Are forests-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are forests-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, forests-related issues are integrated	5-10	<p>An example of long-term business objective is to reduce natural rubber use with "Airless" tire technology makes the Uptis Prototype from Michelin eliminates flats and blowouts. This means Uptis offers significant potential for reducing the use of raw materials and waste, contributing to GM's vision for a world with zero crashes, zero emissions and zero congestion as it:</p> <ul style="list-style-type: none"> Reduces the number of punctured or damaged tires that are scrapped before reaching the end of their life cycle. Reduces the use of raw materials, energy for production and emissions linked to the manufacture of spare tires and replacement tires that are no longer required. Lasts longer by eliminating irregular wear and tear caused by over- or under-inflation. Reduces dangers related to flats and blowouts.
Strategy for long-term objectives	Yes, forests-related issues are integrated	5-10	<p>An example strategy to reduce impacts on timber is the use of returnable containers in-lieu of corrugated cardboard. Currently GM uses approximately 66% returnable containers in North America, with the remaining 34% in corrugated cardboard containers. Additionally, we recycle 50 % of timber related materials - cardboard and office paper.</p>



			<p>We also have established a companion sustainable materials workstream that is dedicated to sustainable packaging.</p> <p>A multidisciplinary group has been tasked with developing a packaging goal and collecting data to better understand GM packaging specifications and requirements. The group is working closely with suppliers and external partners to innovate current practices and embed circular economy principles in packaging procurement and design. The current priority for this new group is to develop our road map for success that takes into account the full life cycle of our packaging and carbon analysis of the various opportunities.</p> <p>As part of this work, GM has partnered with a supplier for all consumer-facing packaging. The supplier prioritizes recycled content input in their sourcing, averaging 35 to 55 percent recycled content in corrugated boxes and 100 percent recycled content in coated boards. Any virgin material used in our packaging going forward is certified by the Sustainable Forestry Initiative (SFI).</p> <p>A recent packaging success story has been around the ventilators, masks and face shields that GM is producing in response to the COVID-19 pandemic. Working with Menasha as our supplier, the five packaging boxes used for these products contain 33 to 95 percent recycled content with remaining materials coming from SFI-certified sources.</p>
Financial planning	Yes, forests-related issues are integrated	5-10	<p>Financial planning was part of our recent strategy related to sustainable packaging with these two as examples:</p> <ol style="list-style-type: none"> 1. GM has partnered with a supplier for all consumer-facing packaging. They prioritize recycled content input in their sourcing, averaging 35 to 55 percent recycled content in corrugated boxes and 100 percent recycled content in coated boards. Any virgin material used in our packaging going forward is certified by the Sustainable Forestry Initiative (SFI). 2. A recent packaging success story has been around the ventilators, masks and face shields that GM is producing in response to the COVID-19 pandemic. Working with Menasha as our supplier, the five packaging boxes used for these products contain 33 to 95 percent recycled content with remaining materials coming from SFI-certified sources.

F6. Implementation

F6.1

(F6.1) Did you have any timebound and quantifiable targets for increasing sustainable production and/or consumption of your disclosed commodity(ies) that were active during the reporting year?

Yes

F6.1a

(F6.1a) Provide details of your timebound and quantifiable target(s) for increasing sustainable production and/or consumption of the disclosed commodity(ies), and progress made.

Target reference number

Target 1

Forest risk commodity

Other - Rubber

Type of target

Other, please specify

50 percent sustainable content within our vehicles by 2030

Description of target

GM is working toward a corporate goal of 50 percent sustainable content within our vehicles by 2030. Although the goal is not specific to rubber, it is an overall commitment to increasing sustainable content of the entire vehicle, including tires. In order to achieve this goal, we are evaluating applications for recycled content potential along with other sustainable material options. Once an application is identified as a best practice for recycled content, quotes are requested for new programs with the recycled material as the required material, in addition to long-term



viability of the recycled material streams. A recent example of our team's success in sustainable packaging was securing sustainable packaging requirements for our ventilators, face masks and face shields in response to COVID-19. Packaging ranged from 33 % to 95 % recycled material, with the remaining material coming from ethically forested sources certified by the Sustainable Forestry Initiative (SFI).

