# **Navistar International Corporation - Climate Change 2019**

## **C0. Introduction**

## **C0.1**

### **(C0.1) Give a general description and introduction to your organization.**

Navistar International Corporation (NYSE: NAV) is a holding company whose subsidiaries and affiliates produce International® brand commercial and military trucks, proprietary diesel engines, and IC Bus™ brand school and commercial buses. An affiliate also provides truck and diesel engine service parts. Another affiliate offers financing services. Additional information is available at www.Navistar.com. This report is created and submitted by the operating subsidiary, Navistar, Inc.

Important disclaimer: The information provided in this questionnaire is provided for general information only and has not been audited or verified, except as may be set forth in an underlying document from which said information may be derived. Discussions of risk and materiality are applicable only to this questionnaire and are not to be read as tantamount to disclosures made in regulatory disclosures, including forms 10-K, 10-Q or 8K and other applicable regulatory disclosures. In the event of any conflict between statements in this report and any regulatory filing, including any disclaimers related to forward looking statements made therein the statements in the regulatory filings should be seen as controlling. Nothing in this questionnaire is meant to be a guarantee of performance or results and all responses in this response, including descriptions of business strategy, involve risks, uncertainties and assumptions.

## **C0.2**

### **(C0.2) State the start and end date of the year for which you are reporting data.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Start date** | **End date** | **Indicate if you are providing emissions data for past reporting years** | **Select the number of past reporting years you will be providing emissions data for** |
| Row 1 | January 1 2018 | December 31 2018 | No | <Not Applicable> |

## **C0.3**

### **(C0.3) Select the countries/regions for which you will be supplying data.**

Argentina

Brazil

Canada

Mexico

United States of America

## **C0.4**

### **(C0.4) Select the currency used for all financial information disclosed throughout your response.**

USD

## **C0.5**

### **(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.**

Operational control

## **C-TO0.7/C-TS0.7**

### **(C-TO0.7/C-TS0.7) For which transport modes will you be providing data?**

Heavy Duty Vehicles (HDV)

## **C1. Governance**

## **C1.1**

### **(C1.1) Is there board-level oversight of climate-related issues within your organization?**

Yes

## **C1.1a**

### **(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.**

|  |  |
| --- | --- |
| **Position of individual(s)** | **Please explain** |
| Board-level committee | Audit Committee of the Board of Directors, (responsibility for environmental risks, including climate change.) |

## **C1.1b**

### **(C1.1b) Provide further details on the board’s oversight of climate-related issues.**

|  |  |  |
| --- | --- | --- |
| **Frequency with which climate-related issues are a scheduled agenda item** | **Governance mechanisms into which climate-related issues are integrated** | **Please explain** |
| Scheduled – some meetings | Reviewing and guiding risk management policies | Climate-related issues are managed through several channels. Regulatory risks, such as the impact of new climate regulation on both products and operations, are assessed as part of the disclosure process for quarterly and annual reports. Groups within the organization with responsibility for product compliance, environmental affairs, legal counsel and government relations, monitor and assess such climate related regulatory risks on at least a quarterly basis. These risks are discussed with the Corporate Controllers Office on at least a quarterly basis and assessed for disclosure through the quarterly and annual filings. These filings are reviewed by senior management and the Board. Broad product plans are also discussed periodically, as appropriate, with the Board. These presentations may include discussions of strategy as it relates to GHG and fuel economy, including regulatory compliance and product competitiveness. Navistar’s Enterprise Risk Management (ERM) process includes also risk assessments, risk management action plans and ERM reporting which are performed by ERM, individual business units and functional areas. This includes an annual Top Down assessment by the Executive Risk Committee. Individual projects/initiatives may also be assessed by both ERM and business units. The Corporate Risk Organization reports on risks to the Board annually and regularly to the Executive Risk Committee. Navistar's ERM process also established a Risk Committee whose members represent each individual business unit and functional area. The Committee oversees the implementation and ongoing application of risk management throughout all business units and functions of the Company with the goal of supporting and enhancing the current risk management program. Top level risks identified through this process are communicated to the Board. |

## **C1.2**

### **(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.**

|  |  |  |
| --- | --- | --- |
| **Name of the position(s) and/or committee(s)** | **Responsibility** | **Frequency of reporting to the board on climate-related issues** |
| Risk committee | Both assessing and managing climate-related risks and opportunities | Annually |

## **C1.2a**

### **(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).**

Climate-related issues are managed through several channels within the organization. Regulatory risks, such as the impact of new climate regulation on both products and operations, are assessed as part of the disclosure process for quarterly and annual reports and as part of the ongoing duties of certain groups. Groups within the organization with responsibility for Product Certification and Compliance, Environmental and Energy Affairs, Legal Counsel and Government Relations, monitor and assess such climate related regulatory risks on at least a quarterly basis. These risks are discussed with the Corporate Controllers Office on at least a quarterly basis and assessed for disclosure through the quarterly and annual filings. These filings are reviewed by senior management and the Board. Environmental and Energy Affairs, responsible primarily for environmental operational issues, and Legal Counsel, responsible for legal issues including environmental and climate, are under the General Counsel’s organization. Product Certification and Compliance, responsible for monitoring regulatory risk to products and product compliance, is within the Integrated Product Development group. IPD as a whole regularly reviews the impact of fuel economy and greenhouse gas regulation on the product portfolio. The Government Affairs and the Corporate Controller’s Office are within the Chief Financial Officer’s organization.

Navistar’s Enterprise Risk Management (ERM) process includes a common risk management framework across the organization that includes a continuous process for identifying, assessing, prioritizing, responding to, and monitoring risks. This framework includes risk assessments, risk management action plans, and ERM reporting which are performed by ERM, individual business units, and functional areas. Navistar's ERM process also established an Executive Risk Committee whose members represent each individual business unit and functional area. The Committee oversees the implementation and ongoing application of risk management throughout all business units and functions of the Company with the goal of supporting and enhancing the current risk management program. They also oversee the annual Top Down enterprise wide risk assessment focused on the top risks to the organization. The ERM Organization reports top risks to the Board annually and regularly to the Executive Risk Committee. If climate risks were to be identified as a top risk, this process would communicate it appropriately. The ERM process is performed by the Internal Audit and Compliance organization. An annual Sustainability Report is also prepared with public disclosure of certain environmental and energy data relevant to climate related issues. This report is prepared by several groups including Environmental and Energy Affairs and Corporate Communications, reviewed by management and presented to the Board of Directors

## **C1.3**

### **(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?**

No

*Meeting or exceeding Product emission targets is critical and not an option to miss nor specifically incentivized.*

## **C2. Risks and opportunities**

## **C2.1**

### **(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **From (years)** | **To (years)** | **Comment** |
| Short-term | 1 | 2 | There is no set definition for these timelines and terms depend somewhat upon topic. These are presented for Climate Change discussions. |
| Medium-term | 2 | 5 |  |
| Long-term | 5 | 20 |  |

## **C2.2**

### **(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.**

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

## **C2.2a**

### **(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Frequency of monitoring** | **How far into the future are risks considered?** | **Comment** |
| Row 1 | Six-monthly or more frequently | 1 to 3 years | Climate change risk assessment is performed as part of the multidisciplinary risk assessment process. Risks, including regulatory, are assessed on a quarterly basis as part of the quarterly and annual report development process. Various functions, including product compliance, government affairs, environmental affairs and legal counsel assess risks including climate regulatory risks. Integrated Product Development and other business units also continually review the impact of fuel economy and greenhouse gas regulation on the product portfolio. Risks are also assessed as part of the ERM Process. Depending upon the existence of risk and prioritization of the risk by either the business functions, or Executive Risk Committee, the risk is included in the “Top ERM risks” dashboard for risk mitigation. Also see C1.2a above and C2.2d below. |

## **C2.2b**

### **(C2.2b) Provide further details on your organization’s process(es) for identifying and assessing climate-related risks.**

Climate change risk assessment is performed as part of the multidisciplinary risk assessment process. Depending upon the existence of risk and prioritization of the risk by either the business functions, or Executive Risk Committee, the risk is included in the “Top ERM risks” dashboard for risk mitigation. Also see

C2.2d below.

