

Welcome to your CDP Forests Questionnaire 2019

F0. Introduction

F0.1

(F0.1) Give a general description 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 173,000 people in over 400 facilities across six continents.

GM offers a comprehensive range of vehicles and services in more than 120 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, Holden, Isuzu, Jiefang, and Wuling in certain regions or specific countries.

GM also maintains equity stakes in major joint ventures including SAIC-GM, SAIC-GM-Wuling, FAW-GM 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. APPLICABILITY 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, 2018	December 31, 2018

F0.3

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

USD

F0.4

(F0.4) Select the stage(s) of the value chain which best represents your organization’s area of operation pertaining to forest risk commodities.

	Stage of the value chain
Timber	Manufacturing
Palm Oil	Not applicable
Cattle Products	Not applicable
Soy	Not applicable
Other - Rubber	Manufacturing
Other	Not applicable

F0.5

(F0.5) Do you produce, use, or sell materials or products that contain any of the forest risk commodities?

	Produce/use/sell	Disclosing	Explanation if produce/use/sell but not disclosing
Timber	Yes	Yes	
Palm Oil	No		
Cattle Products	Yes	No	Life Cycle analysis shows that Greenhouse Gas from leather seats is extremely low at 0.09% of total which is not material for forestry.
Soy	No		
Other - Rubber	Yes	Yes	
Other	No		

F0.6

(F0.6) Are there any parts of your direct operations not included in your disclosure?

No

F0.7

(F0.7) Are there any parts of your supply chain 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)?

Forest risk commodity

Timber

Activity

Distributing/packaging

Form of commodity

Tertiary packaging

Source

Multiple contracted producers

Country/Region of origin

Australia

Colombia

Ecuador

India

Spain

United States of America

% of procurement spend

<1%

Comment

The countries listed are not the origin of the timber, but the country of origin of the manufacturer.

Forest risk commodity

Other - Rubber

Activity

Other, please specify

Natural rubber from rubber trees is used in the manufacturing of automobile tires in our supply chain. GM's life cycle analysis of auto parts identified land use from tires as our number one forest land use and is working on sustainable solutions.

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/Region of origin

Brazil
Canada
China
India
Mexico
Poland
Republic of Korea
Taiwan, Greater China
Thailand
United States of America

% of procurement spend

1-5%

Comment

GM buys tires manufactured in 23 countries. The top 80% of spend is for products manufactured in 10 countries shown in Country of origin. This is not the origin of the rubber commodity, but the origin of the manufacturing of the tire from our tier 1 suppliers.

F1.1a

(F1.1a) Indicate from which State/region(s) and municipality(ies) your disclosed commodity(ies) originate.

Forest risk commodity

Other - Rubber

Country/Region of origin

Brazil

State/Region

Specify state/region
Rio Grande do Sul

Municipality

Specify municipality (1)
Gravatai

Please explain

The location listed is not the origin of the source of natural rubber, but the location of the manufacturing of the tire. It is shown as an example only that we do track the location of tire manufacturing, but not natural rubber.

F1.3

(F1.3) Do you own or manage land used for the production of your disclosed commodity(ies)?

Forest risk commodity

Timber

Own and/or manage land?

Own land

Type of control

Operational

Description of type of control

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.

Country/Region

Brazil

Land type

Planted

Size (Hectares)

33

Do you have a system in place to monitor forests-related risks?

No

Type of monitoring system

Description of monitoring system

Recent infraction(s)

No

Explanation of infraction

Forest risk commodity

Other - Rubber

Own and/or manage land?

Don't own or manage land

Type of control

Description of type of control

Country/Region

Land type

Size (Hectares)

Do you have a system in place to monitor forests-related risks?

Type of monitoring system

Description of monitoring system

Recent infraction(s)

Explanation of infraction

F1.4

(F1.4) For your disclosed commodity(ies), indicate if you collect data regarding your own compliance and/or the compliance of your suppliers with the Brazilian Forest Code.

Timber

Do you collect data regarding compliance with the Brazilian Forest Code?

No, we do not collect data

Please explain

We do not know the origin of the source of timber commodity; however, our tier 1 suppliers manufacture packaging in Brazil.

Other - Rubber

Do you collect data regarding compliance with the Brazilian Forest Code?

No, we do not collect data

Please explain

We do not know the origin of the source of natural rubber commodity; however, our tier 1 suppliers manufacture tires in Brazil. In March of 2019, GM, two other Auto OEMs along with 11 tire manufacturers became founding members of "Global Platform for Sustainable Natural Rubber" (GPSNR) – an independent platform that will lead improvements in the socio-economic and environmental performance of the natural rubber value chain.