Linked commitment

Other environmental commitments

Traceability point

Third-party certification scheme

Start year

2020

Target year

2030

Quantitative metric

Percentage

Target (number)

Target (%)

50

% of target achieved

0

Please explain

Goal was established in 2020 and we are evaluating definitions and planning to measure our progress going forward.

F6.2

(F6.2) Do you have traceability system(s) in place to track and monitor the origin of your disclosed commodity(ies)?

	Do you have system(s) in place?	Description of traceability system	Exclusions	Description of exclusion
Timber products	Yes	<p>A recent example of a traceability in sustainable packaging at GM was securing sustainable packaging requirements for our ventilators, face masks and face shields in response to COVID-19. Packaging ranged from 33 percent to 95 percent recycled material, with the remaining material coming from ethically forested sources certified by the Sustainable Forestry Initiative (SFI).</p> <p>Additionally, we partner with a preferred supplier for all consumer-facing packaging. The packaging is, on average, comprised of 35 to 55 percent recycled content in corrugated boxes, and coated boards are of 100 percent recycled material. Any virgin material used in our packaging is SFI certified. In summary, our automotive consumer-facing packaging and ventilator, face masks and face shields packaging is 100 percent from recycled material or SFI certified material and is 100 percent recyclable.</p>	Specific product line(s)	Sustainable packaging for new ventilator, face masks, face shields, and all consumer-facing packaging only. Other products will be evaluated similarly.
Cattle products	No			
Other - Rubber	No			



F6.2a

(F6.2a) Provide details on the level of traceability your organization has for its disclosed commodity(ies).

Forest risk commodity	Point to which commodity is traceable	% of total production/consumption volume traceable
Timber products	Not traceable	0

F6.2b

(F6.2b) Why do you not have system(s) in place to track and monitor the origin of your disclosed commodity(ies) and what are your plans to develop these in the future?

Forest risk commodity

Cattle products

Primary reason

Insufficient data on operations

Please explain

We do not currently have visibility into our sub-tier suppliers (tier 4) for traceability. We need to study land use effect of leather use to determine if it is material to land use and deforestation and develop working relationships with sub-tier suppliers.

Forest risk commodity

Other - Rubber

Primary reason

Other, please specify

Early stages of evaluation to determine if tracking system are applicable and if so which ones are applicable.

Please explain

GM is a founding member of GPSNR. Their Code of Conduct is in alignment with ours in protecting human rights. GPSNR has finalized standards that will help protect human rights, uphold fair business practices, protect biodiversity and water resources and improve yields, and increase supply chain transparency and traceability. Tire suppliers, rubber refiners, NGOs and further upstream actors also held a collaborative role in the group's creation. We are in the early stages of cross-functional evaluation of a tracking system. We will evaluate and disclose as applicable in the future.

F6.3

(F6.3) Have you adopted any third-party certification scheme(s) for your disclosed commodity(ies)? Indicate the volume and percentage of your certified production and/or consumption.

Forest risk commodity

Timber products

Third-party certification scheme

SFI Forest Management standard

Certification coverage

Consumption volume

% of total production/consumption volume certified

1

Form of commodity

Tertiary packaging

Volume of production/ consumption certified



Metric

Metric tons

Please explain

GM's life cycle analysis of packaging concluded that timber was an insignificant contributor to the categories of greenhouse gas emissions and land use forest. Also, we have not experienced any detrimental effects from packaging in our supply chain. However, we do have sustainable content targets, waste targets, and landfill free targets that promote reduction, reuse, and recycling of packaging.