## **C2.2c**

### **(C2.2c) Which of the following risk types are considered in your organization's climate-related risk assessments?**

|  |  |  |
| --- | --- | --- |
|  | **Relevance & inclusion** | **Please explain** |
| Current regulation | Relevant, always included | Compliance with applicable rules and regulation is baseline for Navistar. All current and upcoming proposed regulatory actions are monitored and most often Navistar is an active stakeholder participant. Examples include all engine product rules, including Phase I and II GHG for truck, and Clean Power Plan, GHG reporting and air permitting NSR for stationary manufacturing sites. Navistar is compliant with current regulation. We plan for and invest as needed for compliance with upcoming regulations. |
| Emerging regulation | Relevant, always included | Compliance with applicable rules and regulation is baseline for Navistar. All current and upcoming proposed regulatory actions are monitored and most often Navistar is an active stakeholder participant. Examples include all engine product rules, including Phase I and II GHG for truck, and Clean Power Plan, GHG reporting and air permitting NSR for stationary manufacturing sites. We plan for and invest as needed for compliance with upcoming regulations. |
| Technology | Relevant, always included | Navistar remains on the forefront of technology advances and options for truck and engine, including 2018 International® LT® Series 625 Class 8 vehicle with an International® A26 engine which has demonstrated to deliver better fuel efficiency than comparable competitor vehicles with comparably sized engines. We recently introduced new International® LT® Series MPG Fuel Efficiency Packages that simplify spec’ing a vehicle for optimal fuel efficiency. Navistar also leads one of four teams in the second phase of the U.S. Department of Energy’s SuperTruck initiative, which aims to more than double the freight efficiency of Class 8 trucks. The company is also advancing alternative power trains, including electric technologies that are poised to deliver major environmental benefits in the school bus and medium truck markets. Early in fiscal 2018, we unveiled our prototype next-generation electric school bus, the chargE™, which was co-developed with our alliance partner TRATON GROUP, formerly Volkswagen Truck &Bus. |
| Legal | Relevant, always included | Compliance with applicable rules and regulation is baseline for Navistar. All current and upcoming proposed regulatory actions are monitored and most often Navistar is an active stakeholder participant, ensuring flexibility to allow Navistar to meet all legal obligations, to the letter and intent. We plan for and invest as needed for compliance with legal changes and implications. |
| Market | Relevant, sometimes included | Navistar, Inc. certainly includes as a risk and opportunity, especially as it effects compliance, legal issues, and the ability to sell our trucks. Navistar is committed to continually finding new ways to make trucking safer, more fuel efficient and more environmentally friendly. Navistar complies with Phase I GHG truck limits and technology and continues to plan for Phase II. To meet these regulations, Navistar will employ technological and other improvements in many aspects of the vehicle. The Climate Change impacts from products and stationary sites are often not communicated as a top concern for most truck customers. |
| Reputation | Relevant, always included | As part of its mission to help customers improve their vehicles’ uptime, Navistar also aims to deliver vehicles that perform as efficiently, reliably and with as low an impact on the environment as possible. Navistar’s long history of product innovation includes pioneering steps in emissions reduction. Our 2018 International® LT® Series 625 Class 8 vehicle with an International® A26 engine was demonstrated to deliver better fuel efficiency than comparable competitor vehicles with comparably sized engines. The company is also advancing alternative power trains, including electric technologies that are poised to deliver major environmental benefits in the school bus and medium truck markets. Navistar also leads one of four teams in the second phase of the U.S. Department of Energy’s SuperTruck initiative. Since the advent of federal regulation by the U.S. EPA, emissions of nitrogen oxides (NOx) from diesel engines have been reduced by more than 90 percent; emissions of particulate matter (PM) have been cut by 99 percent; and emissions of carbon monoxide (CO) and hydrocarbons (HC) have been reduced to near-zero levels. We were the first North American engine manufacturer to release a smokeless diesel engine, and we worked with the EPA to advocate reducing the sulfur content of diesel fuel to 15 ppm in order to cut emissions of NOx and PM. Navistar has built on this tradition, working with the industry, EPA and the National Highway Traffic Safety Administration (NHTSA) to continue development of workable greenhouse gas regulations. |
| Acute physical | Not relevant, explanation provided | Navistar is not aware of any acute or chronic effects from Climate Change at this time, but considers potential published impacts. |
| Chronic physical | Not relevant, explanation provided | Navistar is not aware of any acute or chronic effects from Climate Change at this time, especially none at or effecting our operations. |
| Upstream | Relevant, always included | For products the upstream supplier and technology options can significantly impact the products' performance both in fuel efficiency and GHG emissions, among others. At our manufacturing sites, Scope 3 is not currently monitored but is relevant to operations and GHG emissions. Also see specific examples under Reputation and Technology |
| Downstream | Relevant, always included | Downstream is always considered, whether a customer or affected party Navistar always includes consideration for downstream impacts, positive or negative. Examples include product use and efficiency, reducing GHG by continually increasing fuel efficiency. Much of Navistar’s leadership in fuel economy is due to innovations in aerodynamics. Navistar’s introduction of the LT Series built on the company’s many innovations designed to reduce energy consumption. In addition to vehicle aerodynamics, these innovations have included improvements in base engine efficiency, engine-transmission integration, lubrication materials, and intelligent control strategies, as well as vehicle weight reductions. Manufacturing sites actively work to reduce Scope 1 and 2 emissions by efficiency gains and energy conservation. Energy reduction "Treasure Hunts" team events are an example, conducted to find energy waste, reducing downstream impacts. |

## **C2.2d**

### **(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.**

Climate change risk assessment is performed as part of the multidisciplinary risk assessment process. Navistar’s Enterprise Risk Management (ERM) process includes a common risk management framework across the organization that includes a continuous process for identifying, assessing, prioritizing, responding to, and monitoring risks. This framework includes risk assessments, risk management action plans, and ERM reporting which are performed by ERM, individual business units, and functional areas. Navistar's ERM process also established an Executive Risk Committee whose members represent each individual business unit and functional area. The Committee oversees the implementation and ongoing application of risk management throughout all business units and functions of the Company with the goal of supporting and enhancing the current risk management program. They also oversee the annual Top Down enterprise wide risk assessment focused on the top risks to the organization. The ERM Organization reports top risks to the Board annually and regularly to the Executive Risk Committee. The Committee will prioritize the risks and opportunities identified. As for opportunities, the demand for additional fuel economy and reduced greenhouse gas emissions from customers is considered when developing and updating products. Overall product strategy is informed by this demand.

## **C2.3**

### **(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes

## **C2.3a**

### **(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.**

### **Identifier**

Risk 1

### **Where in the value chain does the risk driver occur?**

Direct operations

### **Risk type**

Transition risk

### **Primary climate-related risk driver**

Policy and legal: Mandates on and regulation of existing products and services

### **Type of financial impact**

Other, please specify (Capital investments in technology development, rapidly changing regulations.)

### **Company- specific description**

EPA and DOT have adopted regulations governing heavy duty engine and vehicle greenhouse gas and fuel efficiency requirements. In addition, California is adopting these rules and also planning regulations including one that may mandate the sale of electric or other advanced technology vehicles. These and other rules drive risks from costs for product development and regulatory implementation. EPA and DOT adopted final rules setting fuel economy and greenhouse gas emissions standards for medium and heavy duty engines and vehicles that came into effect in model year 2014. Having just implemented these reductions, in 2015 and 2016 EPA and NHTSA embarked on an effort to adopt the next phase of greenhouse gas/fuel efficiency regulations in the heavy duty sector. The final rule, adopted in October 2016, phases in over model years 2021 through 2027, and will require new and expanded efficiency technologies across vehicle and engine platforms. EPA estimates the Phase 2 rule will result in an additional 10 percent reduction in greenhouse gas emissions. See also discussion in 2018 form 10-K, Risk Factors, Key Trends and Impact of Government Regulation.

### **Time horizon**

Current

### **Likelihood**

Virtually certain

### **Magnitude of impact**

High

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

No, we do not have this figure

### **Potential financial impact figure (currency)**

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

### **Explanation of financial impact figure**

This is ever changing value and considered proprietary information. Disclosing is deemed a competitive disadvantage.

### **Management method**

Closely monitoring and stake-holder involvement in regulatory changes affecting manufacturing and products. Trade associations and direct contact with EPA and law makers. Proactive involvement. CASE STUDY EXAMPLE: EPA having just implemented Phase 1 GHG reductions, in 2015 and 2016 EPA and NHTSA embarked on an effort to adopt the next phase of greenhouse gas/fuel efficiency regulations in the heavy duty sector. Navistar was directly involved with rule-making and provided comments. The final rule was adopted in October 2016, phases in over model years 2021 through 2027, and will require new and expanded efficiency technologies across vehicle and engine platforms.

### **Cost of management**

0

### **Comment**

Disclosing is deemed a competitive disadvantage.

### **Identifier**

Risk 2

### **Where in the value chain does the risk driver occur?**

Direct operations

### **Risk type**

Transition risk

### **Primary climate-related risk driver**

Market: Increased cost of raw materials

### **Type of financial impact**

Increased production costs due to changing input prices (e.g., energy, water) and output requirements (e.g., waste treatement)

### **Company- specific description**

Fuel and energy regulation and taxes, causing increased costs or reliability of supplies.

