



CLIMATE ACTION PLAN

J.B. Hunt Transport Services, Inc. (J.B. Hunt) understands that our stakeholders – stockholders, regulators, customers, employees, and local communities – want us to decrease greenhouse gas (GHG) emissions from our operations and value chain, including from transportation services. We recognize addressing climate change is increasingly important to our long-term success, and we will continue to take action to reduce the GHG emissions intensity of our operations. However, there are currently technological, economic and other limitations to reducing GHG emissions in our industry. Third-party studies indicate that freight haul is one of the most difficult industries to decarbonize.¹

J.B. Hunt is one of the largest transportation and logistics companies in North America and provides a variety of services for customers throughout the continental United States, Canada, and Mexico. As of December 31, 2020, we operated approximately 16,600 company-owned, 760 customer-owned, and 1,500 independent contractor trucks, the overwhelming majority of which are heavy-duty Class 8 vehicles (HDV). J.B. Hunt's transportation and logistics services involved the movement of approximately 7,368,000 loads across North America in 2020. As a percent of 2020 revenue, retail (28%), general merchandise (16%), and food and kindred products (16%) were the largest industry categories of product shipped.

Efforts to address the trucking industry emissions by regulators at the federal and state-levels have been widely pursued in recent years. In 2018, the United States Environmental Protection Agency (USEPA) reported that the transportation sector was the largest contributor to GHG emissions, accounting for 28% of the emissions in the United States (U.S.). Of that, medium- and heavy-duty trucks were the second most GHG emissions-intensive sources, accounting for 23% of the transportation sector, behind light-duty vehicles which account for 59%.² According to studies from the Intergovernmental Panel on Climate Change (IPCC), one of the main scientific bodies driving climate action, diesel-powered HDV are less GHG intensive than diesel and hybrid medium-duty trucks per weight per distance.³

Recognizing the transportation services industry is currently reliant on fossil fuels to operate, J.B. Hunt leadership is conscious of the environmental effects of our operations and strives to be a good steward in the use of non-renewable resources. We have committed to monetizing the efficient use of fossil fuels and exploring technologies that reduce and potentially eliminate use of fossil fuels. We have already made credible progress on reducing our use of fossil fuels and will continue to make deliberate business decisions to reduce adverse impacts to the environment. We endeavor to address concerns from stakeholders that seek our quick reduction of GHG emissions while continuing to maintain a profitable business.

1. McKinnon, A. (2016) "Freight Transportation in a Low-Carbon World." Online: <http://onlinepubs.trb.org/onlinepubs/trnews/trnews306feature.pdf>

2. USEPA. "Fast Facts on Transportation Greenhouse Gas Emissions." <https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions>

3. Ibid pg 11, IPCC. (2014). Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II, and III to the Fifth Assessment Report. Intergovernmental Panel on Climate Change, Geneva, Switzerland, 2014.

Increasingly, J.B. Hunt and our customers are making environmental responsibility a priority in business decision-making. We strive to offer transportation solutions that help our customers reduce both costs and GHG emissions while meeting or exceeding operational needs. J.B. Hunt has been taking action since the late 1980s when we began to identify cost and transportation efficiency measures by shifting our over-the-road (OTR) truck transportation services to intermodal transport (primarily using more fuel-efficient rail services for the line-haul movement of freight). Since then, we have worked to improve our fuel efficiency, source alternative fuel sources, reduce GHG emissions, and evaluate potential new technologies for alternative-powered vehicles. Although our approach may appear ad hoc, we are deliberate in identifying and assessing our climate-related risks and opportunities and taking action to address those risks and opportunities.

In recent years, J.B. Hunt has improved efforts to transparently disclose and report our environmental, social and governance (ESG) performance to our stakeholders in our annual proxy and on the J.B. Hunt website. More recently, we have increased disclosure with our 2020 CDP (formerly the Carbon Disclosure Project) submission and 2020 Sustainability Accounting Standards Board (SASB) Disclosure Index. Additionally, we recently began reporting to EcoVadis, proactively responded to Sustainalytics, and have continued to be recognized by the USEPA's SmartWay as an Excellence Award recipient. Like many other organizations, we recognize that sustainability is a journey, and we will continue to build a more efficient and resilient business by focusing on sustainability issues material to the transportation industry.

This report discusses our approach to further address climate change and transition to a low-carbon future in the following sections:

1. Historical and Current GHG Emissions
2. Climate-Related Risks and Opportunities
3. Current and Potential Future GHG Emissions Goals
4. Current and Potential Future GHG Emissions Reduction Initiatives
5. Conclusions

We worked with Arcadis U.S., Inc. (Arcadis) to prepare this report in conjunction with our broader engagement with Arcadis to support the evaluation of our climate-related risks and opportunities, development of GHG emissions goals, and assessment of our current and future GHG emissions reductions initiatives.

HISTORICAL AND CURRENT GHG EMISSIONS

In 2020, J.B. Hunt's total GHG emissions were approximately 3.5 million metric tons carbon dioxide equivalent (mTCO_{2e})¹, with the breakdown for Scope 1, 2, and 3 emissions as follows:

- Scope 1 (Direct emissions) accounts for the majority (55%) of total GHG emissions for energy consumed for transportation activities.

1. The J.B. Hunt GHG emissions inventory was calculated in accordance with the Greenhouse Gas Protocol Corporate Standard.

- Scope 2 (Indirect emissions from purchased electricity) accounts for 0.5% of total GHG emissions.
- Scope 3 (Indirect emissions within the downstream transportation and distribution category (Downstream T&D)) accounts for 45% of total (Scope 1, 2 and 3) GHG emissions. The majority (approximately 90%) of Scope 3 emissions are attributable to use of rail for intermodal transportation services.

