



2020-2021
TCFD CLIMATE-RISK REPORT



About World Fuel Services Corporation

World Fuel Services Corporation (“World Fuel Services,” “WFS,” “we,” “our,” and “us”) is a leading global energy management company and is involved in providing energy procurement and related products and services to commercial and industrial customers, principally in the aviation, land, and marine transportation industries. We offer our clients a broad suite of energy advisory, management and fulfillment services, digital and other technology solutions, as well as sustainable products and related services across the energy product spectrum, including carbon management, on-site solar, and renewable energy solutions. We have also expanded our product offering to include supply fulfillment for natural gas and power. As part of our growth strategy and transformation efforts, we are focused on advancing the global energy transition to lower carbon alternatives by expanding our portfolio of energy solutions and providing customers with greater access to sustainably sourced energy.

About this Report

At World Fuel Services, we see the energy transition as a global imperative and believe that we must all work across our value chain to achieve our collective sustainability goals and ambitions. That is why, as a company, we are committed to advancing the energy transition and transforming our business through enhancements to our own operations, lower-carbon solutions for our customers and engagements with our suppliers and others across our value chain.

This Climate Risk Report provides our disclosures aligned with the framework developed by the Financial Stability Board’s Task Force on Climate-related Financial Disclosures (TCFD). In this report, we describe our approach to managing climate-related risks, our initiatives to reduce greenhouse gas (GHG) emissions intensity, and our strategy for navigating the energy transition. Specifically, we outline our approach through each of the TCFD’s four pillars: governance, risk management, strategy, metrics and targets.

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Governance

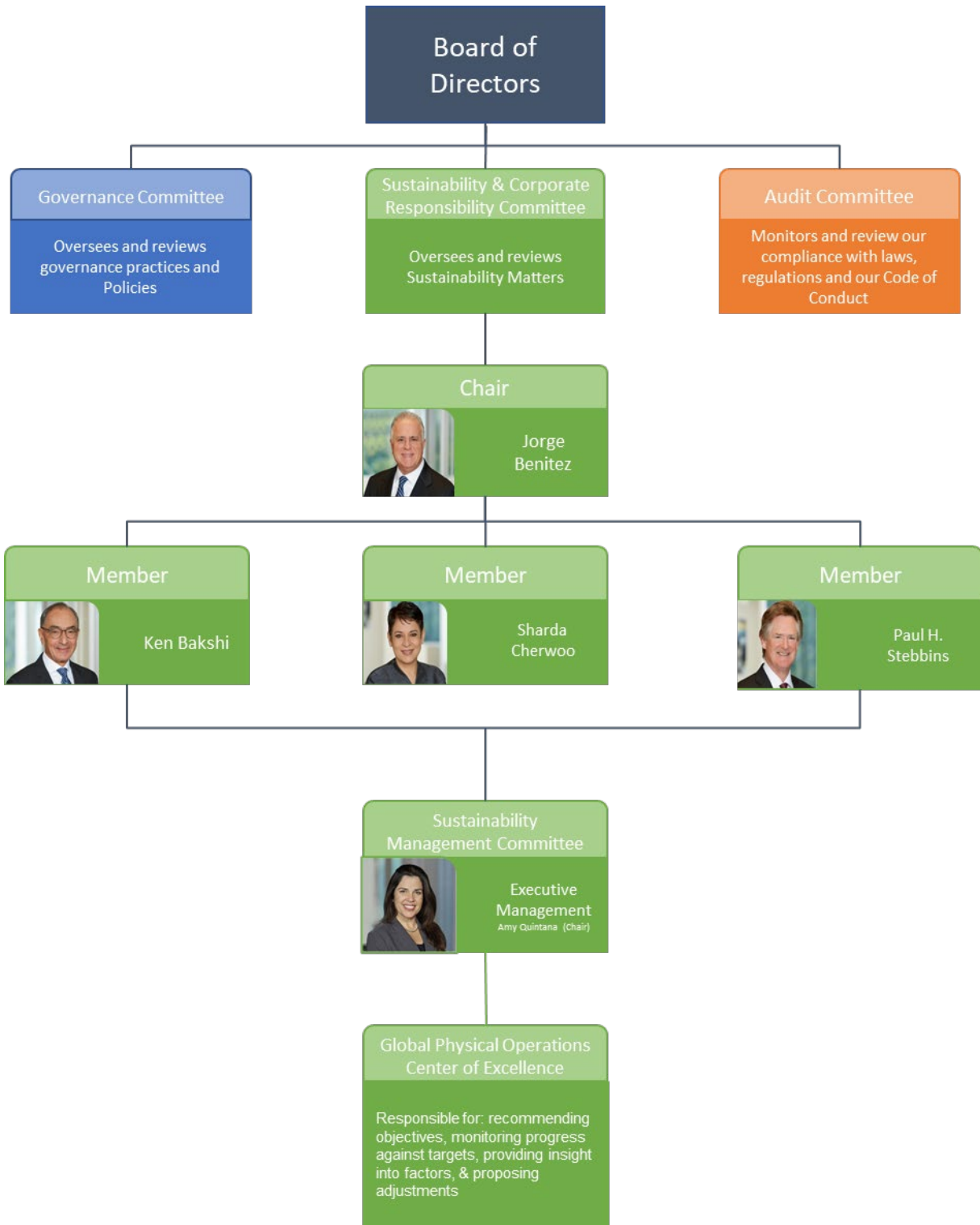
Board of Directors' oversight of climate-related risks and opportunities