### **Time horizon**

Medium-term

### **Likelihood**

More likely than not

### **Magnitude of impact**

Medium

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

No, we do not have this figure

### **Potential financial impact figure (currency)**

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

### **Explanation of financial impact figure**

The risk is the undetermined impact to costs in medium timeframe, as it is not possible to predict these costs or supplies. Changing political climate has eased this concern, however it could be more impactful by sudden changes due to public concern or world events.

### **Management method**

Proactive monitoring of energy markets for both product and manufacturing, lobbying input for effects on customers, product demand, employment, profits. This includes investigating alternatives that could increase market sales or replace risk.

### **Cost of management**

0

### **Comment**

Overall cost is an increase in tax due to GHG emissions whether direct or indirect via energy costs, stationary or mobile, currently not measurable. See also, discussion in 2018 form 10-K, Risk Factor and Business Outlook and Key Trends.

### **Identifier**

Risk 3

### **Where in the value chain does the risk driver occur?**

Direct operations

### **Risk type**

Physical risk

### **Primary climate-related risk driver**

Chronic: Rising mean temperatures

### **Type of financial impact**

Increased production costs due to changing input prices (e.g., energy, water) and output requirements (e.g., waste treatement)

### **Company- specific description**

Increase in cooling needs or damaged equipment as recorded ambient and earth temperatures rise, for both human comfort and equipment. This will have a direct increase in operational costs and indirect GHG emissions, causing additional tax or costs. Toll to human resources in and outside work would impact production costs. Increased occurrences of extreme weather events can negatively effect production facilities and operations resulting in potential risk of increased costs or downtime. See also, discussion in 2018 form 10-K, Business Outlook and Key Trends.

### **Time horizon**

Long-term

### **Likelihood**

More likely than not

### **Magnitude of impact**

Medium-low

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

No, we do not have this figure

### **Potential financial impact figure (currency)**

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

### **Explanation of financial impact figure**

Navistar cannot ascertain exact financial impacts from potential physical risks at this time.

### **Management method**

Proactive and continuous monitoring directly of our sites for weather related physical changes or impacts that present new or added risks, and direct involvement with industry groups and EPA initiatives. Navistar participates on many levels with other manufacturing and trade groups to stay current with potential business impacts from Climate Change and other environmental or business risks. Ohio Manufacturing Association active members and sit on separate Energy, Environmental and Sustainability committees.

### **Cost of management**

0

### **Comment**

Participation is enhanced due to Climate Change issues and new committees, however the company would stay involved with these groups issues for all topics, thus no added cost.

## **C2.4**

### **(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes

## **C2.4a**

### **(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.**

### **Identifier**

Opp1

### **Where in the value chain does the opportunity occur?**

Customer

### **Opportunity type**

Markets

### **Primary climate-related opportunity driver**

Access to new markets

### **Type of financial impact**

Increased revenues through access to new and emerging markets (e.g., partnerships with governments, development banks)

### **Company-specific description**

Concerns about global climate change, attributed mostly to GHG emissions, have escalated considerably over the last few years. Navistar considers the escalation of such concerns as opportunity to market its fuel efficient and innovative products. • Navistar 2018 International® LT® Series 625 Class 8 vehicle with an International® A26 engine was demonstrated to deliver better fuel efficiency than comparable competitor vehicles with comparably sized engines. . In addition to vehicle aerodynamics, these innovations have included improvements in base engine efficiency, engine-transmission integration, lubrication materials, and intelligent control strategies, as well as vehicle weight reductions. • Early in fiscal 2018, we unveiled our prototype next-generation electric school bus, the chargE™, which was co-developed with our alliance partner TRATON GROUP. • Navistar leads one of four teams in the second phase of the U.S. Department of Energy’s SuperTruck initiative, which aims to more than double the freight efficiency of Class 8 trucks. Our involvement in a five-year R&D program with the U.S. DOE to develop a highly fuel-efficient Class 8 line haul truck SuperTruck I was delivered in 2016 with exceptional results.; exceeded the DOE’s requirements for a 50 percent improvement in overall freight efficiency on a heavy-duty Class 8 tractor-trailer vehicle, and 50 percent engine efficiency. It ultimately achieved a fuel efficiency of 13 miles per gallon and demonstrated 50.3 percent Brake Thermal Efficiency, representing an improvement in freight efficiency of 104% over DOE’s control vehicle. • Navistar is playing a leading role in developing a new generation of connected heavy-duty vehicles and also exploring the great potential benefits from autonomous technologies that enable platooning, which allows trucks to safely follow each other to reduce wind drag. This platooning work is being conducted through Navistar’s research partnership with the Texas A&M Transportation Institute. • Navistar believes alternative fuel choices we offer; diesel, propane, natural gas, gasoline and B20 options, continue to offer solutions to climate change issues.

### **Time horizon**

Current

### **Likelihood**

Virtually certain

### **Magnitude of impact**

High

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

No, we do not have this figure

### **Potential financial impact figure (currency)**

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

### **Explanation of financial impact figure**

Considered a competitive advantage and not something we can reveal.

### **Strategy to realize opportunity**

Please see the company description above which also lays out the strategy of developing, partnering, and bringing to market various alternatives and customer product options.

### **Cost to realize opportunity**

### **Comment**

Considered a competitive advantage and not something we can reveal.

### **Identifier**

Opp2

### **Where in the value chain does the opportunity occur?**

Customer

### **Opportunity type**

Products and services

### **Primary climate-related opportunity driver**

Development and/or expansion of low emission goods and services

### **Type of financial impact**

Increased revenue through demand for lower emissions products and services

### **Company-specific description**

The company continues to pursue innovations that build on technology’s inherent to fuel economy advantages, using improved aerodynamics and other approaches to improve fuel efficiency and reduce emissions: • Some examples include: Predictive cruise control that innovatively uses GPS mapping and the latest commercial route data to adjust cruising speed without the need to pre-drive routes; Advanced integration of engine and vehicle, utilizing proprietary intelligent controls for higher-efficiency; Innovative use of lighter-weight carbon-fiber panels in the upper body, roof headers, back panel and dash panel; and Aerodynamic improvements that reduce the trailer’s drag coefficient by more than 30 percent, to name a few. • Navistar worked extensively with EPA and NHTSA and with the industry, to develop workable Phase II GHG regulations. The final rule, which was adopted in October 2016, phases in over model years 2021 through 2027, and will require new and expanded efficiency technologies across vehicle and engine platforms. EPA has estimated the Phase 2 rule will result in an additional 10 percent reduction in greenhouse gas emissions. • In 2016 our focus on key contributors to energy consumption made for additional improvements in the aerodynamics of the vehicle, base engine efficiency, engine transmission integration, lubrication materials, and intelligent control strategies, accounting for a notable difference and helping customers improve their bottom line. • Navistar also contributes to reduced emissions by offering many anti-idle solutions, such as battery-powered heating and air conditioning systems. Our Parts group offers validated diesel exhaust emission retrofit products from various manufacturers to help reduce emissions from older vehicles. • Navistar also offers alternative-fuel vehicles. Early in fiscal 2018, we unveiled our prototype next-generation electric school bus, the chargE™, which was co-developed with our alliance partner TRATON GROUP, formerly Volkswagen Truck & Bus.

### **Time horizon**

Current

### **Likelihood**

Very likely

### **Magnitude of impact**

Medium-high

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

No, we do not have this figure

### **Potential financial impact figure (currency)**

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

### **Explanation of financial impact figure**

Considered a competitive advantage and not something we can reveal.

### **Strategy to realize opportunity**

Please see the company description above which also lays out the strategy of developing, partnering, and bringing to market various alternatives and customer product options.

### **Cost to realize opportunity**

### **Comment**

Considered a competitive advantage and not something we can reveal.