Figure 1 below presents total GHG emissions intensity for Scope 1 per company operated million ton-miles to illustrate the gains in efficiencies over the last six years.¹ Intensity metrics are common for the transportation industry in that emissions are closely tied to the demand for transportation services provided.

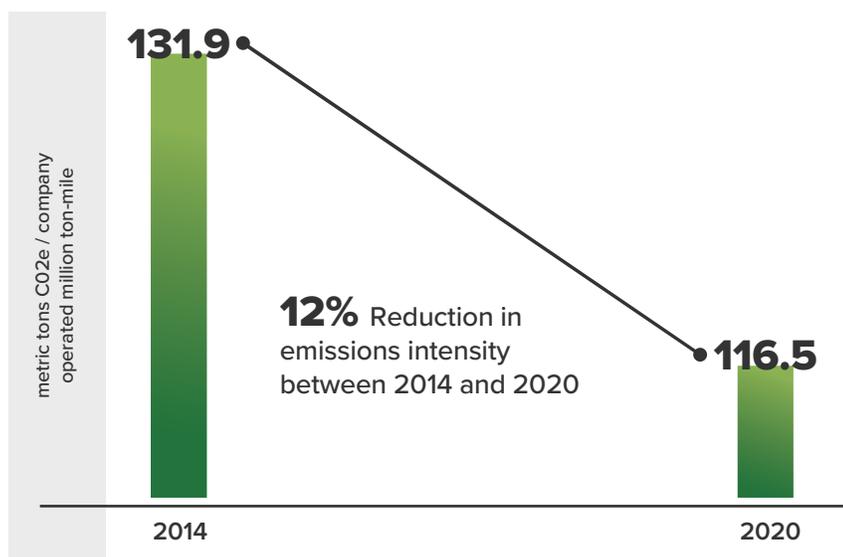


FIGURE 1. J.B. HUNT'S GHG EMISSIONS BETWEEN 2014 AND 2020

Figure 2 presents our available GHG emissions for 2014 and 2017 through 2020 for Scopes 1, 2 and 3. This figure illustrates that the breakdown between Scopes 1, 2, and 3 emissions has been relatively consistent over the years. Total absolute GHG emissions slightly increased each year (3.5% in 2019 and 0.8% in 2020) due to increased ton miles. Over the six-year period (2014-2020), Scope 1 associated ton-miles increased by over 33%, and corresponding GHG emissions rose by only 18%. As a result, our actual emissions intensity improved significantly (12%) from 2014 (131.9 mTCO₂e/ million company operated ton miles) to 2020 (116.5 mTCO₂e/ million company operated ton miles). A large portion of the increase in efficiencies (9%) occurred from 2018 to 2020. We have made significant headway in reducing our Scope 1 GHG emissions intensity due in part to our efficiency measures.

1. A ton-mile is a statistical unit of freight transportation equivalent to a ton of freight moved one mile.

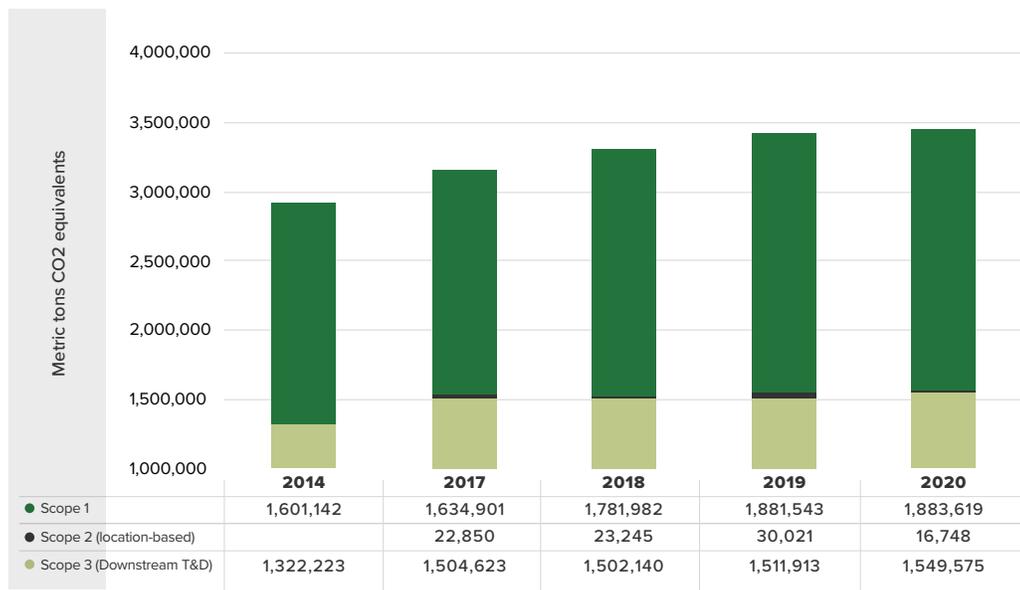


FIGURE 2. J.B. HUNT SCOPE 1, 2 AND 3 GHG EMISSIONS¹

CLIMATE-RELATED RISKS AND OPPORTUNITIES

To support development of climate action goals and strategies, J.B. Hunt assessed transitional and physical risks and opportunities in accordance with the Task Force for Climate-related Financial Disclosures (TCFD) framework. As we continue to work on climate-related issues in the future, we will be able to build upon this assessment as we seek to further understand our climate-related risks and opportunities. Within the next two years, we expect to complete a climate-scenario analysis, which will be supported by the assessment completed as part of this plan.

TCFD categorizes climate-related risks into two major categories: (1) risks related to the transition to a lower-carbon economy and (2) risks related to the physical impacts of climate change. Transition risk may include extensive policy, legal, technology, and market changes to address climate change mitigation and adaptation requirements related to climate change. Physical risks resulting from climate change can be event driven (acute) or longer-term shifts (chronic) in climate patterns. These physical risks or hazards may include those both directly related to climate change, such as extreme temperatures, sea level rise, and drought, as well as issues that might be exacerbated by climate-related hazards such as subsidence and erosion.