We are committed to operating our business in a safe, responsible, and ethical manner through sound corporate governance that promotes accountability and transparency. As such, our Board plays a key role in providing oversight of our business practices and risks, including any climate-related risks and opportunities.

Our Board has established the Sustainability & Corporate Responsibility Committee ("SCRC"), which is comprised solely of independent directors. The mission of the SCRC is to assist the Board in fulfilling its oversight responsibilities with respect to our programs, policies, risks, and key initiatives regarding sustainability, environmental, health and safety ("EHS"), diversity, equity, and inclusion ("DE&I"), and other social responsibility issues and impacts (collectively, "Sustainability Matters"). Further, the Committee is responsible for reviewing and providing input on our strategy, goals, and integration of Sustainability Matters into business activities across our company. The SCRC is a reflection of our commitment to embed sustainability and corporate responsibility in our business strategy for long-term value creation. Through this collaborative action, we can ensure that our Board maintains effective fluency in how we assess and manage climate-related risks as well as other significant environmental risks.

The SCRC receives regular reports and other insights from our Chief Sustainability Business Officer and business leaders across our organization, concerning topics such as the latest advances in lower and zero-carbon fuels within the transportation sector, the ongoing progress of our customer-facing sustainability solutions and the latest developments in the regulatory environment. In addition, the SCRC provides oversight and feedback on our progress against any goals and targets we establish for our company. This committee also reviews key disclosures regarding our position, approach and reporting of Sustainability Matters.

Board Oversight of Sustainability Matters



Management's role in assessing and managing climate-related risks and opportunities

Our executive management team, including our CEO, is significantly involved in our processes for identifying and acting on climate-related risks and opportunities. We have established a Sustainability Management Committee, which is a cross-functional committee comprised of senior leaders and subject matter experts from across our organization. Their mission is to collaborate on identifying priorities, setting goals, and driving the implementation of our strategy and objectives with respect to Sustainability Matters.

Our management regularly updates the SCRC on climate-related risks and opportunities within our businesses and reviews our strategic plans for transitioning our business model to a net zero economy. At least four times per year, the SCRC receives updates from our Chief Sustainability Business Officer and other members of our senior leadership on our progress on meeting our established goals and objectives, including the actions we are taking to reduce our GHG emissions within our operations and the key drivers of year-over-year variances.

To further these objectives, in 2021, we established a sustainability subcommittee of our Global Physical Operations Center of Excellence ("CoE") to recommend objectives to reduce our emissions, measure and monitor our progress against the targets we set, provide insight into the factors influencing these outcomes, and propose adjustments and alternatives, as necessary, to achieve our sustainability goals.