Development of the GPSNR was initiated by the CEOs of the World Business Council for Sustainable Development (WBCSD) Tire Industry Project (TIP) in November 2017. Members of the platform include tire manufacturers, rubber suppliers and processors, vehicle makers and NGOs.

The platform is working to finalize its operational strategy, guided by the stakeholder-agreed GPSNR priorities of harmonizing standards to improve respect for human rights, preventing land-grabbing and deforestation, protecting biodiversity and water resources, improving yields, and increasing supply chain transparency and traceability.

F1.5

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

	Data availability/Disclosure
Timber	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

Data type

Consumption data

Volume

524,256

Metric

Metric tons

Data coverage

Full 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 consumption data disclosed is based on disposition data 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

60,532

Metric

Metric tons

Data coverage

Full commodity production/consumption

Please explain

The amount of natural rubber was calculated based on 4 X 2018 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.

F1.6

(F1.6) Have you identified sufficient sources of sustainable materials to meet your current operational needs? If yes, what are you doing to ensure the security/continuity of this supply?

Timber

Sustainable source identified

No

Please explain

As our main approach is to cost effectively eliminate non-returnable packaging and we have not experienced adverse effects, we continue an aggressive reduction and recycling program as our best mitigation effort.

Other - Rubber

Sustainable source identified

No

Please explain

GM is actively working with organizations to increase the sustainable supply of material for tires. 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 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."

Additionally, GM is working with Michelin on airless tires. 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, contributing to GM's vision for a world with zero emissions

F1.7

(F1.7) 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

Value chain stage

Not applicable

Please explain

GM has not experienced detrimental impacts related to lack of cardboard supply. Our focus for improving the sustainable supply of cardboard is on 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 99.4% of corrugated containers avoiding about 400,000 tons of CO₂e emissions compared to landfill.

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 to identify and assess risks

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.

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	No
Other - Rubber	Yes

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 impact figure

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 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.

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?

Forest risk commodities

Timber

Primary reason

Not yet evaluated

Please explain

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.

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	No
Other - Rubber	No

F3.2b

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

Timber

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 99.6% 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.

Other - Rubber

Primary reason

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

Please explain

We are in the early stages of developing airless tires with Michelin and have not quantified the business or financial impact. From a sustainability aspect, we feel that reducing flat tires and spare tires will reduce the overall cost to our customers and GM.

F4. Governance

F4.1

(F4.1) Does your organization have a policy that includes forests-related issues?

Yes, we have a documented forests policy, but it is not publicly available

F4.1a

(F4.1a) Select the options to describe the scope and content of your policy.

Scope	Content	Please explain
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Row 1	Company-wide	Reference to international standards and widely-recognized forests-related initiatives	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.
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F4.1b

(F4.1b) 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?	Please explain
Timber	No	Our Supplier code of conduct relates to all commodities.
Other - Rubber	No	Our Supplier code of conduct relates to all commodities.

F4.2

(F4.2) Is there board-level oversight of forests-related issues within your organization?

No

F4.2c

(F4.2c) 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 been identified as a deforestation risk	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). We expect further developments in the future.

F4.3

(F4.3) 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	GM's Senior Vice President Global Purchasing and Supply Chain approved our participation in GPSNR.

F4.4


(F4.4) Do you provide incentives to C-suite employees or board members for the management of forests-related issues?

No, not currently but we do plan to introduce them in the next two years

F4.5

(F4.5) 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_2018_SR.pdf

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	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

			<p>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> <p>Reduces the number of punctured or damaged tires that are scrapped before reaching the end of their life cycle.</p> <p>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.</p> <p>Lasts longer by eliminating irregular wear and tear caused by over- or under-inflation.</p> <p>Reduces dangers related to flats and blowouts.</p>
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.</p> <p>Additionally, we recycle 99.6 % of timber related materials - cardboard and office paper.</p>
Financial planning	No, forests-related related issues were reviewed but not considered as strategically relevant/significant	5-10	<p>As timber and products do not pose a significant financial risk, they are not included in our strategic planning.</p>

F6. Implementation

F6.1

(F6.1) 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

F6.1a

(F6.1a) 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

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.

F6.1b

(F6.1b) Provide details on your public commitment(s), including the description of specific criteria, coverage, and actions.

Commodity coverage

Other - Rubber

Criteria

No forest degradation

Operational coverage

Supply chain

% of total production/ consumption covered by commitment

1-5%

Cutoff date

Not applicable

Commitment timeframe

>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 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.

What's next? The GPSNR is working to define the objectives and action plans of the organization as all stakeholders work toward the goal of a globally sustainable natural rubber industry.