The results of the climate-related risk and opportunity assessment are presented in Appendix A. For each climate-related risk and opportunity category, we assessed the financial impact for each as low, medium, or high in the short-term (0-4 years), medium-term (4-10 years), and long-term (10-20 years). The selected time horizons align with our current normal equipment trade cycle (i.e. 4 years).

Appendix A reflects that we have both high risks and opportunities in the short-, medium-, and long-term. Given that our primary source of GHG emissions is combustion of fossil fuels for the transportation of freight, our greatest short-term high risk is related to economically feasible technology.

1. The GHG emissions displayed are not the total emissions for each scope; however, the emissions included account for greater than 98% of total emissions. Total GHG emissions will be reported in the annual sustainability report to be published later in 2021.

We must not only improve the efficiency of our direct emissions (Scope 1) but also indirect emissions (Scope 3), and we have less direct control over our Scope 3 emissions related to Downstream T&D, which includes rail transportation for intermodal services. As low-carbon alternatives mature for HDV, we must continue to work closely with rail transportation providers and seek opportunities to align GHG emissions goals and initiatives to ultimately reduce Scope 3 emissions. Overall, Intermodal service is 2.5 times more fuel efficient than comparable freight transport by HDV.¹

CURRENT AND POTENTIAL FUTURE GHG EMISSIONS GOALS

Current GHG Emissions Goals

In 2019, we set new GHG emissions reduction goals. The following short-term and long-term goals were officially released in 2020:

- **Short-Term Goal:** J.B. Hunt established a goal to reduce metric tons of CO₂e per million company-operated ton-miles (Scope 1) by 3% by 2025.²
- **Long-Term Goal:** J.B. Hunt set a goal to convert at least 25% of our day cab and straight truck fleet to an alternative power fuel source by 2035 assuming operational, regulatory, and total cost of ownership (TCO) requirements are achieved.

These goals build upon targets previously set to reduce our GHG emissions. In 2014, we set a goal to upgrade 100% of our fleet with automatic-manual-transmissions (AMTs) by 2022.³ At the end of 2020, approximately 86% of our fleet had been upgraded to AMTs, and we expect to complete the remaining upgrades in time to achieve this goal.

Potential Future GHG Emissions Goals

In 2020, we evaluated the feasibility of establishing a target aligned with the Paris Accord. The Paris Accord signatories commit to limiting global temperatures at well-below 2°C (W2DC) from pre-industrial levels, with additional efforts to limit the temperature increase to 1.5°C (1.5DC). According to the Science-Based Target Initiative (SBTi), these science-based targets (SBTs) represent GHG emissions reductions of 2.5% (W2DC) and 4.2% (1.5DC) per year for absolute Scope 1 and 2 emissions.⁴ Because our Downstream T&D GHG emissions are currently greater than 40% of our total GHG emissions (Scopes 1, 2, and 3), setting SBTs at this time would also involve establishing an SBT for Scope 3 GHG emissions.

For a Paris Accord aligned GHG emissions reduction target, we would need to establish an ambitious five-year W2DC SBT at a minimum, which would result in absolute Scope 1 and 2 emissions reductions of 12.5% from our base year. However, our GHG footprint is highly dependent on customers requesting these services. As such, similar to peers in the transportation and logistics industry, we would need to establish an intensity target (CO₂e/Company-operated ton-mile).

1. AAR. 2020. What Railroads Haul: Intermodal. Online: <https://www.aar.org/wp-content/uploads/2020/07/AAR-Intermodal-Fact-Sheet.pdf>

2. This short-term CO₂e reduction goal is based on the 2019 emissions intensity baseline of 1171 mTCO₂e per million company-operated ton-miles.

3. AMTs are 1.5% more fuel efficient than traditional manual transmissions.

4. An SBT should cover a minimum of 5 years and a maximum of 15 years from the date the target is publicly announced.

As we will further discuss in the next section, we have made significant strides in reducing our Scope 1 and 2 emissions over the last 15+ years. We have identified and implemented new technologies (low to moderate price points) and processes to drive efficiencies in our value chain and reduce our GHG emissions. In order to establish an SBT, we would like to be able to develop a road map with technologically feasible and economically viable solutions to achieve our target over time. At this time, there are no such solutions that satisfy both of these requirements for our business.

As part of our assessment of a more aggressive GHG reductions target, we evaluated the impacts of California Air Resources Board's (CARB) Advanced Clean Truck Regulation, which will require that at least 30% of Class 8 truck sales in the state be Zero Emission Vehicles (ZEVs) by 2030. To date, the expected cost of ZEV battery electric Class 8 trucks is as much as 200% greater than a standard diesel truck. To comply with CARB, we would need at least 300 battery electric trucks to replace our current fleet in California. Given ZEV battery electric vehicles are heavier, we would need to limit the quantity of freight or weight per load in order to be compliant with regulatory restrictions for truck weight. As such, we would need to have a larger fleet to move the same amount of freight. To transition our fleet in California, we would incur a capital expenditure increase of approximately \$25 million per year – for one state representing approximately 12% of our annual revenue.

We will continue to pilot and evaluate emerging technologies to determine the economic viability of alternatives for our fleet and to set GHG reduction targets within our operational control. However, we will also continue to give serious consideration and evaluation to whether and when we may reasonably establish an SBT.