## **C2.5**

### **(C2.5) Describe where and how the identified risks and opportunities have impacted your business.**

|  |  |  |
| --- | --- | --- |
|  | **Impact** | **Description** |
| Products and services | Impacted | Customer demand for increased fuel efficiency, equating to reducing GHG emissions drives much of product development and innovations and commensurate services. New product lines, fuel options, electric options, advanced parts, controls and monitoring are all geared towards reduced emissions, costs, and resources with increased profits, product offerings, and overall market share. |
| Supply chain and/or value chain | Impacted | A repeat of above description for products and services applies here. In 2017, Navistar and Volkswagen Truck & Bus established a strategic alliance, featuring a procurement joint venture and technology collaboration. The alliance is exploring all aspects of commercial vehicle development, including powertrain technology solutions, advanced driver assistance systems, connected vehicle solutions, platooning and autonomous technologies, electric vehicles, as well as cab and chassis components. In 2018, Navistar took its electric school bus, chargE™, on a national tour. This concept electric school bus incorporates a common group electric drivetrain, which is quiet and has no emissions, from Navistar’s alliance partner TRATON GROUP. The two companies announced they would collaborate on development of electric powertrains for school buses and Class 6-7 medium-duty trucks. The chargE™, our prototype next-generation electric school bus, is based on alliance technology. We incorporate advanced driver assistance systems. Our medium-duty vehicles were the first to use the Bendix® Wingman® Fusion™ suite of integrated, advanced safety technologies. these are just a couple significant examples of supply and value chain impact. |
| Adaptation and mitigation activities | Impacted for some suppliers, facilities, or product lines | Product line diversity has increased due to customer demand for increased fuel efficiency, reducing GHG emissions. Navistar's proud diesel engine history has grown into many diverse product offerings, including gasoline, propane, biofuels, and electric concepts. |
| Investment in R&D | Impacted | Please refer to many examples throughout, including partnerships with U.S. Department of Energy (DOE,) Texas A&M Transportation Institute, Volkswagen Truck & Bus alliance. |
| Operations | Impacted for some suppliers, facilities, or product lines | Some manufacturing facilities can trigger the EPA mandatory GHG reporting. Monitoring and tracking developed for all sites to evaluate impacts. |
| Other, please specify | Impacted for some suppliers, facilities, or product lines | Customers are impacted by increased availability of energy efficient low emitting products, or the converse increased operating costs from inefficient competitor products or regulatory taxes. |

## **C2.6**

### **(C2.6) Describe where and how the identified risks and opportunities have been factored into your financial planning process.**

|  |  |  |
| --- | --- | --- |
|  | **Relevance** | **Description** |
| Revenues | Impacted for some suppliers, facilities, or product lines | Increased product offerings grow and diversify customer base, often demanding higher profit margins. |
| Operating costs | Impacted for some suppliers, facilities, or product lines | Varies. Energy costs have increased in some locations while some sites have enjoyed lower energy costs due to regional supplies. Potential GHG taxes are a threat to increase costs, possibly negating recent energy cost reductions achieved through efficiency gains. Most recently local and national political policies are increasing costs for coal or nuclear subsidies, increasing energy supply costs or taxes. |
| Capital expenditures / capital allocation | Impacted | Required for continuous R&D and partnerships, as well as manufacturing infrastructure and operating costs for newer products and diverse fuel offerings. Such developments impact operations requiring new equipment, processes, training, etc. |
| Acquisitions and divestments | Impacted for some suppliers, facilities, or product lines | Affected as the company adjust business planning and investments to match customer demands for products. Significant impact to Navistar's engine division. |
| Access to capital | Impacted for some suppliers, facilities, or product lines | All tangible and required risks for capital are considered. |
| Assets | Impacted for some suppliers, facilities, or product lines | Capital expenditures are required for continuous R&D and partnerships, as well as manufacturing infrastructure and operating costs for newer products and diverse fuel offerings. Such developments impact operations requiring new equipment, processes, training, etc |
| Liabilities | Not impacted |  |
| Other | Not impacted |  |

## **C3. Business Strategy**

## **C3.1**

### **(C3.1) Are climate-related issues integrated into your business strategy?**

Yes

## **C3.1a**

### **(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?**

Yes, qualitative and quantitative

## **C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b**

### **(C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b) Indicate whether your organization has developed a low-carbon transition plan to support the long-term business strategy.**

Yes

## **C3.1c**

### **(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.**

Greenhouse gas and fuel economy regulations closely regulate our products and thus is a significant driver in product development. Phase 2 of the greenhouse gas regulations for heavy duty engines and vehicles will drive improvements in fuel efficiency in the engines and also in various aspects of the vehicles. The product development functions consider greenhouse gas emissions, generally involving product fuel economy, throughout the product development process.

The company also monitors its energy use and continually seeks to reduce energy use. Energy use mirrors GHG emissions, thus communicating, tracking, and reducing energy use is commensurate to GHG. Navistar is also an active participant in the development of climate change policy, particularly in the development and implementation of heavy duty greenhouse gas and fuel efficiency regulations, working with EPA, CARB, DOE, and NHTSA.

## **C3.1d**

### **(C3.1d) Provide details of your organization’s use of climate-related scenario analysis.**

|  |  |
| --- | --- |
| **Climate-related scenarios** | **Details** |
| Other, please specify (Reduce carbon/GHG IncreaseEnergy Efficiency) | Goals to reduce energy usage, which reduces GHG emissions, meeting these site reduction goals and product GHG regulations . Goals are driven both voluntarily at stationary sites and mandatory for product lines as driven by EPA. Reduction strategies are both qualitative and quantitative; qualitative being those with known reductions but specifically unmeasured. As such, climate-related issues are part of the 'top line growth' strategy of the company, rather than being dealt with solely at the operational level |
| Other, please specify (Alternative fuels or propulsion, efficiency improvements and products - Opportunity) | Climate-change opportunity to grow markets for new products; alternative fuels trucks, electric truck development, as well as autonomous vehicles. All incorporated into business strategy and R&D units developed. |

## **C-AC3.1e/C-CE3.1e/C-CH3.1e/C-CO3.1e/C-EU3.1e/C-FB3.1e/C-MM3.1e/C-OG3.1e/C-PF3.1e/C-ST3.1e/C-TO3.1e/C-TS3.1e**

### **(C-AC3.1e/C-CE3.1e/C-CH3.1e/C-CO3.1e/C-EU3.1e/C-FB3.1e/C-MM3.1e/C-OG3.1e/C-PF3.1e/C-ST3.1e/C-TO3.1e/C-TS3.1e) Disclose details of your organization’s low-carbon transition plan.**

The company is exploring various low carbon product solutions. The areas of emphasis are 1 ) improvements in the fuel efficiency in diesel powered vehicles and 2) exploring alternatives, such as electric vehicles. This includes increased fuel efficiency features, such as aerodynamics, on diesel powered products. Part of this is internal, part is in conjunction with partners as in the TRATON alliance or the federal government as in the SuperTruck program. The company is also exploring electric vehicle options and has recently established an eMobility group within the company to concentrate on electrification of vehicles. We are also exploring those issues in conjunction with the TRATON alliance.

## **C4. Targets and performance**

## **C4.1**

### **(C4.1) Did you have an emissions target that was active in the reporting year?**

Both absolute and intensity targets

## **C4.1a**

### **(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.**

### **Target reference number**

Abs 1

### **Scope**

Scope 1+2 (location-based)

### **% emissions in Scope**

100

### **Targeted % reduction from base year**

15

### **Base year**

2014

### **Start year**

2014

### **Base year emissions covered by target (metric tons CO2e)**

323388

### **Target year**

2020

### **Is this a science-based target?**

No, and we do not anticipate setting one in the next 2 years

### **% of target achieved**

100

### **Target status**

Achieved

### **Please explain**

This is an internal GHG emission target intended to match our goals for energy reduction. The below intensity target is a voluntary and public, via DOE Better Buildings Better Plants program; met in 2018, 2 years ahead of schedule. New goals are being developed and committed.

## **C4.1b**

### **(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).**

### **Target reference number**

Int 1

### **Scope**

Scope 1+2 (location-based)

### **% emissions in Scope**

70

### **Targeted % reduction from base year**

25

### **Metric**

Metric tons CO2e per unit of production

*Includes production and weather (HDD and CDD) variables as intensity based target.*

### **Base year**

2010

### **Start year**

2010

### **Normalized base year emissions covered by target (metric tons CO2e)**

2894159

### **Target year**

2020

### **Is this a science-based target?**

No, and we do not anticipate setting one in the next 2 years

### **% of target achieved**

100

### **Target status**

Achieved

### **Please explain**

2,894,159 units are MMBTU, NOT CO2 tons. Inclusion in DOE program allows only US specific sites, thus 70%. Goal 25% by 2020 was exceeded at 27% in 2018, two years ahead of schedule. Voluntary commitment - Energy reduction. This is our voluntary commitment to the USDOE/USEPA Better Buildings, Better Plants Program. Base year normalized energy use was adjusted due to acquisitions and closures per Protocol. Thus, the base year energy and emissions have changed annually due to adjustments.

