

# CARBON & CLIMATE REPORT

MARCH 2021



**THOR**  
Go Everywhere. Stay Anywhere.™

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The year 2020 tied 2016 as the hottest on record. Five of the hottest years ever recorded have occurred during the past decade. Our climate is changing and we can see the devastating effects around us today. More frequent and powerful hurricanes, extreme temperature volatility, longer droughts, and rising sea levels resulting in colossal coastal flooding. An article recently published in the Wall Street Journal reports between 1994 and 2017, the earth lost 28 million metric tons of ice. That is an amount roughly equivalent to a sheet of ice 100 meters thick covering the state of Michigan or the entire U.K. – and the meltwater from so much ice loss has raised the sea level just over an inch world-wide. We need only look in our own backyard to see the devastating impact of rising water levels in the Great Lakes.

The Covid-19 pandemic is straining, and in some cases breaking, healthcare systems and economies around the world. Scientists predict that if the earth's average temperature continues to increase, we should expect more frequent and severe pandemic threats. In other words – climate change is a direct and real threat to THOR's purpose of connecting people with nature and one another, and consequently, to its business.

The problem we face is that human activities – mainly the burning of fossil fuels (coal, oil and natural gas), agriculture and land clearing – are increasing the concentration of greenhouse gases. This is the enhanced greenhouse effect, which is contributing to the warming of the earth. Research shows the warming of the earth must be kept at a maximum of 1.5°C, or 2.7°F, from a 1990 baseline to avoid the worst impacts of climate change. This is the basis for "Business Ambition for 1.5°C" which we reference in this report.<sup>1, 2, 3, 4, 5</sup>

Working together, we can affect the trajectory of climate change and thereby prevent the more devastating impacts of climate change, and some damage may even be reversed – but the time to act is now. The transformation to a carbon-free economy can save the earth for future generations. While the risks from climate change are many, THOR recognize this crisis also creates opportunity – for positive social change, addressing inequalities, and accelerating innovation of new and exciting technology.

The focus of this report is to offer THOR stakeholder's greater insight into strategies, plans and actions we are taking as the industry leader to combat the risks posed by climate change. The new emission and energy intensity data shared in this report are from activities recently completed to establish THOR's fiscal year 2019 (August 1, 2018 to July 31, 2019) as our environmental reporting baseline. Comparative data trends for the periods of fiscal year 2020 (August 1, 2019 to July 31, 2020) and fiscal year 2021 (August 1, 2020 to July 31, 2021) will be presented in THOR's fiscal year 2021 sustainability report. However, in this report we also disclose new information concerning investments in renewable energy self-generation and reducing energy intensity, projects to convert away from fossil fuels, and sustainability risk management.

# ABOUT THOR

THOR Industries, Inc., was founded in 1980 with the purchase of Airstream. THOR Industries went public in 1984, and since that time, THOR has grown organically and through strategic acquisitions. Today, THOR is the sole owner of operating companies, which combined, represent the world's largest manufacturer of recreation vehicles (RV's). The THOR Family of Companies is committed, now more than ever, to connecting people to nature, conserving our natural resources and continuing to improve our sustainability efforts in measurable ways, year on year.

THOR is proud of its path to become the global leader in the RV Industry. We've created thousands of jobs in the communities in which we operate and we continue to strive to connect people with nature, and families with each other.

Here is a summary of business metrics for THOR's fiscal year ended July 31, 2020.

**335** FACILITIES  
ENCOMPASSING MORE THAN 20,600,000 SQ. FT.

MANUFACTURING OPERATIONS IN **5** COUNTRIES-  
FRANCE, GERMANY, ITALY, UK & US

**3,300** DISTRIBUTOR  
LOCATIONS IN 25+ COUNTRIES

**219,776**  
RV UNITS MADE AND SOLD

**~23,000**  
GLOBAL TEAM MEMBERS

Various external organizations commonly identify THOR as a 'automotive or supplier' company when using standard industry classifications. However, particularly from the environmental perspective, this classification is inaccurate, meaning comparisons between THOR and such "peers" are often inapt and potentially misleading. A majority of THOR's sales are derived from towable RV's, meaning these units are not motorized or self-propelled. The balance of sales is from motorized RV's wherein THOR companies upfit vehicles supplied by multiple automotive OEM's. The production of towable and motorized RV's is very similar, consisting of constructing flooring, wall and roof systems, and equipping with kitchen, bath, sleeping and general living quarters. A more accurate comparison of THOR may be to the manufactured housing sector.