CURRENT AND POTENTIAL FUTURE GHG EMISSIONS REDUCTION INITIATIVES

J.B. Hunt has focused on driving efficiencies in our operations for decades, and we are continuing to explore innovative solutions to increase efficiencies and reduce GHG emissions from our operations and value chain. We are committed to monetizing the efficient use of fossil fuels, such as adopting the most advanced technologies provided from OEMs (original equipment manufacturers), deploying aftermarket products to reduce fuel burn, adopting policies to incentivize reduced fuel burn, and assisting manufacturers in developing commercially viable ZEV trucks. These actions will enable us to improve the fuel efficiency and reduce GHG emissions from our direct operations (Scope 1) and from our value chain (Scope 3).

Scope 1 and 2 Emissions

Scope 1 and 2 GHG emissions are directly related to our transportation services, and we continuously look for new ways that our people, process, and technology can be used to move freight transportation forward. We have implemented initiatives to improve fuel efficiency over time, and we continuously seek to be the most fuel-efficient transportation and logistics service provider for our customers. To further reduce our direct GHG emissions (Scope 1), we need to: 1) transition customers to use more efficient transportation modes by converting from OTR to intermodal rail and/or 2) deploy a lower carbon fleet using economically feasible alternatives to diesel-powered equipment.

To reduce the GHG emissions of our fleet, we are reliant on our suppliers to develop economically viable technologies such as ZEVs or viable alternative fuels that provide our tractors with necessary range and hauling capabilities.

Indirect Scope 3 Emissions

J.B. Hunt's Scope 3 emissions are primarily driven from the conversion (over many decades) of our OTR truck transportation service to our intermodal service. In 1989, we reached an agreement with the Santa Fe Railway Company to transport freight using the combination of truck and rail services, commonly referred to as intermodal service, and initiated operations for this service in 1990. Overall, the shift from OTR to intermodal helps reduce GHG emissions because intermodal transportation service is 2.5 times more fuel efficient than the truck-only alternative. For us to further reduce our Scope 3 emissions, we will need to collaborate with the major North American rail carriers. It is unlikely we will be able to require rail carriers to meet specific GHG emissions reduction goals; however, many rail carriers have committed to reducing their GHG emissions in accordance with the Paris Accord. We will continue to work with rail carriers with the understanding that many of these providers are seeking to improve efficiencies and reduce GHG emissions.

GHG Emissions Reduction Options Assessment

As part of our emissions reduction assessment, we have grouped GHG emissions reduction initiatives into the following seven categories:

1. **Business strategy pivot:** J.B. Hunt relies on fossil fuels to profitably provide transportation services to our customers. To transport our customers' freight more efficiently, we may need to shift our core service offerings or develop new service offerings. For example, the shift from OTR to intermodal represented a change in our business strategy that reduced GHG emissions. As we explore potential new business strategies to reduce GHG emissions, we must be mindful of customer price sensitivity. Our customers may choose to use other, more cost competitive services, that may not necessarily be as energy efficient. So, while our GHG footprint may decline, on a global level the net result may be a detriment to the goal of reducing GHG emissions. These initiatives have the potential to reduce Scope 1, 2, or 3 emissions.
2. **Aftermarket and efficiency measures:** Energy and fuel efficiency can be achieved through a variety of measures in the transportation sector. For this category, we evaluate aftermarket technologies, behavioral changes, or other means to reduce GHG emissions for our current fleet. It should be noted that there may be limitations due to the length of haul and type of load of our typical transportation services (e.g., opting for smaller, more fuel-efficient vehicles may not be possible). In this option, we may explore aftermarket and/or training and behavioral change options for improving fuel efficiency. These initiatives may reduce Scope 1 emissions.
3. **New alternative energy vehicles:** J.B. Hunt has actively been evaluating and pursuing alternative energy trucks. New technologies, such as battery electric, hydrogen or liquid natural gas (LNG) Class 8 vehicles, have the potential to significantly reduce GHG emissions. However, there are currently significant present-day limitations for these new technologies, including increased capital costs, increased operations and maintenance costs, resale market limitations, OEM producer reputations and reliability,

and insufficient refueling infrastructure. For example, battery electric trucks cost two to three times more than a comparable diesel truck. These initiatives may reduce Scope 1 and 3 emissions but may increase Scope 2 emissions.

4. **Alternative fuels:** The alternative fuels category includes the use of cleaner fuels from renewable sources – such as biofuels – for our fleet. When evaluating alternative fuels, we will need to adhere to the manufacturer’s specifications for fuel blends and seasonal restrictions as not doing so may result in costly damages to fleet engines. These initiatives may reduce Scope 1 and 3 emissions, but biodiesel does not eliminate emissions and may have other environmental and social impacts.
5. **Renewable Energy Certificates (RECs):** Numerous companies are supporting development of renewable energy projects by purchasing RECs to reduce their Scope 2 emissions. As discussed above, our Scope 2 GHG emissions are only 0.5% of our total emissions. Nevertheless, we evaluated feasibility of purchasing RECs to reduce Scope 2 GHG emissions.
6. **Carbon offsets:** Many organizations purchase carbon offsets to address Scope 1, 2 and 3 GHG emissions. However, it should be noted that carbon offsets do not count toward targets that are approved by organizations such as SBTi. As such, we view purchasing carbon offsets to be a last resort.

J.B. Hunt is currently implementing initiatives to reduce our GHG emissions that make good business sense. From reducing empty truck miles to training and gamifying fuel efficiency behaviors, many key cost-effective initiatives are already integrated into our operational strategy. Table 1 below summarizes the current and potential future GHG reduction activities that we have evaluated.