F6.2

(F6.2) Did you have any quantified targets for increasing sustainable production and/or consumption of your disclosed commodity(ies) that were active during the reporting year?

No

F6.2b

(F6.2b) Why do you not have target(s) for increasing sustainable production and/or consumption of your disclosed commodity(ies) and what are your plans to develop these in the future?

	Primary reason	Please explain
Timber	Judged to be unimportant, explanation provided	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 waste targets and landfill free targets that promote reduction, reuse, and recycling of packaging.
Other - Rubber	Other, please specify Early stages of evaluation to determine if targets are	As GM became a founding member of the Global Platform for Sustainable Natural Rubber in March 2019 and announced our partnership with Michelin on airless tires in June of 2019, we are in the early stages of evaluation. If either initiative could be

	applicable and if so what the target would be.	enhanced with targets, we will evaluate and disclose them as applicable.
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F6.3

(F6.3) 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?
Timber	No
Other - Rubber	No

F6.3b

(F6.3b) 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

Timber

Primary reason

Judged to be unimportant, explanation provided

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 waste targets and landfill free targets that promote reduction, reuse, and recycling of packaging.

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

As GM became a founding member of the Global Platform for Sustainable Natural Rubber in March 2019 and announced our partnership with Michelin on airless tires in June of 2019, we are in the early stages of evaluation. If either initiative could be enhanced with tracking systems, we will evaluate and disclose them as applicable.

F6.4

(F6.4) Do you specify any third-party certification schemes for your disclosed commodity(ies)? Indicate the volume and percentage of your production and/or consumption covered.

Forest risk commodity

Timber

Do you specify any certification scheme?

No

Certification coverage

Third-party certification scheme

% of total production/consumption volume certified

Form of commodity

Volume of production/ consumption certified

Metric

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 waste targets and landfill free targets that promote reduction, reuse, and recycling of packaging.

Forest risk commodity

Other - Rubber

Do you specify any certification scheme?

No

Certification coverage

Third-party certification scheme

% of total production/consumption volume certified

Form of commodity

Volume of production/ consumption certified

Metric

Please explain

As GM became a founding member of the Global Platform for Sustainable Natural Rubber in March 2019 and announced our partnership with Michelin on airless tires in June of 2019, we are in the early stages of evaluation. If either initiative could be enhanced with certification schemes, we will evaluate and disclose them as applicable.

F9. Barriers and challenges

F9.1

(F9.1) Describe the key barriers or challenges to avoiding forests-related risks in your direct operations or in other parts of your value chain.

Forest risk commodity

Timber

Coverage

Direct operations

Supply chain

Primary barrier/challenge type

Other, please specify

As the impact from timber in our packaging from the supply chain is small, it becomes a lower priority than other impacts, e.g. Rubber

Comment

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 waste targets and landfill free targets that promote reduction, reuse, and recycling of packaging. The greatest barrier we have in eliminating timber

related packaging is cost. If the cost is less, then we will use returnable dunnage in-lieu of timber related packaging. As we already recycle 99.6% of our packaging and office paper, the cost to recycle 100% is large and unreasonable.

Forest risk commodity

Other - Rubber

Coverage

Supply chain

Primary barrier/challenge type

Inexistent or immature certification standards

Comment

GM is in the early stages of evaluation of Sustainable Rubber working with organizations like Global Platform for Sustainable Natural Rubber (GPSN) in March 2019 and our partnership with Michelin on airless tires in June of 2019. As we are leading the effort for the auto industry, a barrier is that it is a new issue without established background on availability of alternatives and certifications. This will be addressed in the future GPSN committees.

F9.2

(F9.2) Describe the main measures that would improve your organization's ability to manage forests-related risks.

Forest risk commodity

Timber

Coverage

Direct operations
Supply chain

Main measure

Greater supplier awareness/engagement

Comment

GM is working on sustainable materials initiatives, like rubber and others. Sustainable packaging is not a mainstream supply chain initiative due to prioritization and lack of supply chain engagement as well. As markets for sustainable packaging develop and are cost effective, GM will participate along with other customers.

Forest risk commodity

Other - Rubber

Coverage

Supply chain

Main measure

Greater supplier awareness/engagement

Comment

GM is in the early stages of evaluation of Sustainable Rubber working the Global Platform for Sustainable Natural Rubber (GPSN) in March 2019 and our partnership with Michelin on airless tires in June of 2019. One of the purposes of joining GPSN is to increase supply chain awareness of the issue to promote greater engagement on solutions.

F18. 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.

F18.1

(F18.1) 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?

Please confirm how your response should be handled by CDP

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

Please confirm below