# CLIMATE & GOVERNANCE

THOR is governed by our Executive Leadership Team and Board of Directors. The Board consists of eight external members and one internal executive officer. THOR's President and Chief Executive Officer is a board member, while we operate with an independent Chairman of the Board.

THOR's Executive Leadership Team (ELT) today is comprised of:

- President and Chief Executive Officer
- Senior Vice President and Chief Financial Officer
- Senior Vice President, General Counsel and Corporate Secretary
- Senior Vice President of Administration and Human Resources
- Chief Innovation Officer

The Board of Directors maintains the following standing committees:

- Audit Committee: Ensures the integrity of our financial statements and compliance with legal and regulatory requirements. Manages our internal and external auditors.
- Compensation Committee: Has overall responsibility for evaluating and approving the structure of our executing plans, policies and programs.
- Nominating and Governance Committee: Oversees the composition of the Board of Directors by regularly reviewing membership and nominating prospective members.

During fiscal year 2020, THOR implemented a policy to review Sustainability as a standing agenda topic with the Nomination and Governance Committee during quarterly meetings, and the full board from time to time. The Nomination and Governance Committee currently consists of four independent board members. The quarterly sustainability meeting agenda includes discussion on priorities and strategies, actions plans, status and metrics for:

- Environmental: Carbon & Climate, Waste & Toxicity, Natural Resources, and Risk & Opportunities.
- Social: Human Rights, Labor, Health & Safety, Stakeholders & Society, Product Safety, Quality & Brand.
- Governance: Board Structure, Compensation, Stakeholder Rights, and Audit/Risk.

Ensuring we have the best people and practices in place to lead THOR through our sustainability journey is essential. THOR has established a Sustainability Committee consisting of leaders from across the organization with complementary functional expertise, including two representatives from THOR's Executive Leadership Team, and is led by our VP of Sustainability, a position created during fiscal year 2020. Reporting directly to THOR's Nomination and Governance Committee, the Sustainability Committee meets monthly to define the vision, strategies and action plans required to position THOR as a leader in sustainability.

A challenge faced by many companies is how to implement organizational changes to advance sustainability initiatives while maintaining critical focus on operational execution. To address this concern, THOR's VP of Sustainability leads the Sustainability Operating Committee which consists of executive leadership delegates from each of the THOR Family of Companies, as defined by operating relationships. This committee meets monthly to discuss sustainability goals, solicit feedback on business concerns and recommendations, and align on implementation and resource planning. The Sustainability Operating Committee is a critical path for the flow of information to/from the THOR companies and the Nomination Committee and Sustainability Committee.



# SUSTAINABILITY RISK MANAGEMENT

THOR has a well-developed enterprise risk management (ERM) process based on the Committee of the Sponsoring Organizations of the Treadway Commission Enterprise Risk Management – Integrated Framework. THOR’s ERM process involves an annual assessment of risks facing the company, typically highlighting a one-year time horizon, where participants force rank a number of risks based on financial impact and likelihood of occurrence. The top ten risks, identified as a result of the annual ERM survey, are reviewed with THOR’s Executive Leadership Team and Board of Directors.<sup>6</sup>

In order to capture THOR’s sustainability risk level, the initial strategy was to incorporate sustainability risk and opportunities management as an “add-on” to our current ERM process. However, we quickly identified several obstacles with this approach:

- Sustainability risks are more difficult to quantify than traditional risks.
- Longer timelines of 10, 20 or even 30 years are used when considering sustainability risks.
- Unpredictability exists with many sustainability issues.
- Sustainability risks are emerging without direct historical references.