TABLE 1. SUMMARY TABLE WITH RESULTS OF GHG EMISSIONS REDUCTION OPTIONS ASSESSMENT

Status Implication  Implemented Low-hanging fruit initiative  Testing phase Moderate risk/rewards initiative  Evaluated, not feasible at present High risk/low return initiative 			
Reduction Initiative	Status	Financial and Environmental Implications	Comments
BUSINESS STRATEGY PIVOT			
Highway Freight Conversion to Intermodal	Underway	<p>Costs to transition are market driven based on service, cost (including the cost of alternate methods to move freight, primarily truck), and customers' desire to reduce their Scope 3 emissions. Segment still presents strong growth.</p> <p>High reductions of GHG emissions versus a truck only alternative method of shipping</p>	<p>J.B. Hunt has invested in growing our intermodal service offering since 1989, which represented 49% of our 2020 revenue. This investment allows us to greatly reduce our GHG footprint. Investments to grow this business are still ongoing as we have identified 7 to 11 million loads of freight (based on annual bid activity) with combined price and service characteristics that support conversion from OTR truck service to intermodal service. By moving freight utilizing rail providers through our intermodal service offering in 2020, we estimate that approximately 3.4 million mTCO_{2e} of GHG emissions were avoided (versus the movement of the same freight by truck alone).</p> <p>This transition is not without challenges. The rail sector is also undertaking initiatives to improve efficiencies and reduce their own GHG footprint. For example, many of the rail providers have begun implementing Precision Scheduled Railroading (PSR) which has improved efficiency by running longer direct route trains and optimizing assets, but they have faced challenges with decreased flexibility. We believe when PSR is consistently implemented, such issues will be resolved, and we will have a stronger value proposition to convert more OTR truck freight to intermodal.</p>
Multimodal Digital Freight Marketplace – J.B. Hunt 360 [®]	Underway	<p>Moderate financial impact (moderate risk/reward initiative)</p> <p>Moderate reductions in GHG emissions for J.B. Hunt, larger reduction potential for broader transportation industry</p>	<p>In 2017, J.B. Hunt announced an investment of \$500 million in technology, a portion of which was allocated to the investment in innovative and future technologies, including our proprietary multimodal digital freight marketplace to help third-party carriers and shippers operate more efficiently and eliminate waste in the North American supply chain. J.B. Hunt believes that greater visibility of available capacity in the transportation market will help to optimize the movement of freight in North America and eliminate waste by matching the right load with the right truck. In 2020, we estimate that we eliminated approximately 4.3 million out-of-route/empty miles from our network by utilizing the technology for transportation provided with our own assets. We believe that this technology is assisting third-party motor carriers in a similar fashion through J.B. Hunt 360 by assisting drivers to maximize the utilization of equipment and eliminate waste. In 2020, we estimate this initiative helped reduce our GHG emissions by approximately 6,112 mTCO_{2e}.</p>

Reduction Initiative	Status	Financial and Environmental Implications	Comments
AFTERMARKET AND EFFICIENCY MEASURES			
Multimodal Digital Freight Marketplace – J.B. Hunt 360	Underway	Limited financial impact (low-hanging fruit) Moderate reductions in GHG emissions	J.B. Hunt will continue to invest in building out our proprietary multimodal digital freight marketplace to help third-party carriers and shippers operate more efficiently to eliminate wasted or empty miles in the North American supply chain. While the benefits of the technology are apparent for our assets, J.B. Hunt is not currently able to accurately predict the amount of waste eliminated from third-party carriers using J.B. Hunt 360.
Route Optimization	Underway	Limited financial impact (low-hanging fruit) Moderate reduction in GHG emissions	J.B. Hunt engineers in our Intermodal, Truckload and Dedicated Contract Services business units will continue to use proprietary optimization software to eliminate empty movement of assets, which reduces costs and needless fuel burn. This initiative may also help us to improve delivery times and maintain business continuity. While the benefits of the engineered processes are not easily calculated in terms of GHG emissions reductions, we believe our long-term growth trends at acceptable ROIs are evidenced by these efficiencies that make us cost competitive in a highly fragmented industry.
Governed Speed	Underway	Limited financial impact (low-hanging fruit) Limited reduction in GHG emissions	J.B. Hunt governs the speed of our trucks not only to help with fuel economy, but to support our safety programs and initiatives. Regulation of speed will improve the fuel efficiency and reduce Scope 1 GHG emissions. As a rule of thumb, our engineers believe every mile-per-hour (MPH) above 55 equates to 1% reduction in fuel economy, but this is also dependent upon gear ratios selected when selecting specifications for tractor equipment. We estimate that governing the speed of tractors helps improve the fleets' fuel economy by 2.5% to 3.0%.
Aerodynamics	Underway	Moderate financial implication Limited to moderate reduction in GHG emissions	J.B. Hunt continues to invest in aerodynamic features on both our tractors and trailers to reduce drag and maximize fuel efficiency.
DRIVE - Truck Idle Reduction Program	Commenced	Limited financial impact (low-hanging fruit) Limited to moderate reduction in GHG emissions	In 2020, J.B. Hunt introduced a new truck idle reduction program to reduce non-productive fuel burn. Our proprietary DRIVE app gives drivers immediate visibility into their engine idling in comparison to their peer group, using gamification as a reduction catalyst. We estimate that this initiative will save 2,400 mTCO ₂ e each year.
Remedial Truck MPG Program	Underway	Moderate financial implication, additional training Moderate reduction in GHG emissions	With detailed truck and driver miles per gallon (MPG) data, the maintenance personnel and driver trainers intervene to ensure our fleet is performing in line with designated specifications.