We also have established a companion sustainable materials workstream that is dedicated to sustainable packaging. A multidisciplinary group has been tasked with developing a packaging goal and collecting data to better understand GM packaging specifications and requirements. The group is working closely with suppliers and external partners to innovate current practices and embed circular economy principles in packaging procurement and design. The current priority for this new group is to develop our road map for success that takes into account the full life cycle of our packaging and carbon analysis of the various opportunities. As part of this work, GM has partnered with WestRock as the preferred supplier for all consumer-facing packaging. WestRock prioritizes recycled content input in their sourcing, averaging 35 to 55 percent recycled content in corrugated boxes and 100 percent recycled content in coated boards. Any virgin material used in our packaging going forward is certified by the Sustainable Forestry Initiative (SFI).

A recent packaging success story has been around the ventilators, masks and face shields that GM is producing in response to the COVID-19 pandemic. Working with Menasha as our supplier, the five packaging boxes used for these products contain 33 to 95 percent recycled content with remaining materials coming from SFI-certified sources.

F6.4

(F6.4) For your disclosed commodity(ies), do you have a system to control, monitor, or verify compliance with no conversion and/or no deforestation commitments?

	A system to control, monitor or verify compliance	Comment
Timber products	Yes, we have a system in place, but for other commitments	



Cattle products	No, but we plan to develop one within the next two years	Our commitment to having 50% sustainable materials in our vehicles by 2030 will involve all aspects of our supply chain. We are in the early stages of developing definitions and initiatives.
Other - Rubber	No, but we plan to develop one within the next two years	GM is a founding member of GPSNR. Their Code of Conduct is in alignment with ours in protecting human rights. GPSNR has finalized standards that will help protect human rights, uphold fair business practices, protect biodiversity and water resources and improve yields, and increase supply chain transparency and traceability. Tire suppliers, rubber refiners, NGOs and further upstream actors also held a collaborative role in the group's creation. We are in the early stages of cross-functional evaluation of a tracking system. We will evaluate and disclose as applicable in the future.

F6.6

(F6.6) For your disclosed commodity(ies), indicate if you assess your own compliance and/or the compliance of your suppliers with forest regulations and/or mandatory standards.

	Assess legal compliance with forest regulations	Please explain
Timber products	Yes, from owned and/or managed land	
Cattle products	No, we do not assess legal compliance	GM complies with legal requirements for procurement and use of seats that contain leather for countries and locations where we sell vehicles.
Other - Rubber	No, we do not assess legal compliance	GM complies with legal requirements for procurement and use of tires that contain natural rubber for countries and locations where we sell vehicles.

F6.6a

(F6.6a) For you disclosed commodity(ies), indicate how you ensure legal compliance with forest regulations and/or mandatory standards.

Timber products

Procedure to ensure legal compliance

GM complies with local regulations using internal audits through GM Audit Services and the Self Evaluation Audit for compliance with ISO 14001.

The Self Evaluation Audit follows the criteria below:

- 1) Auditor is not affiliated with GM CPCA
- 2) Process shall be completed between 10 to 14 months from the last audit
- 3) All items in the ISO 14001 must be verified at least every 3 years
- 4) A final report must be submitted to the environmental regional manager, coordinator of ISO 14001 and to the local environmental engineer.
- 5) If any non-conformity is identified, it shall be processed into Reliance EtQ system as a Corrective Action Plan.

The local environmental engineer is responsible to include the Corrective Action into Reliance along with an root-cause analysis and a complete RASIC chart. A timeline for each action to correct the non-conformity is also included.

If an Action is not corrected on a timely manner or within 12 months since its creation, the issue is escalated to senior leadership until it is resolved.

Country/Area of origin

Brazil

Law and/or mandatory standard(s)

General assessment of legal compliance

Comment

GM has planted trees and vegetation at our proving grounds site in Indaiatuba, Sao Paulo, Brazil for land conservation. As part of the conservation efforts, we contract to have timber removed as needed to maintain the site.

F6.7

(F6.7) Are you working with smallholders to support good agricultural practices and reduce deforestation and/or conversion of natural ecosystems?