Research to determine the best way to identify sustainability risks led us to The World Economic Forum’s Global Risk Report 2016. This report shows that in 2016, societal and environmental risks represented four out of the top five global risks in terms of likelihood and three out of five global risks in terms of impact. This result is a significant shift from ten years prior when economic, geopolitical and technological risks comprised the majority of top global risks in terms of impact.<sup>7</sup>

Since THOR recognizes the criticality of sustainability risks and is passionate about mainstreaming a sustainability risk assessment, we made the decision to conduct a stand-alone sustainability enterprise risk management process to ensure a prioritization on sustainability that is not diluted in importance by other business challenges.

In fiscal year 2021, we launched a new program for sustainability risk management (SRM) that focuses exclusively on environmental, social and governance risks and opportunities of climate change. To address the challenges outlined above, management training on sustainability and climate change preceded the roll-out of the SRM tool. Consistent with THOR’s current enterprise risk management process, the findings of the SRM will be reported directly to the Board of Directors and Executive Leadership Team, and will be shared across the THOR Family of Companies through the Sustainability Operating Committee.

Our sustainability risk management process borrows from The World Economic Forum’s Global Risk Report 2016 to define top risks by probability and impact:

## Probability

1. Large-scale involuntary migration
2. Extreme weather events
3. Failure of climate change mitigation or adoption
4. Interstate conflict
5. Natural catastrophes
6. Failure of national governance
7. Unemployment or underemployment
8. Data fraud or theft
9. Water crisis
10. Illicit trade

## Impact

1. Failure of climate mitigation or adoption
2. Weapons of mass destruction
3. Water crisis
4. Large scale involuntary migration
5. Energy price shock
6. Biodiversity loss and ecosystem collapse
7. Fiscal crisis
8. Spread of infection
9. Asset bubble
10. Significant social instability

As outlined above, key challenges of launching an SRM process are quantifying the scenarios over a longer-than-typical time horizon, and educating the company as to the contributing factors and causal relationships. For this task, we focused our research on information published by the National Oceanic and Atmospheric Administration (NOAA).<sup>8</sup>

In THOR’s SRM process we consider three scenarios for greenhouse gas emissions and corresponding global average temperature increase using the concepts: High – carbon emissions continue to increase at current rates; Medium – assumes relative balance between greenhouse gas emissions and other renewable energy solutions (emissions slow from current levels); Low – in this scenario greenhouse gas emissions peak in the coming decades and gradually decline to achieve 1990 levels (consistent with “Business Ambition for 1.5°C”).

The SRM process considers in a matrix format the variables of the three greenhouse gas emission projections, changes to average global temperature and the resulting impact on ice cap melt, precipitation, sea levels and sea temperature over the time horizons of 2030, 2040 and 2050. Participants were asked to consider these scenarios versus the risk factors based on probability and likelihood as defined above.

We look forward to sharing more information regarding THOR’s Sustainability Risk Management process in our FY2021 Sustainability Report.

# BASELINE AND TARGET SETTING

As a natural expansion of THOR's commitment to the UN Global Compact, we became a signatory of the "Business Ambition for 1.5°C" in June, 2020. THOR took this bold action as recognition of the environmental, social, and governance risks posed by climate change, and commit to be carbon net-neutral by 2050. Furthermore, we have set the interim target of 50% reduction in GHG emissions by 2030. THOR has until June, 2022 for formal approval of GHG targets by SBTi; however, it is our intension to secure this approval as soon as practical.

We selected THOR's fiscal year 2019 (August 1, 2018 to July 31, 2019) as the reporting baseline. This decision was based on the recognition that the COVID-19 pandemic would distort economic activity during fiscal year 2020, and thereby create risk of variance in emission data. THOR defines the reporting boundary for climate-related impacts from the perspective of operational control, as this methodology is consistent with established company reporting norms.

The immediate priority has been to analyze and define targets for Scope 1 and Scope 2 emissions. The emissions data is calculated using actual energy consumption. Greenhouse gas emissions are calculated using the EPA Simplified GHG Calculator (SGEC), which summarizes output in CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O, collectively reported as CO<sub>2</sub> equivalents. For the purposes of this report we are using greenhouse gas, CO<sub>2</sub> equivalents and carbon emissions interchangeably. Regarding Scope 2, we calculated emissions using market actuals as provided by electricity providers. Also, this data is characterized as absolute emissions and normalized as a factor of USD\$ revenue.<sup>9</sup>

It is noteworthy that for THOR's fiscal year 2019, we have total GHG emissions data for our European companies; however, we do not have details regarding energy usage, breakdown of greenhouse gases, previous energy efficiency investments, etc., due to acquisition timing and subsequent data integration. We are working to enhance data collection capabilities regarding these operations for future reporting.