Reduction Initiative	Status	Financial and Environmental Implications	Comments
NEW ALTERNATIVE ENERGY VEHICLES			
AMTs	Underway	Limited financial impact Limited reduction in GHG emissions	In 2014, J.B. Hunt began to recognize the operational and climate-related (environmental) benefits of AMTs and set a goal to convert nearly 100% of our fleet to AMTs by 2022. At the end of 2020, roughly 86% of our fleet was converted. We expect to meet the target based on our current trade cycle on our tractor equipment of approximately four years. We consider this to have limited financial impact as the cost for an ATM vehicle is not significantly more than standard purchases, and it is already built into the expected future trade cycles with limited residual value risk. AMTs are approximately 1.5% more fuel efficient than traditional manual transmissions, which leads to GHG emissions reductions. In 2020, AMTs resulted in an overall GHG emissions reduction of 21,877 mTCO ₂ e.
Battery Electric Vehicle (BEV)	Testing	High financial implication, potential supporting infrastructure needs, considering feasibility, etc. High reduction in GHG emissions	<p>J.B. Hunt is one of the first transportation companies to place an order for Class 8 battery electric trucks and we remain optimistic about their future. We deployed five Class 6 eCanter EV trucks in our Final Mile operations between January 2019 and September 2020, and we anticipate our Final Mile segment to be a potential opportunity for EV equipment given the smaller truck size needed to complete home deliveries. Our initial experience with this pilot showed that range, speed, available cube space, and required infrastructure created operational and financial challenges.</p> <p>In 2020, we completed our first delivery using the Freightliner eCascadia, Daimler Trucks North America's (DTNA) all-electric Class 8 truck. We kicked off a three-month testing phase in which we will integrate the eCascadia into our day-to-day fleet operations in Los Angeles.¹</p> <p>We are also working with DTNA to pilot its Freightliner EV eM2, a class 6/7 truck designated for local distribution and last-mile logistics applications.</p> <p>Transitioning to a battery electric fleet will shift our GHG emissions from Scope 1 to 2; however, the total GHG reductions are currently unknown as it is dependent on the locations the vehicles are deployed and charged and the source of electricity for charging infrastructure. We are also simultaneously considering that a robust support system must be developed, including additional tractor depots and charging stations to meet the needs of any EV initiatives.</p>

1. Bunten, J. (2020) J.B. Hunt Makes First Company Delivery Using the All-Electric Freightliner eCASCADIA. Online: <https://cleantechnica.com/2020/08/14/j-b-hunts-1st-delivery-with-fully-electric-freightliner-ecascadia/>

Reduction Initiative	Status	Financial and Environmental Implications	Comments
Natural Gas	Limited	High financial implication, potential supporting infrastructure needs (LNG tanks), decommissioning requirements Moderate reduction in GHG emissions	Natural gas vehicles emerged as an alternative fuel and emission reduction opportunity from 2008 to 2012. We have worked directly with OEMs, component suppliers, fuel suppliers, and infrastructure developers (to address both short- and mid-term equipment strategies) and tested various natural gas trucks. We have also prepared total cost of ownership and viability studies. As of December 31, 2020, we continued to operate 160 natural gas-powered trucks with select customers as an alternative to diesel-powered trucks. Use of natural gas still results in GHG emissions, but there is an approximate 30% reduction in GHG emissions in comparison to diesel fuel combustion.
Fuel Cell Electric Vehicle (FCEV)	Evaluating, in preliminary stages of evaluation	Unknown feasibility, unknown cost High reduction in GHG emissions	To get long-haul FCEV into production by 2024, J.B. Hunt is collaborating with Navistar International Corp., General Motors Co., and OneH2. As part of this joint effort, we will begin testing FCEVs as part of this pilot in late 2022. At this time, we understand that FCEVs will allow for flexibility, lighter weight, and longer-range trucks resulting in fewer charging station requirements in comparison to BEVs. Based on third party studies, and dependent on the source of the hydrogen, FCEVs have the potential to eliminate GHG emissions entirely, but the technology is nascent, untested for large vehicles, and requires significant supporting infrastructure investment. ¹
Autonomous Vehicles (AV)	Evaluating	Unknown feasibility, unknown cost Unknown reduction in GHG emissions	J.B. Hunt acknowledges discussions around the future of logistics such as AV; however, there are currently no feasible options. There would also be potential significant social impacts and potentially nominal GHG emissions savings, which might be negligible when combined with other technologies by the time AV is feasible.
Other technologies	Nil	NA	Currently, there are no other known feasible alternatives. We will continue to work with our OEM suppliers, trade organizations, regulators, etc. to monitor new and emerging technologies for our Class 8 vehicle fleet.

1. US Department of Energy. "Fuel Cell Electric Vehicle Emissions." Online: https://afdc.energy.gov/vehicles/emissions_hydrogen.html

Reduction Initiative	Status	Financial and Environmental Implications	Comments
ALTERNATIVE FUELS			
Biodiesel	Underway	Limited to moderate financial implication Moderate reduction in GHG emissions	The prevalence of biodiesel has increased considerably in the U.S. and we estimate that 51% of our purchased fuel is biodiesel or biodiesel blends (B5-B20). It is possible to use biodiesel for our existing fleet, but other considerations remain. We must adhere to manufacturer recommended fuels to meet warranty specifications, as biodiesel has had issues with vehicle durability and engine performance. For our operations, biodiesel is sensitive to storage and handling, cold weather, exhaust and after treatment systems. As such, it may be possible to only use biodiesel blends from reputable sources on a seasonal basis. Lastly, transition to 100% biodiesel (B100), while not currently feasible, would still result in significant GHG emissions. Transitioning our entire fleet would only result in a 9% reduction in GHG emissions. Based on this analysis, we understand we cannot rely on biodiesel alone.
Renewable fuels	Nil	NA	Other renewable fuels used in J.B. Hunt's standard fleet are not currently known.
ONSITE AND OFFSITE RENEWABLE ENERGY			
Onsite installation	Onsite installation Evaluating, completed request for proposal (RFP) process	Limited to moderate financial impact Limited reduction in GHG emissions	Although onsite solar has a limited to moderate financial impact, we currently have an extremely limited Scope 2 footprint (only 0.5%). As we transition our fleet to BEV, this option will be reevaluated to support future energy needs of our fleet.
Power Purchase Agreement (PPA)	Evaluated, not pursued	Limited financial impact, long-term investment Limited reduction in GHG emissions	Many organizations are directly purchasing renewable energy through PPAs, long-term contractual tools (over 10-year commitment) to reduce the Scope 2 GHG emissions. Given our current electricity consumption, this renewable energy option is not viable.
RENEWABLE ENERGY CERTIFICATES (RECS)			
Renewable Energy Certificate (REC) purchase	Evaluated, considering	Limited financial impact (low-hanging fruit) Limited reduction in GHG emissions	J.B. Hunt is currently considering purchasing RECs for our limited Scope 2 GHG emissions (16,748 mTCO _{2e}).
CARBON OFFSETS			
Carbon offset purchase	Evaluated, not pursued	Limited financial impact (low-hanging fruit) Moderate but restricted reduction in GHG emissions	Many organizations purchase carbon offsets to address Scope 1, 2 and 3 GHG emissions. However, it should be noted that carbon offsets do not count toward targets that are approved by organizations such as SBTi. As such, we have evaluated purchasing carbon offsets, but have decided not to pursue this option at this time.