### **% change anticipated in absolute Scope 1+2 emissions**

27

### **% change anticipated in absolute Scope 3 emissions**

0

## **C4.2**

### **(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.**

## **C4.3**

### **(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.**

Yes

## **C4.3a**

### **(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.**

|  |  |  |
| --- | --- | --- |
|  | **Number of initiatives** | **Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked \*)** |
| Under investigation |  |  |
| To be implemented\* |  |  |
| Implementation commenced\* |  |  |
| Implemented\* |  |  |
| Not to be implemented |  |  |

## **C4.3b**

### **(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.**

## **C4.3c**

### **(C4.3c) What methods do you use to drive investment in emissions reduction activities?**

|  |  |
| --- | --- |
| **Method** | **Comment** |
| Financial optimization calculations | Energy reduction 'Treasure Hunt' training and tools refine energy reduction specific calcs and GHG savings can be completed by anyone with TH tool and sent to Accounting for verification. These energy specific savings can help drive implementation. |
| Dedicated budget for other emissions reduction activities | Dedicated funds and resources for meeting and exceeding ongoing product emission reductions and freight efficiency improvements. |
| Employee engagement | Energy reduction 'Treasure Hunts' involving employees, before, during, and after. On-going facility efficiency activities are focused on non-production time energy reduction, often relying on employees active participation for non-automated energy systems or devices. |
| Partnering with governments on technology development | Navistar won funding for the U.S. Department of Energy's, SuperTruck II project, with a goal of improving heavy-truck freight efficiency by 100%, as compared to 2009. Navistar's work on the first SuperTruck concept delivered the CatalIST International® to the U.S. Department of Energy in 2016 with an improvement in freight efficiency of 104% over DOEs control vehicle. SuperTruck II aims to more than double the freight efficiency of Class 8 trucks moving forward. And platooning work was conducted with the Texas A&M Transportation Institute, demonstrate the potential of energy-saving truck platooning. |
| Compliance with regulatory requirements/standards | As applicable, investments are always available for regulatory compliance, at a minimum. This represents significant investments. |
| Partnering with governments on technology development | In 2018, Navistar again using partner (U.S. Department of Energy, Better Buildings, Better Plants program) tools extended the “energy treasure hunt” (TH) opportunity to other MWM sites to identify ways of decreasing both CO2 emissions and energy cost. |

## **C4.5**

### **(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?**

Yes

## **C4.5a**

### **(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.**

### **Level of aggregation**

Group of products

### **Description of product/Group of products**

The newest products in our line that are compliant with greenhouse gas and fuel economy regulations may help customers avoid emissions associated with older, nonregulated vehicles. Our products initiatives have delivered the industry’s newest product line, innovative, fuel-efficient vehicles with enhanced visibility and advanced safety features. Our 2018 International® LT® Series 625 Class 8 vehicle with an International® A26 engine was demonstrated to deliver better fuel efficiency than comparable competitor vehicles with comparably sized engines. Navistar also leads one of four teams in the second phase of the U.S. Department of Energy’s SuperTruck initiative, which aims to more than double the freight efficiency of Class 8 trucks. The company is also advancing alternative power trains, including electric technologies that are poised to deliver major environmental benefits in the school bus and medium truck markets. Early in fiscal 2018, we unveiled our prototype next-generation electric school bus, the chargE™, which was co-developed with our alliance partner TRATON GROUP, formerly Volkswagen Truck & Bus. Navistar also contributes to reduced emissions by offering many solutions to support anti-idling, such as battery-powered heating and air conditioning systems.

### **Are these low-carbon product(s) or do they enable avoided emissions?**

Avoided emissions

### **Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions**

Other, please specify (Internal based upon calculating low emissions using EPA and CARB fuel economy and greenhouse gas emission standards.)

### **% revenue from low carbon product(s) in the reporting year**

### **Comment**

## **C5. Emissions methodology**

## **C5.1**

### **(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).**

### **Scope 1**

### **Base year start**

January 1 2014

### **Base year end**

December 31 2014

### **Base year emissions (metric tons CO2e)**

107979

### **Comment**

### **Scope 2 (location-based)**

### **Base year start**

January 1 2014

### **Base year end**

December 31 2014

### **Base year emissions (metric tons CO2e)**

215409

### **Comment**

### **Scope 2 (market-based)**

### **Base year start**

### **Base year end**

### **Base year emissions (metric tons CO2e)**

### **Comment**

Location-based only, Scope 1 and Scope 2

## **C5.2**

### **(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.**

Energy Information Administration 1605B

The Climate Registry: General Reporting Protocol

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

US EPA Climate Leaders: Direct Emissions from Stationary Combustion

US EPA Mandatory Greenhouse Gas Reporting Rule

## **C6. Emissions data**

## **C6.1**

### **(C6.1) What were your organization’s gross global Scope 1 emissions in metric tons CO2e?**

### **Reporting year**

### **Gross global Scope 1 emissions (metric tons CO2e)**

88982

### **Start date**

January 1 2018

### **End date**

December 31 2018

### **Comment**

## **C6.2**

### **(C6.2) Describe your organization’s approach to reporting Scope 2 emissions.**

### **Row 1**

### **​Scope 2, location-based​**

We are reporting a Scope 2, location-based figure

### **Scope 2, market-based**

We have operations where we are able to access electricity supplier emission factors or residual emissions factors, but are unable to report a Scope 2, market-based figure

### **Comment**

## **C6.3**

### **(C6.3) What were your organization’s gross global Scope 2 emissions in metric tons CO2e?**

### **Reporting year**

### **Scope 2, location-based**

125015

### **Scope 2, market-based (if applicable)**

<Not Applicable>

### **Start date**

January 1 2018

### **End date**

December 31 2018

### **Comment**

## **C6.4**

### **(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?**

No

## **C6.5**

### **(C6.5) Account for your organization’s Scope 3 emissions, disclosing and explaining any exclusions.**

### **Purchased goods and services**

### **Evaluation status**

Relevant, not yet calculated

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

### **Explanation**

### **Capital goods**

### **Evaluation status**

Relevant, not yet calculated

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

### **Explanation**

### **Fuel-and-energy-related activities (not included in Scope 1 or 2)**

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

50000000

### **Emissions calculation methodology**

Trucks and engines sold \* 1,000,000 mile limited useful life of the product \* / 8 average MPG To calculate an estimated emissions from products, a number of baseline units for each general category of vehicles was multiplied by useful life, estimated average fuel consumption and emission factor to calculate estimated tons of CO2 for that generalized vehicle population.

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

### **Explanation**

Emissions estimated from long life expectancy of products in use and the combustion of fossil fuels to operate, primarily diesel. Actual CO2 emissions from these vehicles rely heavily upon actual use and will vary depending on a number of factors, including final vehicle configuration, duty cycle, routes, maintenance and other factors.

### **Upstream transportation and distribution**

### **Evaluation status**

Relevant, not yet calculated

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

### **Explanation**

### **Waste generated in operations**

### **Evaluation status**

Not evaluated

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

### **Explanation**

### **Business travel**

### **Evaluation status**

Relevant, not yet calculated

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

### **Explanation**

### **Employee commuting**

### **Evaluation status**

Relevant, not yet calculated

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

### **Explanation**

### **Upstream leased assets**

### **Evaluation status**

Not evaluated

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

### **Explanation**

### **Downstream transportation and distribution**

### **Evaluation status**

Relevant, not yet calculated

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

### **Explanation**

### **Processing of sold products**

### **Evaluation status**

Relevant, not yet calculated

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

### **Explanation**

### **Use of sold products**

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO2e**

50000000

### **Emissions calculation methodology**

Trucks and engines sold \* 1,000,000 mile limited useful life of the product \* / 8 average MPG To calculate an estimated emissions from products, a number of baseline units for each general category of vehicles was multiplied by useful life, estimated average fuel consumption and emission factor to calculate estimated tons of CO2 for that generalized vehicle population.

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

### **Explanation**

Emissions estimated from long life expectancy of products in use and the combustion of fossil fuels to operate, primarily diesel. Actual CO2 emissions from these vehicles rely heavily upon actual use and will vary depending on a number of factors, including final vehicle configuration, duty cycle, routes, maintenance and other factors.

### **End of life treatment of sold products**

### **Evaluation status**

Relevant, not yet calculated

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

### **Explanation**

### **Downstream leased assets**

### **Evaluation status**

Not evaluated

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

### **Explanation**

### **Franchises**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

### **Explanation**

None. Not applicable.

### **Investments**

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

### **Emissions calculation methodology**

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

### **Other (upstream)**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

### **Explanation**

No known "other" not already included or considered.

### **Other (downstream)**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

### **Explanation**

No known "other" not already included or considered.

## **C6.7**

### **(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?**

No

## **C6.10**

### **(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.**

### **Intensity figure**

20.88

### **Metric numerator (Gross global combined Scope 1 and 2 emissions)**

213997

### **Metric denominator**

unit total revenue

### **Metric denominator: Unit total**

10250

### **Scope 2 figure used**

Location-based

### **% change from previous year**

20

### **Direction of change**

Decreased

### **Reason for change**

Reduction attributed primarily to site's efforts in reducing electric use, especially focused on non-production time and load ratio monitoring. Increased demand for products, efficiency and increased revenue are contributors.