THOR's fiscal year 2019 absolute greenhouse gas emissions totaled 109,976 metric tons. This translates to an annual reduction of 4,999 metric tons to achieve the target of 50% reduction by 2030, and 2,750 metric ton annual reduction to achieve the net-neutral target by 2050.

**Chart 1: Absolute GHG Emissions.**

Absolute Emissions (Metric Tons)	Scope 1 Emissions	Scope 2 Market-based Emissions	Yearly Reduction Goal until 2030		Yearly Reduction Goal until 2050	
			Scope 1	Scope 2	Scope 1	Scope 2
THOR North America	37,144.36	50,408.57	1,688.38	2,291.30	928.61	1,260.21
THOR Europe	9,438.00	12,985.00	429.00	590.23	235.95	324.63
THOR Total	46,582.36	63,393.57	2,117.38	2,881.53	1,164.56	1,584.84

Chart 2 summarizes greenhouse emissions as normalized to USD\$ revenue. THOR's fiscal year 2019 emissions totaled 2.24 metric tons per \$100,000 of revenue. We therefore must reduce greenhouse gas emissions by 0.10 metric tons annually to achieve the target of 50% reduction by 2030, and 0.05 metric tons per year by 2050 to achieve net-neutral target, as a relationship to revenue USD\$.

**Chart 2: Emissions Normalized to Revenue USD\$**

Normalized Emissions (Metric Ton/\$100,000)	Scope 1	Scope 2 Market-based Emissions	Yearly Reduction Goal until 2030		Yearly Reduction Goal until 2050	
			Scope 1	Scope 2	Scope 1	Scope 2
THOR North America	0.58	0.78	0.03	0.04	0.01	0.02
THOR Europe	0.37	0.51	0.02	0.02	0.01	0.01
THOR Total	0.95	1.29	0.04	0.06	0.02	0.03

Using the EPA Simplified GHG Calculator, Chart 3 contains a summary of emissions by chemical type for THOR North America for the period of fiscal year 2019.

**Chart 3: Emission by Type for North America**

Absolute Emission Types	Scope 1 Emissions			Scope 2 Emissions		
	CO <sub>2</sub> (Metric Tons)	CH <sub>4</sub> (Ounces)	N <sub>2</sub> O (Ounces)	CO <sub>2</sub> (Metric Tons)	CH <sub>4</sub> (Ounces)	N <sub>2</sub> O (Ounces)
THOR North America	37,143.19	34,119.36	6,960.12	51,580.43	147,033.57	27,340.82
Reduction Yearly Until 2030	1,688.33	1,550.88	316.37	2,344.57	6,683.34	1,242.76
Reduction Yearly Until 2050	928.58	852.98	174.00	1,289.51	3,675.84	683.52

THOR has recently begun the process to define and quantify Scope 3 greenhouse gas emissions. While this work is in the early stages of development, we are currently focusing on understanding the below emission sources as critical elements of THOR's Scope 3 boundary:

- Transportation of finished RV products from THOR factories to dealer locations
- End-customer RV use, with sub-categories of 'travel to destination' and 'recreational use'
- Airline and rental car usage from company sponsored business travel

We look forward to continued engagement with Science Based Target initiative (SBTi) regarding Scope 3 emissions boundaries to facilitate incorporation into reporting and target setting.

# ENERGY CONSUMPTION & EMISSIONS REDUCTION

We organize our energy sources as electricity, natural gas, diesel, unleaded gas, and liquid propane. The table below summarizes consumption for fiscal year 2019 for THOR North America.