CONCLUSION

J.B. Hunt understands that our stakeholders want us to decrease our GHG emissions from our operations and value chain, and we are committed to taking additional actions in the future. Over the last 15+ years, we have identified and implemented new technologies (low to moderate price points) and processes to drive efficiencies in our value chain and reduce our GHG emissions. From 2018 to 2020, J.B. Hunt significantly grew company operated ton miles by 15.6%. While our total Scope 1 emissions increased by 5.7% for the same time period, our Scope 1 emissions intensity improved by 8.5% to 116.5 mTCO₂e per ton mile. In the short term, we will continue to reduce our GHG emissions as follows:

- Implement new idle reduction effort using the proprietary DRIVE app to give drivers immediate visibility into their engine idling in comparison to their peer group, using gamification as a reduction catalyst.
- Convert our entire fleet to AMTs by 2022 to reduce our emissions by approximately 1% in comparison to traditional manual transmissions.
- Rapidly modernize the fleet with tractors certified under the EPA's US GHG Phase II regulations or CARB regulations to reduce GHG emissions intensity by 3% from a 2019 base year.
- Support research and pilot opportunities for alternative fuel vehicles including electric, hydrogen or natural gas options, and discuss with our industry peers, trade associations, and OEMs on potential new solutions.

J.B. Hunt is committed to creating the most efficient transportation network in North America and providing best-in-class transportation service for our customers. In a highly fragmented and competitive industry, we must provide cost-competitive services to our customers, while investing both time and capital into future transportation technologies. We are giving serious consideration to adopting a science-based carbon reduction target. We are optimistic that a business case will exist for alternative energy vehicles in the future. To turn this optimism into concrete GHG emissions reduction goals, J.B. Hunt needs the following alternative energy market developments:

- Multiple alternative energy vehicle suppliers with a robust service network to support their products
- Comprehensive refueling and recharging infrastructure network for battery electric, hydrogen, or other alternative fuel vehicles
- Comparable total cost of ownership including purchase price, lifetime operations and maintenance costs (including fuel), and residual equipment value
- Comparable vehicle performance including the ability to haul similar loads, while remaining compliant with all federal and state regulations (including weight restrictions)
- Vehicle range that provides drivers an opportunity to maximize available hours in a workday, as regulated by the Federal Motor Carrier Safety Administration (FMCSA) hours of service regulations
- Comparable reliability with sufficient uptime to enable J.B. Hunt to provide high-quality service to our customers

J.B. Hunt is optimistic that we can deliver beyond current environmental commitments, and we look forward to sharing our progress with you. Moving forward, we are committed to providing regular communications on the actions we are taking to reduce our total GHG emissions.

APPENDIX A

The following tables present the results of the climate-related risk and opportunity assessment for J.B. Hunt. For each climate-related risk and opportunity category, we assessed the financial impact for each as low, medium, or high in the short-term (0-4 years), medium-term (4-10 years), and long-term (10-20 years). The selected time horizons align with our current equipment trade cycle (i.e. 4 years).

TABLE A-1. CLIMATE-RELATED RISK ASSESSMENT FOR J.B. HUNT

Risk Level		 Low	 Moderate	 High	
Risk Type	Potential Financial Impact	Short	Medium	Long	Mitigation Strategy
TRANSITIONAL RISKS					
Policy and Legal	Increased cost related to regulations on GHG emissions	L	L	M	J.B. Hunt addresses potential increased cost through engagement with our value chain, namely regulators and suppliers for our fleet. J.B. Hunt has assessed our largest sources of GHG emissions (Scope 1 from fuel purchases) and addressed this through efforts to expand reduced GHG emissions business lines such as intermodal transportation. J.B. Hunt also recently set targets to help mitigate risks and has been transforming our business through our core business offerings and supplier collaboration.
	Increased cost related to regulatory compliance	M	M	M	Regulatory efforts at present are led by state governments. J.B. Hunt constantly monitors emerging regulations and analyzes potential impacts from compliance at the local, state, and federal levels. To mitigate this risk, J.B. Hunt will interact with industry participants and regulators to develop an environmentally friendly and cost-effective consensus and to mitigate regulatory compliance issues. J.B. Hunt also has a newer fleet than our competitors, helping address uptake of new technologies and meet regulatory requirements.
Technology	Increased cost for new technologies	H	M	L	Adherence to immature technology presents risks to J.B. Hunt's costs and operations but failure to latch on to it may present risks on market, operational, and regulatory fronts. J.B. Hunt explores new technologies, but is wary of limitations for our business continuity, operations and maintenance (O&M), as well as excess cost. J.B. Hunt undertakes a vigorous means to evaluate new options in a timely manner. As the technology becomes more reliable and mainstream, costs will be reduced, however, present costs on renewable energy trucks are prohibitively expensive and at times unreliable. J.B. Hunt will continue to explore the possibility of these technologies prior to mainstream emergence; our existing means to update our fleet allows for fast integration and uptake. J.B. Hunt works with suppliers to bring and test new technologies through pilot studies in markets where more stringent regulation may be present.
Direct (Market)	Decreased customer base	L	L	L	J.B. Hunt prides itself on developing long-term relationships with our customer base. J.B. Hunt proactively engages with our customers to ensure that our services meet their needs, including reducing their value chain GHG emissions through: (1) assessing alternative fuels and emerging technologies that reduce our GHG footprint, (2) introducing efficiencies through behavioral change, and (3) shifting services and business strategy to leverage our network and services to deliver efficient, low-carbon transportation solutions. J.B. Hunt's business strategy addresses this and constantly evolves to offer the necessary mix of transportation and logistics services (e.g. intermodal solutions).