### **Intensity figure**

16.3

### **Metric numerator (Gross global combined Scope 1 and 2 emissions)**

213997

### **Metric denominator**

full time equivalent (FTE) employee

### **Metric denominator: Unit total**

13100

### **Scope 2 figure used**

Location-based

### **% change from previous year**

16.8

### **Direction of change**

Decreased

### **Reason for change**

Reduction attributed to site's efforts in reducing energy use, especially focused on non-production time and load ratio monitoring.

### **Intensity figure**

0.0222

### **Metric numerator (Gross global combined Scope 1 and 2 emissions)**

213997

### **Metric denominator**

square foot

### **Metric denominator: Unit total**

9626239

### **Scope 2 figure used**

Location-based

### **% change from previous year**

15.8

### **Direction of change**

Increased

### **Reason for change**

Reduction of 16.8% or nearly 2 million square feet of space as compared to previous year.

## **C7. Emissions breakdowns**

## **C7.1**

### **(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?**

Yes

## **C7.1a**

### **(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).**

|  |  |  |
| --- | --- | --- |
| **Greenhouse gas** | **Scope 1 emissions (metric tons of CO2e)** | **GWP Reference** |
| CO2 | 303 | IPCC Fifth Assessment Report (AR5 – 100 year) |
| CH4 | 8474 | IPCC Fifth Assessment Report (AR5 – 100 year) |
| N2O | 80205 | IPCC Fifth Assessment Report (AR5 – 100 year) |
| HFCs | 0.01 | IPCC Fifth Assessment Report (AR5 – 100 year) |

## **C7.2**

### **(C7.2) Break down your total gross global Scope 1 emissions by country/region.**

|  |  |
| --- | --- |
| **Country/Region** | **Scope 1 emissions (metric tons CO2e)** |
| Argentina | 220 |
| Brazil | 1843 |
| Canada | 36 |
| Mexico | 27256 |
| United States of America | 59627 |

## **C7.3**

### **(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.**

By facility

By activity

## **C7.3b**

### **(C7.3b) Break down your total gross global Scope 1 emissions by business facility.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Facility** | **Scope 1 emissions (metric tons CO2e)** | **Latitude** | **Longitude** |
| Section C7.3b facility data is tracked internally but deemed too detailed and unnecessary, thus retained as proprietary. |  |  |  |

## **C7.3c**

### **(C7.3c) Break down your total gross global Scope 1 emissions by business activity.**

|  |  |
| --- | --- |
| **Activity** | **Scope 1 emissions (metric tons CO2e)** |
| Manufacturing | 82082 |
| Used Truck | 217 |
| Offices | 2589 |
| Warehouses | 2177 |
| Other: Corporate-wide (DealCor and Fleet) | 1917 |

## **C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4**

### **(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization’s total gross global Scope 1 emissions by sector production activity in metric tons CO2e.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Gross Scope 1 emissions, metric tons CO2e** | **Net Scope 1 emissions , metric tons CO2e** | **Comment** |
| Cement production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Chemicals production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Coal production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Electric utility generation activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Metals and mining production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Oil and gas production activities (upstream) | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Oil and gas production activities (downstream) | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Steel production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Transport OEM activities | 84259 | <Not Applicable> | Includes manufacturing and PDC product parts warehousing. |
| Transport services activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |

## **C7.5**

### **(C7.5) Break down your total gross global Scope 2 emissions by country/region.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Country/Region** | **Scope 2, location-based (metric tons CO2e)** | **Scope 2, market-based (metric tons CO2e)** | **Purchased and consumed electricity, heat, steam or cooling (MWh)** | **Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)** |
| Argentina | 480 |  | 1232 |  |
| Brazil | 1064 |  | 15643 |  |
| Canada | 524 |  | 2130 |  |
| Mexico | 29531 |  | 53683 |  |
| United States of America | 93416 |  | 166542 |  |

## **C7.6**

### **(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.**

By facility

By activity

## **C7.6b**

### **(C7.6b) Break down your total gross global Scope 2 emissions by business facility.**

|  |  |  |
| --- | --- | --- |
| **Facility** | **Scope 2 location-based emissions (metric tons CO2e)** | **Scope 2, market-based emissions (metric tons CO2e)** |
| Section C7.6b data is tracked internally but deemed too detailed and unnecessary, thus retained as proprietary. |  |  |

## **C7.6c**

### **(C7.6c) Break down your total gross global Scope 2 emissions by business activity.**

|  |  |  |
| --- | --- | --- |
| **Activity** | **Scope 2, location-based emissions (metric tons CO2e)** | **Scope 2, market-based emissions (metric tons CO2e)** |
| Manufacturing | 104927 |  |
| Used Truck | 876 |  |
| Offices | 14430 |  |
| Warehouses | 4782 |  |

## **C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7**

### **(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization’s total gross global Scope 2 emissions by sector production activity in metric tons CO2e.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Scope 2, location-based, metric tons CO2e** | **Scope 2, market-based (if applicable), metric tons CO2e** | **Comment** |
| Cement production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Chemicals production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Coal production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Metals and mining production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Oil and gas production activities (upstream) | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Oil and gas production activities (downstream) | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Steel production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Transport OEM activities | 109709 |  | Includes manufacturing and PDC product parts warehousing. |
| Transport services activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |

## **C-TO7.8**

### **(C-TO7.8) Provide primary intensity metrics that are appropriate to your indirect emissions in Scope 3 Category 11: Use of sold products from transport.**

## **C7.9**

### **(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?**

Decreased

## **C7.9a**

### **(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Change in emissions (metric tons CO2e)** | **Direction of change** | **Emissions value (percentage)** | **Please explain calculation** |
| Change in renewable energy consumption | 0 | No change | 0 | No new renewables added to portfolio |
| Other emissions reduction activities | 48125 | Decreased | 22.5 | For reporting, this value is a mass balance; assumes all other reported values from actual CO2e emitted. Remainder is 'other activities' around energy conservation. |
| Divestment | 6093 | Decreased | 2.7 | CO2 value from divestitures divided by total CO2 emitted 2017. |
| Acquisitions | 0 | No change | 0 | No acquisitions to include in inventory |
| Mergers | 0 | No change | 0 | No mergers within operational control |
| Change in output | 44725 | Increased | 20.9 | Simple math for reporting purposes assumes percentage increase/decrease of CO2e is equivalent to percent change in production output. |
| Change in methodology | 0 | No change | 0 | No change. |
| Change in boundary | 0 | No change | 0 | No change. |
| Change in physical operating conditions | 0 | No change | 0 | None known other than identified energy savings initiatives included elsewhere. |
| Unidentified | 0 | No change | 0 | None known. |
| Other | 0 | No change | 0 | None known. |

## **C7.9b**

### **(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?**

Location-based

## **C8. Energy**

## **C8.1**

### **(C8.1) What percentage of your total operational spend in the reporting year was on energy?**

More than 0% but less than or equal to 5%

## **C8.2**

### **(C8.2) Select which energy-related activities your organization has undertaken.**

|  |  |
| --- | --- |
|  | **Indicate whether your organization undertakes this energy-related activity** |
| Consumption of fuel (excluding feedstocks) | Yes |
| Consumption of purchased or acquired electricity | Yes |
| Consumption of purchased or acquired heat | No |
| Consumption of purchased or acquired steam | No |
| Consumption of purchased or acquired cooling | No |
| Generation of electricity, heat, steam, or cooling | No |

## **C8.2a**

### **(C8.2a) Report your organization’s energy consumption totals (excluding feedstocks) in MWh.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Heating value** | **MWh from renewable sources** | **MWh from non-renewable sources** | **Total MWh** |
| Consumption of fuel (excluding feedstock) | HHV (higher heating value) | 0 | 419301 | 419301 |
| Consumption of purchased or acquired electricity | <Not Applicable> | 15650 | 223580 | 239230 |
| Consumption of purchased or acquired heat | <Not Applicable> | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Consumption of purchased or acquired steam | <Not Applicable> | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Consumption of purchased or acquired cooling | <Not Applicable> | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Consumption of self-generated non-fuel renewable energy | <Not Applicable> | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Total energy consumption | <Not Applicable> | 15650 | 642881 | 658531 |

## **C8.2b**

### **(C8.2b) Select the applications of your organization’s consumption of fuel.**

|  |  |
| --- | --- |
|  | **Indicate whether your organization undertakes this fuel application** |
| Consumption of fuel for the generation of electricity | No |
| Consumption of fuel for the generation of heat | Yes |
| Consumption of fuel for the generation of steam | No |
| Consumption of fuel for the generation of cooling | No |
| Consumption of fuel for co-generation or tri-generation | No |

## **C8.2c**

### **(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.**

### **Fuels (excluding feedstocks)**

Natural Gas

### **Heating value**

HHV (higher heating value)

### **Total fuel MWh consumed by the organization**

270785

### **MWh fuel consumed for self-generation of electricity**

<Not Applicable>

### **MWh fuel consumed for self-generation of heat**

<Not Applicable>

### **MWh fuel consumed for self-generation of steam**

<Not Applicable>

### **MWh fuel consumed for self-generation of cooling**

<Not Applicable>

### **MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

### **Comment**

### **Fuels (excluding feedstocks)**

Diesel

### **Heating value**

HHV (higher heating value)

### **Total fuel MWh consumed by the organization**

130836

### **MWh fuel consumed for self-generation of electricity**

<Not Applicable>

### **MWh fuel consumed for self-generation of heat**

<Not Applicable>

### **MWh fuel consumed for self-generation of steam**

<Not Applicable>

### **MWh fuel consumed for self-generation of cooling**

<Not Applicable>

### **MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

### **Comment**

Fuels used in products for testing or as OEM products containing required fluids, such as fuel.