**Chart 4: Energy Consumption**

Region	Electricity (kWh)	Natural Gas (Therms)	Diesel (Gal)	Unleaded Gas (Gal)	Liquid Propane (Gal)
THOR North America	93,735,915.20	5,780,085.40	173,710.43	158,337.21	562,091.30

By far, the largest contributor to THOR's climate emissions is electricity consumption. We are pursuing a multi-pronged approach to 1) engage with electricity providers to understand their respective timeline for conversion to renewable energy and away from fossil fuels, 2) internal investment in renewable energy self-generation, and 3) actions to reduce energy intensity.

Currently, an estimated 16% of THOR's North American electricity supply is derived from renewable energy sources. The percentage of clean energy is expected to increase significantly to an estimated 29% by 2028, based on engagement with our electricity supply partners. These actions by THOR's electricity suppliers translates to an estimated reduction of 7,848 MT of GHG emissions annually, at fiscal year 2019 base values. While this is strong progress by our energy partners, we continue to encourage more aggressive conversion to renewable sources of energy.

Some of the THOR companies secure 100% renewable energy credits (REC) in partnership with their local electricity utility's solar energy farms. Using fiscal year 2019 data, these operations consumed 5,920 MWH of electricity, and the REC's represent the avoidance of 3,361 MT of greenhouse gas emissions. THOR's global operations are in close dialogue with our energy suppliers to identify opportunities for partnership with locally produced REC projects as well as participation in regional and/or national renewable energy markets.

To compliment the actions of our electric suppliers to reduce their dependency on energy derived from fossil fuels, to-date THOR has committed to invest more than \$6,262,000 in multiple Solar Photovoltaic Systems capable of generating in excess of 6,448 MWH, with the first phase coming online during late 2020. THOR's investments in renewable energy self-generation will further reduce GHG emissions by an estimated 3,408 MT annually. And we are currently studying additional opportunities to further expand our clean energy production capacity.

At THOR, continuous improvement is an integral part of our business culture. We recently invested more than \$1,279,000 to reduce the energy intensity of our operations. These actions represent annual saving of an estimated 10,815 MWH of electricity with a corresponding 4,203 MT reduction in carbon emissions at fiscal year 2019 base values.

We conducted an analysis of Scope 1 emissions from our US companies to better understand sources and to support the development of strategies to reduce and eliminate. Emissions from stationary combustion accounts for approximately 83% of Scope 1, while fleet vehicles represent roughly 16% of emissions.

As next steps, we have identified the top sources of stationary emissions and are studying opportunities to replace with zero-emission equipment or eliminate the need. Forklifts are the greatest contributor of fleet emissions. In December 2020, THOR launched a project to validate battery electric forklifts, with the goal of converting the fleet to full battery electric over the next several years. As a point of reference, conversion to battery electric forklift fleet by 2025 will eliminate an estimated 7,427 MT of Scope 1 emissions annually.



# CLIMATE PARTNERSHIPS

Our National Forests offer incredible life-giving resources. These public lands are the cornerstone of our outdoor heritage and provide Americans with clean water, fresh air and open spaces to explore. Seven in ten Americans live within a 2-hour drive of a National Forest, making these places the backyard playgrounds for 70 percent of the U.S. population.

THOR announced in November, 2020, a conservation effort in partnership with the National Forest Foundation (NFF) to plant half a million new trees in national forests by 2025. The mission of the National Forest Foundation (NFF) is to engage Americans in promoting the health and public enjoyment of the National Forest System. NFF is the only nonprofit dedicated to addressing the many challenges facing National Forests and Grasslands, including wildfires, insects, disease, sustainability efforts and funding shortfalls.<sup>10</sup>

Visited by millions each year and having experienced a double digit increase in use during the Covid-19 pandemic, National Forests provide access to outdoor recreation activities in 44 states and Puerto Rico. THOR's commitment to fund the planting of 500,000 trees over five years will support rebuilding of public lands that help sequester greenhouse gases (GHG), filter pollutants, and release life-giving oxygen while providing a retreat for outdoor newcomers and enthusiasts.

THOR recognizes there is a sequestering benefit to the 500,000 trees over five years program. We are working within the sustainability community to confirm a preferred reporting standard for tree carbon sequestering benefits before including in THOR's carbon and climate reporting.