Risk Type	Potential Financial Impact	Short	Medium	Long	Mitigation Strategy
Indirect (Operational)	Increased fuel costs	L	L	M	J.B. Hunt passes on most fuel costs to our customers, and notes that this may impact our cost competitiveness in the future. J.B. Hunt mitigates costs associated with fossil fuel volatility by transitioning our business offerings to more efficient means (e.g. intermodal), creation of applicable targets, utilization of aftermarket fuel efficiency products, and pilot testing of emerging technologies (e.g. renewable fuels, biodiesel, LNG and EV).
PHYSICAL RISKS					
Acute	Decreased business through disruption to operations and business continuity	M	M	M	J.B. Hunt provides transportation and logistics services to our customers in a time and cost-effective manner. Acute physical risks such as increased adverse weather events, may impact J.B. Hunt's ability to deliver goods and services on time, however, operators in the same region will also be subject to the same risks. To mitigate, J.B. Hunt monitors acute physical risks, and has an extensive network and relationships with other transportation providers in place to help re-route goods during these events; J.B. Hunt's drivers also undertake training on how to handle inclement weather. J.B. Hunt has also recently released two climate-related targets.
	Increased maintenance and repair cost	L	M	M	Increased maintenance costs are likely from increased acute physical risks. To mitigate, J.B. Hunt maintains a relatively young fleet of HDV which should reduce maintenance requirements.
Chronic	Increased operating costs due to increased need for heating	L	L	L	For J.B. Hunt's customers with perishable and items requiring refrigeration, increased temperature control and refrigeration may be necessary as temperatures increase. For the most part, the impacts are limited and a low impact risk classification as J.B. Hunt mitigates this risk by maintaining a fleet of temperature-controlled trailers, which utilize modern and advanced technologies.
	Increased cost due to relocation from sea level rise	L	L	M	J.B. Hunt's primary physical assets are our tractor and trailing equipment, in addition to our corporate headquarters located in Lowell, AR. J.B. Hunt's tractor and trailing equipment is extremely mobile and moves across regions of the country on a frequent basis.

TABLE A-2. CLIMATE-RELATED OPPORTUNITY ASSESSMENT FOR J.B. HUNT

Risk Type	Potential Financial Impact	Short	Medium	Long	Mitigation Strategy
Direct (Market)	Increased revenue by reduced competitive market	M	L	M	Regulatory efforts are currently led by state governments which often require capital for compliance. To realize, J.B. Hunt constantly monitors emerging regulations and analyzes potential impacts from compliance at the local, state, and federal levels. J.B. Hunt also engages with authorities on means to develop mutually beneficial regulations and have a systematic means to deploy new technologies to our HDV fleet over a four-year trade cycle.
	Increased revenue through increased customer base	M	M	M	To realize the strategy, J.B. Hunt proactively engages with our customers to ensure that our services meet their needs, including reducing their value chain GHG emissions through assessing means to reduce our GHG footprint including (1) evaluate alternative fuels and emerging technologies, (2) implement efficiencies through behavioral change, and (3) shift services and business strategy to leverage our network and services to deliver efficient, low-carbon transportation solutions. J.B. Hunt's business strategy addresses this and constantly evolves to offer the necessary mix of transportation and logistics services (e.g. intermodal solutions). Additionally, J.B. Hunt also develops key performance indicators (KPIs) with our customers. ¹
Indirect (Operational)	Decreased operational spending	L	M	H	To realize this strategy, J.B. Hunt can potentially reduce our operational expenditures (e.g. fuel) through use of new technologies. However, today, many of these technologies are cost-prohibitive and lack feasibility (e.g. supporting infrastructure, O&M, resale). J.B. Hunt expects the cost of entry to reduce over time and feasibility to improve, but our ability to realize this strategy today is limited by the cost-prohibitive nature of shifting our entire fleet to expensive and limited field-tested technology. Nevertheless, J.B. Hunt is constantly in contact with OEM manufacturers to understand new developments and trends, as well as regulators that are generally tasked with zoning and planning of needed infrastructure.
	Reduced spend through subsidized purchases	L	L	L	Agencies at the state and federal level may provide financial incentives or funding for alternative fuel combustion. To realize this, J.B. Hunt will need to ensure we are up to date on financial incentives and programs that may impact our suppliers or J.B. Hunt directly. For example, a recent article from Volvo indicated some California environmental agencies provide financial incentives to meet emerging regulatory requirements. ²

1. J.B. Hunt. Overcoming the Challenges Of Private Fleet Management with Outsourcing. Online: <https://ww3.jbhunt.com/files/whitepapers/Overcoming%20the%20Challenges%20of%20Private%20Fleet%20Management%20with%20Outsourcing.pdf>

2. Hirsch, J. (2020) "Volvo President Voorhoeve Outlines Electric Heavy-Duty Truck Plans." <https://www.trucks.com/2020/08/18/volvo-electric-truck-plans/>