	Are you working with smallholders?	Type of smallholder engagement approach	Smallholder engagement approach	Number of smallholders engaged	Please explain
Timber products	No, not working with smallholders				We are not working with smallholders at this time.
Cattle products	No, not working with smallholders				We are not working with smallholders at this time.
Other - Rubber	Yes, working with smallholders	Supply chain mapping	Other, please specify Engaging with smallholders as part of Global Platform for Sustainable Natural Rubber (GPSNR). Planning is underway to include them in the discussion so they will have a voice in sustainable solutions.	0	We are in the planning stages to include smallholders as part of the Global Platform for sustainable natural rubber (GPSNR).

F6.8

(F6.8) Are you working with your direct suppliers to support and improve their capacity to comply with your forests-related policies, commitments, and other requirements?

	Are you working with direct suppliers?	Type of direct supplier engagement approach	Direct supplier engagement approach	% of suppliers engaged	Please explain
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Timber products	Yes, working with direct suppliers	Other	Other, please specify Required recycle content and SFI for virgin materials	<10%	<p>We also have established a companion sustainable materials workstream that is dedicated to sustainable packaging. A multidisciplinary group has been tasked with developing a packaging goal and collecting data to better understand GM packaging specifications and requirements. The group is working closely with suppliers and external partners to innovate current practices and embed circular economy principles in packaging procurement and design. The current priority for this new group is to develop our road map for success that takes into account the full life cycle of our packaging and carbon analysis of the various opportunities. As part of this work, GM has partnered with WestRock as the preferred supplier for all consumer-facing packaging. WestRock prioritizes recycled content input in their sourcing, averaging 35 to 55 percent recycled content in corrugated boxes and 100 percent recycled content in coated boards. Any virgin material used in our packaging going forward is certified by the Sustainable Forestry Initiative (SFI).</p> <p>A recent packaging success story has been around the ventilators, masks and face shields that GM is producing in response to the COVID-19 pandemic. Working with Menasha as our supplier, the five packaging boxes used for these products contain 33 to 95 percent recycled content with remaining materials coming from SFI-certified sources.</p>
Cattle products	No, not working with direct suppliers				<p>We have initiated a request for information from leather suppliers so we can evaluate options to reduce waste. We have incorporated within our sourcing process, an evaluation and dialogue focusing upon supplier best practices for minimizing waste, subscribing to animal welfare practices, and utilizing sustainable materials and processes. As a standard, our</p>



					<p>suppliers adhere to animal welfare treatment of cattle known as the "freedoms".</p> <p>The five freedoms include - freedom from hunger, thirst, pain, freedom from hunger and thirst, discomfort, pain, injury and disease, fear and stress and freedom to express natural behavior. Also, our suppliers have committed to the self governing and certification of the Leather Working Group which has in place traceability and sustainable standards for leather manufacturers as well as other best practices.</p>
Other - Rubber	Yes, working with direct suppliers	Other	Other, please specify Collaboration with Auto OEMs and Tire Suppliers via Global Platform for Sustainable Rubber.	<10%	<p>GM is a founding member of the Global Platform for Sustainable Natural Rubber (GPSNR). Their Code of Conduct is in alignment with ours in protecting human rights. GPSNR has finalized standards that will help protect human rights, uphold fair business practices, protect biodiversity and water resources and improve yields, and increase supply chain transparency and traceability. Tire suppliers, rubber refiners, NGOs and further upstream actors also held a collaborative role in the group's creation.</p>

F6.9

(F6.9) Are you working beyond your first-tier supplier(s) to manage and mitigate deforestation risks?