# CONCLUSION

THOR fully embraces the Ten Principles of the UN Global Compact, and completed the annual Communication on Progress (CoP) submission during January, 2021. We recently reached out to the Climate Disclosure Project (CDP) to self-initiate participation in their 2021 Climate Questionnaire process – this engagement was not at the request of a THOR stakeholder, but an example of our proactive strategies to learn and drive continuous improvement in being a leader in the fight against climate change.

THOR is embracing the principles of several organizations regarding sustainability reporting as our climate reporting methodology evolves, the Sustainability Accounting Standards Board (SASB), Task Force on Climate-related Financial Disclosures (TCFD), and General Reporting Initiative (GRI) as examples, and are researching accreditation of core team members. We are also researching opportunities for benchmarking with companies listed in the Dow Jones Sustainability Index to become a better sustainability practitioner.

We are in the very early stages of our sustainability journey, and understand there is no definitive end, but instead view this as an integral part of THOR's culture of continuous improvement and market leadership. We are proud of the accomplishments we've made in advancing the principles of the UN Global Compact, the "Business Ambition for 1.5°C", and supporting climate disclosures. We recognize these actions are just the first steps in THOR's very intentional journey to lead and positively affect the challenge of climate change.



## Forward-Looking Statements

This release includes certain statements that are "forward-looking" statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements are made based on management's current expectations and beliefs regarding future and anticipated developments and their effects upon THOR, and inherently involve uncertainties and risks. These forward-looking statements are not a guarantee of future performance. We cannot assure you that actual results will not differ materially from our expectations. Factors which could cause materially different results include, among others: the costs of compliance with governmental regulation; legal and compliance issues including those that may arise in conjunction with recently completed transactions; management changes, general economic, market and political conditions in the various countries in which our products are produced and/or sold; the impact of changing emissions and other regulatory standards in the various jurisdictions in which our products are produced and/or sold; and changes to our investment and capital allocation strategies or other facets of our strategic plan.

These and other risks and uncertainties are discussed more fully in our Quarterly Report on Form 10-Q for the quarter ended January 31, 2021 and in Item 1A of our Annual Report on Form 10-K for the year ended July 31, 2020.

We disclaim any obligation or undertaking to disseminate any updates or revisions to any forward-looking statements contained in this release or to reflect any change in our expectations after the date hereof or any change in events, conditions or circumstances on which any statement is based, except as required by law.

1. Signatories of "Business Ambition for 1.5°C" have 2 years from date of commitment acceptance to release a plan to achieve net-neutral greenhouse gas emissions (GHG) that is approved by Science Based Targets initiative (SBTi).
2. GHG emissions are defined as Scope 1 = emissions from sources owned or controlled by the company, Scope 2 = emissions from purchased energy consumed by the company, and Scope 3 = emissions not included in Scope 2 that occur upstream and downstream of the company.
3. "Business Ambition for 1.5°C" Commitment is defined as net-zero GHG emissions in or before 2050 for Scope 1, Scope 2 and to be verified percentage of Scope 3, including interim science-based targets.
4. THOR commits to a 50% reduction in GHG Scope 1 and Scope 2 emissions, from the baseline of fiscal year 2019, achieved in or before 2030.
5. Baseline GHG emissions for fiscal year 2019 are restricted to Scope 1 and Scope 2. Quantifying and measuring Scope 3 emissions are under-review, and not in-scope for the 50% reduction interim target.
6. COSO Enterprise Risk Management – Integrated Framework. [www.coso.org](http://www.coso.org).
7. The Global Risk Report 2016 | World Economic Forum. [www.weforum.org](http://www.weforum.org).
8. National Oceanic and Atmospheric Administration | Climate. [www.noaa.gov](http://www.noaa.gov).
9. Simplified GHG Calculator | EPA Center for Corporate Climate Leadership. [www.epa.gov/climateleadership/simplified-ghg-emissions-calculator](http://www.epa.gov/climateleadership/simplified-ghg-emissions-calculator).
10. THOR Industries Partners with National Forest Foundation to Plant 500,000 Trees in Five Years. <https://ir.thorindustries.com/investor-resources/press-releases/press-release-details/2020/THOR-Industries-Partners-with-National-Forest-Foundation-to-Plant-500000-Trees-in-Five-Years/default.aspx>





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