### **Fuels (excluding feedstocks)**

Motor Gasoline

### **Heating value**

HHV (higher heating value)

### **Total fuel MWh consumed by the organization**

555

### **MWh fuel consumed for self-generation of electricity**

<Not Applicable>

### **MWh fuel consumed for self-generation of heat**

<Not Applicable>

### **MWh fuel consumed for self-generation of steam**

<Not Applicable>

### **MWh fuel consumed for self-generation of cooling**

<Not Applicable>

### **MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

### **Comment**

Fuels used in products for testing or as OEM products containing required fluids, such as fuel.

### **Fuels (excluding feedstocks)**

Kerosene

### **Heating value**

HHV (higher heating value)

### **Total fuel MWh consumed by the organization**

51

### **MWh fuel consumed for self-generation of electricity**

<Not Applicable>

### **MWh fuel consumed for self-generation of heat**

<Not Applicable>

### **MWh fuel consumed for self-generation of steam**

<Not Applicable>

### **MWh fuel consumed for self-generation of cooling**

<Not Applicable>

### **MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

### **Comment**

### **Fuels (excluding feedstocks)**

Propane Gas

### **Heating value**

HHV (higher heating value)

### **Total fuel MWh consumed by the organization**

17074

### **MWh fuel consumed for self-generation of electricity**

<Not Applicable>

### **MWh fuel consumed for self-generation of heat**

<Not Applicable>

### **MWh fuel consumed for self-generation of steam**

<Not Applicable>

### **MWh fuel consumed for self-generation of cooling**

<Not Applicable>

### **MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

### **Comment**

## **C8.2d**

### **(C8.2d) List the average emission factors of the fuels reported in C8.2c.**

### **Diesel**

### **Emission factor**

10.24

### **Unit**

kg CO2e per gallon

### **Emission factor source**

The Climate Registry Default Emissions Factors 2017, Table 13.1 U.S. Default CO2 Emission Factors for Transport Fuels

### **Comment**

### **Kerosene**

### **Emission factor**

10.18

### **Unit**

kg CO2e per gallon

### **Emission factor source**

The Climate Registry Default Emissions Factors 2017, Table 13.1 U.S. Default CO2 Emission Factors for Transport Fuels

### **Comment**

### **Motor Gasoline**

### **Emission factor**

8.81

### **Unit**

kg CO2e per gallon

### **Emission factor source**

The Climate Registry Default Emissions Factors 2017, Table 13.1 U.S. Default CO2 Emission Factors for Transport Fuels

### **Comment**

### **Natural Gas**

### **Emission factor**

53.32

### **Unit**

kg CO2e per million Btu

### **Emission factor source**

The Climate Registry Default Emissions Factors 2017, Table 12.1 U.S. Default Factors for Calculating CO2 Emissions from Fossil Fuel and Biomass Combustion

### **Comment**

### **Propane Gas**

### **Emission factor**

5.74

### **Unit**

kg CO2e per gallon

### **Emission factor source**

The Climate Registry Default Emissions Factors 2017, Table 13.1 U.S. Default CO2 Emission Factors for Transport Fuels

### **Comment**

## **C8.2f**

### **(C8.2f) Provide details on the electricity, heat, steam and/or cooling amounts that were accounted for at a low-carbon emission factor in the market-based Scope 2 figure reported in C6.3.**

### **Basis for applying a low-carbon emission factor**

Grid mix of renewable electricity

### **Low-carbon technology type**

Hydropower

### **Region of consumption of low-carbon electricity, heat, steam or cooling**

Other, please specify (Brazil, South America)

### **MWh consumed associated with low-carbon electricity, heat, steam or cooling**

15650

### **Emission factor (in units of metric tons CO2e per MWh)**

68

### **Comment**

UOM - Gram per KWH, CO2e

## **C-TO8.4**

### **(C-TO8.4) Provide any efficiency metrics that are appropriate for your organization’s transport products and/or services.**

### **Activity**

Heavy Duty Vehicles (HDV)

### **Metric figure**

### **Metric numerator**

Please select

### **Metric denominator**

Production: Vehicle

### **Metric numerator: Unit total**

### **Metric denominator: Unit total**

### **% change from previous year**

### **Please explain**

## **C9. Additional metrics**

## **C9.1**

### **(C9.1) Provide any additional climate-related metrics relevant to your business.**

## **C-TO9.3/C-TS9.3**

### **(C-TO9.3/C-TS9.3) Provide tracking metrics for the implementation of low-carbon transport technology over the reporting year.**

### **Activity**

Heavy Duty Vehicles (HDV)

### **Metric**

Production

### **Technology**

Vehicle using LPG/CNG

### **Metric figure**

### **Metric unit**

Please select

### **Explanation**

Alternate fuel buses and other product.

### **Activity**

Heavy Duty Vehicles (HDV)

### **Metric**

Sales

### **Technology**

Vehicle using LPG/CNG

### **Metric figure**

### **Metric unit**

Please select

### **Explanation**

### **Activity**

Heavy Duty Vehicles (HDV)

### **Metric**

Other, please specify (R&D)

### **Technology**

Battery electric vehicle (BEV)

### **Metric figure**

1

### **Metric unit**

Units

### **Explanation**

In 2018, Navistar took its electric school bus, chargE™, on a national tour. This concept electric school bus incorporates a common group electric drivetrain, which is quiet and has no emissions, from Navistar’s alliance partner TRATON GROUP.

## **C-TO9.6/C-TS9.6**

### **(C-TO9.6/C-TS9.6) What is your investment in research and development (R&D), equipment, products and services and which part of it would you consider a direct investment in the low-carbon transition?**

### **Activity**

Heavy Duty Vehicles (HDV)

### **Investment start date**

January 1 2016

### **Investment end date**

December 31 2021

### **Investment area**

R&D

### **Technology area**

Electrification

### **Investment maturity**

Pilot demonstration

### **Investment figure**

1

### **Low-carbon investment percentage**

0-20%

### **Please explain**

The exact investment amount is deemed proprietary. Investment end date is arbitrary, as unknown successful end date for heavy truck, though deemed soon. Other vehicle types exist. Navistar presented its vision for advanced technologies at the Green Transportation Summit and Expo and the Advanced Clean Transportation Expo. In addition, Navistar continues to participate in the Department of Energy’s SuperTruck program.

## **C10. Verification**

## **C10.1**

### **(C10.1) Indicate the verification/assurance status that applies to your reported emissions.**

|  |  |
| --- | --- |
|  | **Verification/assurance status** |
| Scope 1 | No third-party verification or assurance |
| Scope 2 (location-based or market-based) | No third-party verification or assurance |
| Scope 3 | No emissions data provided |

## **C10.2**

### **(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?**

No, we do not verify any other climate-related information reported in our CDP disclosure

## **C11. Carbon pricing**

## **C11.1**

### **(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?**

No, and we do not anticipate being regulated in the next three years

## **C11.2**

### **(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?**

No

## **C11.3**

### **(C11.3) Does your organization use an internal price on carbon?**

No, and we do not currently anticipate doing so in the next two years

## **C12. Engagement**

## **C12.1**

### **(C12.1) Do you engage with your value chain on climate-related issues?**

Yes, our suppliers

Yes, our customers

Yes, other partners in the value chain

## **C12.1a**

### **(C12.1a) Provide details of your climate-related supplier engagement strategy.**

### **Type of engagement**

Innovation & collaboration (changing markets)

### **Details of engagement**

Run a campaign to encourage innovation to reduce climate impacts on products and services

### **% of suppliers by number**

10

### **% total procurement spend (direct and indirect)**

### **% Scope 3 emissions as reported in C6.5**

0

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

We are engaging with key suppliers to improve overall fuel efficiency of our products. Highlights of our efforts include utilizing predictive cruise control technology, remote engine control modules servicing, low rolling resistant tires, weight reductions, aerodynamics, improved lubrication materials, and use of fuel efficient powertrain and transmission combinations.