Are you working beyond first tier?	Type of engagement approach with indirect suppliers	Indirect supplier engagement approach	Please explain
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Timber products	Yes, working beyond first tier	Other	<p>Other, please specify</p> <p>Tier one supplier for packaging working with sub-tiers to set recycle content and require all other materials to be certified by Sustainable Forestry Initiative (SFI)</p>	<p>We also have established a companion sustainable materials workstream that is dedicated to sustainable packaging.</p> <p>A multidisciplinary group has been tasked with developing a packaging goal and collecting data to better understand GM packaging specifications and requirements. The group is working closely with suppliers and external partners to innovate current practices and embed circular economy principles in packaging procurement and design. The current priority for this new group is to develop our road map for success that takes into account the full life cycle of our packaging and carbon analysis of the various opportunities.</p> <p>As part of this work, GM has partnered with a supplier for all consumer-facing packaging. They prioritize recycled content input in their sourcing, averaging 35 to 55 percent recycled content in corrugated boxes and 100 percent recycled content in coated boards. Any virgin material used in our packaging going forward is certified by the Sustainable Forestry Initiative (SFI).</p> <p>A recent packaging success story has been around the ventilators, masks and face shields that GM is producing in response to the COVID-19 pandemic. Working with Menasha as our supplier, the five packaging boxes used for these products contain 33 to 95 percent recycled content with remaining materials coming from SFI-certified sources.</p>
Cattle products	No, not working beyond the first tier			<p>Our design team is investigating alternative materials to leather that will have less of an environmental impact. We have incorporated within our sourcing process, an evaluation and dialogue focusing upon supplier best practices for minimizing waste, subscribing to animal welfare practices, and utilizing sustainable materials and</p>

				<p>processes. As a standard, our suppliers adhere to animal welfare treatment of cattle known as the "freedoms". The five freedoms include - freedom from hunger, thirst, pain, freedom from hunger and thirst, discomfort, pain, injury and disease, fear and stress and freedom to express natural behavior. Also, our suppliers have committed to the self governing and certification of the Leather Working Group which has in place traceability and sustainable standards for leather manufacturers as well as other best practices.</p>
Other - Rubber	Yes, working beyond first tier	Other	Other, please specify Collaboration with Auto OEMs and Tire Suppliers via Global Platform for Sustainable Rubber.	<p>GM is a founding member of the Global Platform for Sustainable Natural Rubber (GPSNR). Their Code of Conduct is in alignment with ours in protecting human rights. GPSNR has finalized standards that will help protect human rights, uphold fair business practices, protect biodiversity and water resources and improve yields, and increase supply chain transparency and traceability. Tire suppliers, rubber refiners, NGOs and further upstream actors also held a collaborative role in the group's creation.</p>

F6.10

(F6.10) Do you participate in external activities and/or initiatives to promote the implementation of your forests-related policies and commitments?

Forest risk commodity

Other - Rubber

Do you participate in activities/initiatives?

Yes



Activities

Involved in multi-partnership or stakeholder initiatives

Initiatives

Other, please specify

Collaboration with Auto OEMs and Tire Suppliers via Global Platform for Sustainable Natural Rubber (GPSNR).

Jurisdictional approaches

Please explain

GM is a founding member of the Global Platform for Sustainable Natural Rubber (GPSNR). Their Code of Conduct is in alignment with ours in protecting human rights. GPSNR has finalized standards that will help protect human rights, uphold fair business practices, protect biodiversity and water resources and improve yields, and increase supply chain transparency and traceability. Tire suppliers, rubber refiners, NGOs and further upstream actors also held a collaborative role in the group's creation.

F6.11

(F6.11) Is your organization supporting or implementing project(s) focused on ecosystem restoration and protection?

Yes

F6.11a

(F6.11a) Provide details on your project(s), including the extent, duration, and monitoring frequency. Please specify any measured outcome(s).

Project reference

Project 1

Project type

Other, please specify
Wildlife habitats

Primary motivation

Voluntary

Description of project

The status of ecosystems is important to our operations in all locations because of our Environmental principles which are implemented at every GM facility and especially at locations with certified wildlife habitats that could be adversely impacted. Local potential future changes in the status of ecosystems and habitats requires local management actions. Each GM manufacturing site has an environmental engineer (EE) who provides internal company methods to monitor future potential changes in wildlife habitats to assist in risk management. GM applied the WRI Aqueduct tool to all of our major manufacturing facility locations which projects risk now and in the future to 2030.