### **Impact of engagement, including measures of success**

Navistar’s introduction of the LT Series built on the company’s many innovations designed to reduce energy consumption. In addition to vehicle aerodynamics, these innovations have included improvements in base engine efficiency, engine-transmission integration, lubrication materials, and intelligent control strategies, as well as vehicle weight reductions.

### **Comment**

## **C12.1b**

### **(C12.1b) Give details of your climate-related engagement strategy with your customers.**

### **Type of engagement**

Education/information sharing

### **Details of engagement**

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

### **% of customers by number**

5

### **% Scope 3 emissions as reported in C6.5**

0

### **Please explain the rationale for selecting this group of customers and scope of engagement**

Supply GHG emissions of products and manufacturing processes, reporting to outside parties, and voluntary efforts to reduce emissions are supplied at customer request.

### **Impact of engagement, including measures of success**

Perceived as competitive advantage providing in depth sustainability data and initiatives. No known instances of not winning product supply bid related to engagement or information sharing.

## **C12.1c**

### **(C12.1c) Give details of your climate-related engagement strategy with other partners in the value chain.**

Other Partners: U.S. Department of Energy - Navistar delivered the results of the five-year SuperTruck research and development program undertaken with the U.S. Department of Energy (DOE) in 2016. The truck exceeded the DOE’s requirements for a 50 percent improvement in overall freight efficiency on a heavy-duty Class 8 tractor-trailer vehicle, and 50 percent engine efficiency. Our SuperTruck I work also inspired our International® LT® Series of ergonomic, aerodynamic Class 8 vehicles, which in 2017 was shown by a third-party study to provide industry-leading fuel efficiency. We are now participating in the next phase of DOE’s SuperTruck initiative, SuperTruck II, as Navistar leads one of four teams in the second phase of the U.S. Department of Energy’s SuperTruck initiative, whose goals include the demonstration of greater than 100% improvement in freight efficiency over 2009 equivalent product, and a 55% engine increase in brake thermal efficiency performance. DOE Better Plants Better Buildings program participation resulted in an award as "Goal Achiever" for a 27% reduction in energy intensity over just 8 years. This DOE collaboration spurred a manufacturing site energy reduction Treasure Hunt exchange with other industry and DOE partners. These events provided success in sharing opportunities, collabartion, and identifying specific energy reduction and cost savings items. Texas A&M Transportation Institute - Navistar’s is playing a leading role in research partnership with the Texas A&M Transportation Institute developing a new generation of connected heavy-duty vehicles. Navistar is also exploring the great potential benefits from autonomous technologies that enable platooning, which allows trucks to safely follow each other to reduce wind drag. This parternership has put test units on the highway.

## **C12.3**

### **(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?**

Direct engagement with policy makers

Trade associations

Other

## **C12.3a**

### **(C12.3a) On what issues have you been engaging directly with policy makers?**

|  |  |  |  |
| --- | --- | --- | --- |
| **Focus of legislation** | **Corporate position** | **Details of engagement** | **Proposed legislative solution** |
| Other, please specify (Phase I and II GHG for truck) | Support with major exceptions | The company worked extensively with EPA and NHTSA on the next phase of greenhouse gas/fuel efficiency regulations in the heavy-duty sector. Navistar supported the larger goal of the proposed rule, while expressing concerns about certain specific aspects of the proposed rule. The final rule, which was adopted in October 2016, phases in over model years 2021, 2024 through 2027, and will require new and expanded efficiency technologies across vehicle and engine platforms. EPA has estimated the Phase 2 rule will result in an additional 10 percent | The final rule, which was adopted in October 2016, phases in over model years 2021, 2024 and 2027, and will require new and expanded efficiency technologies across vehicle and engine platforms. EPA has estimated the Phase 2 rule will reduce emissions by approximately 1.1 billion metric tons and reduce oil consumption by as much as two billion barrels of oil over the life of the vehicles covered by Phase 2. |
| Energy efficiency | Support with minor exceptions | Various sites working with local Chambers of Commerce or trade groups regarding support of incentives for energy efficiency improvements, energy efficiency investments, and real reduction projects at its manufacturing sites. | None. One of the minor exceptions is Clean Power Plan |
| Clean energy generation  *We SUPPORT clean energy generation but highly OPPOSE the Ohio proposed HB6, expected to pass.* | Support with minor exceptions | Since 2013 to date Navistar has lobbied against legislative proposals in Ohio to roll back renewable power standards in the state which in 2017 remained stayed but not eliminated. | Ohio legislature HB6, expected to pass, will remove the renewable energy portfolio standards that were frozen at lesser amounts in 2017 and add requirements, for utilities to impose new fee/tax to bailout failing nuclear plants and upgrading 2 coal-fired units bill termed "Ohio Clean Air Program" |
| Energy efficiency  *We SUPPORT energy efficiency but highly OPPOSE the removal of EE program and replacing with new fees dedicated to a specific utility business entity via Ohio proposed HB6, expected to pass.* | Oppose | Since 2013 to date Navistar has lobbied against legislative proposals in Ohio to roll back energy efficiency and renewable power standards in the state. | Ohio legislature voted to remove the energy efficiency incentive program requirements and rebates, replacing with a new fee/tax to bailout failing nuclear plants and upgrading 2 coal-fired units in "Ohio Clean Air Program" |

## **C12.3b**

### **(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?**

Yes

## **C12.3c**

### **(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.**

### **Trade association**

Engine Manufacturers Association

### **Is your position on climate change consistent with theirs?**

Mixed

### **Please explain the trade association’s position**

Navistar is primarily focused on regulations that impact our products, on manufacturing policy and on trade issues. The Engine Manufacturers Association served as a key liaison between commercial vehicle manufacturers and the EPA during the heavy duty GHG phase I and phase II. More recently, the association has been working with manufacturers, EPA and California to have a productive dialogue on NOx emissions and EPA’s Clean Truck Initiative. Navistar also provides funding for technical studies of our industry vehicles to help guide policy and regulatory implementation. Position is workable rules within available technologies.

### **How have you influenced, or are you attempting to influence their position?**

Yes, Navistar has participated in the development of positions taken by the EMA.

### **Trade association**

National Association of Manufacturers (NAM)

### **Is your position on climate change consistent with theirs?**

Mixed

### **Please explain the trade association’s position**

Navistar is primarily focused on regulations that impact our products on manufacturing and trade policy. The National Association of Manufacturers, Navistar and other commercial vehicle manufacturers have supported EPA’s Greenhouse Gas Phase Ii regulations and the inclusion of limiting high polluting glider vehicles in the market place, support our industry’s commitment to reduce emissions.

### **How have you influenced, or are you attempting to influence their position?**

Yes, Navistar has participated in the development of positions taken by the NAM.

## **C12.3e**

### **(C12.3e) Provide details of the other engagement activities that you undertake.**

Navistar engages on a wide variety of engagement activities at the state and federal level. In 2018, Navistar lobbied at the federal level on the Greenhouse Gas Phase II rule for commercial vehicles, trade issues, Department of Energy funding for the Advanced Vehicle Technology office, tax reform, pension reform, and for key defense programs. Navistar also lobbied in California, Ohio, Illinois, and Oklahoma on various state and local issues that impact our dealers operations and facilities in those states.

## **C12.3f**

### **(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?**

Navistar has an annual policy and governmental affairs team meeting that develops the company’s lobbying agenda. This agenda is shared with the Vice-President of Product Development, the Chief Financial Officer, the Chief Operating Officer and the President/Chief Executive Officer for review and revision. Navistar’s lobbying team also conducts a mid-year review of on-going issues and formally amends its lobbying agenda at that point to reflect any changes in company priorities.

During the development, review and revision process, Navistar ensures that its lobbying activities are focused on the company’s key concerns and that the government relations group’s lobbying activities align with all relevant corporate strategies.

## **C12.4**

### **(C12.4) Have you published information about your organization’s response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).**

### **Publication**

In voluntary sustainability report

### **Status**

Complete

### **Attach the document**

[Navistar\_2018\_SR.pdf](https://www.cdp.net/en/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/BSKasg44j06h0X_LnV2moA/Navistar2018SR.pdf)

### **Page/Section reference**

### **Content elements**

Governance

Risks & opportunities

Emissions figures

Emission targets

Other metrics

### **Comment**

Sustainability report and GRI reporting for CY18.

## **C14. Signoff**

## **C-FI**

### **(C-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.**

## **C14.1**

### **(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.**

|  |  |  |
| --- | --- | --- |
|  | **Job title** | **Corresponding job category** |
| Row 1 | Director, Environmental and Energy Affairs and Senior Counsel | Business unit manager |