We are on track to meet our goal of having a Wildlife Habitat at feasible GM facilities globally. To date, we have 77 out of a target of 77 certified Wildlife Habitats, or 100%, at GM targeted facilities globally.

Start year

2010

Target year

2020

Project area to date (Hectares)

0

Project area in the target year (Hectares)

0

Country/Area

United States of America

Latitude

0

Longitude

0

Monitoring frequency

Annually

Measured outcomes to date

Biodiversity

Please explain

The goal is to improve wildlife habitats by having a Wildlife Habitat Certification (or equivalent) at each GM manufacturing site, globally, where feasible by 2020 from a baseline of 2010. The goal was set to support one of our Environmental Principles " We are committed to actions to restore and preserve the environment." Setting a global goal provides each facility the opportunity to demonstrate our commitment. Many studies show the direct relationship of protecting wildlife habitats and water quality. One paper published by Purdue University shows the positive impact on water quality with land use conservation and habitats-"There are three main strategies in the Planning ... for communities to use as they plan their future use and protection of vital and critical drinking water, farmlands, forests, and recreation areas. They are:

- 1) Plan to protect critical natural resources in your community while still accommodating growth through natural resource-based planning.
- 2) Minimize the impact to initial natural resources resulting from land use change through appropriate site designs and use of best management practices. (Wildlife Habitats)
- 3) Mitigate the negative impacts to critical natural resources or loss of open space

Each major GM manufacturing facility has an Environmental Leader (EL) that is responsible to implement methods and objectives on the business plan related to the environment, including Wildlife Habitats. As we have 77 Wildlife Habitats globally, we use the US and 0 for latitude and longitude as proxy.

F7. Verification

F7.1

(F7.1) Do you verify any forests information reported in your CDP disclosure?

No, but we are actively considering verifying in the next two years

F8. Barriers and challenges

F8.1

(F8.1) Describe the key barriers or challenges to eliminating deforestation and/or conversion of other natural ecosystems from your direct operations or from other parts of your value chain.

Forest risk commodity

Timber products

Coverage

Supply chain

Primary barrier/challenge type

Supply chain complexity

Comment

Although we have a couple of examples of wins in eliminating deforestation, there are many complexities for Packaging supply chains related to Timber. These are two examples of traceability in sustainable packaging at GM. As we were securing sustainable packaging requirements for our ventilators, face masks and face shields in response to COVID-19, packaging ranged from 33 percent to 95 percent recycled material, with the remaining material coming from ethically forested sources certified by the Sustainable Forestry Initiative (SFI).

Additionally, we partner with a preferred supplier for all consumer-facing packaging. The packaging is, on average, comprised of 35 to 55 percent recycled content in corrugated boxes, and coated boards are of 100 percent recycled material. Any virgin material used in our packaging is SFI certified. In summary, our automotive consumer-facing packaging and ventilator, face masks and face shields packaging is 100 percent from recycled material or SFI certified material and is 100 percent recyclable.

F8.2

(F8.2) Describe the main measures that would improve your organization's ability to manage its exposure to deforestation and/or conversion of other natural ecosystems.

Forest risk commodity

Cattle products

Coverage

Supply chain

Main measure

Greater transparency

Comment

We need to further study the land use and climate change effect of using leather content parts in our vehicles. Then, if warranted, we need to develop a system to track the origin of the cattle to determine if deforestation is an issue for leather as a commodity.

F17 Signoff

F-FI

(F-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.



F17.1

(F17.1) Provide the following information for the person that has signed off (approved) your CDP forests response.

	Job Title	Corresponding job category
Row 1	Chief Financial Officer	Chief Financial Officer (CFO)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission
I am submitting my response	Investors	Public

Please confirm below

I have read and accept the applicable Terms