Our Vice President of Global Sustainability, along with our carbon footprint reporting team, also monitors and reports the status of our GHG emissions reduction goals to our senior management and the Sustainability Management Committee on a routine basis.

Risk Management

Climate-related risks and opportunities

Identifying and assessing climate-related risks

We monitor and manage our operations through processes and procedures designed to minimize our effects and impacts on the environment. Certain products we supply are potentially hazardous and the environments in which we deliver our products and services can be challenging. Operating fuel storage and distribution terminals and transporting fuel products involves inherent risks, such as spills, discharges, and other releases.

Business and operational risks are regularly reviewed as part of our Enterprise Risk Management (ERM) program, and identifying, assessing and managing climate-related risks and opportunities is an integral aspect of our overall ERM processes. As part of this review, our senior leadership, together with various business and functional leaders and governing committees, such as our CoEs for Risk, Supply, and Global Physical Operations, monitor and evaluate our operational risks including environmental, health, safety, and climate-related risks. These CoEs generally meet on a monthly basis and more frequently, as needed. At an enterprise level, our ERM processes and key business risks are regularly reported on by our executive management and are overseen and reviewed by our Board of Directors on a quarterly

basis. Additional reviews are conducted as needed on an ad-hoc basis through our Risk CoE or our Internal Audit function, among others.

Risk management and safety are our priority; therefore, we perform regular assessments at both an enterprise and specific business level. The principal purposes of these assessments are to:

- Ensure that risk management efforts are focused and directly linked to our underlying business strategy;
- Implement a sustainable and scalable framework to identify, manage and monitor risk;
- Assign responsibility for each risk, put mitigation plans in place and then assess the effectiveness of such mitigation plans; and
- Enhance our risk management capabilities for priority risks and continue the development of our risk management policies and action plans.

The results of these risk assessments are regularly communicated to our Board. In connection with these reviews and assessments, we have identified a number of potential climate-related risks to our business as outlined below.

Regulatory Risks

As climate change continues to draw considerable public and scientific attention globally, numerous proposals, from various levels of government, have been adopted and will likely continue to be brought forward to monitor and limit GHG emissions as well as reduce the use of hydrocarbon-based fuels or require substantial additional and costly disclosure relating to emissions. These include: cap-and-trade programs, carbon taxes, greenhouse gas (“GHG”) reporting and tracking programs, GHG emissions limitations, restrictive permitting, increased efficiency standards, and incentives or mandates for renewable energy. At an international level, the European Union (“EU”) has committed to reducing net GHG emissions by at least 55% by 2030. EU member states have implemented a range of subsidies and incentives to achieve the EU’s climate change goals, including the European Union Emissions Trading System (“EU ETS”) for industrial emissions. The EU ETS is expected to become progressively more stringent over time, through regulations such as reducing the number of GHG emission allowances and broadening the industries subject to the restrictions.

Although the ultimate impact of these or other future measures is difficult to accurately predict, additional legislation or regulations could impose significant additional costs on us, our suppliers, vendors and customers, or could adversely affect demand for our energy products. The potential increase in our operating costs could include additional costs to operate and maintain our facilities, such as installing new infrastructure or technology to respond to new mandates, or paying taxes related to our GHG emissions, among others. Furthermore, changes in regulatory policies or increased awareness and any adverse publicity in the global marketplace about potential impacts on climate change by us or other companies in our industry, which could result in a reduction in the demand for hydrocarbon products that are deemed to contribute to GHGs, harm our reputation and adversely impact our sales of fuel products.

Physical Risks

Potential physical impacts of climate change on our operations are highly uncertain and vary amongst the geographic areas in which we operate. These impacts may include changes in rainfall, storm patterns and intensities, hurricanes, sea levels, and temperatures that may impact the seasonality of our

business. The occurrence of any of the foregoing factors may increase our costs and the prices we charge our customers, reduce the demand for our products, and therefore, adversely affect our results of operations.

Demand-related impacts

Changing temperatures may impact the seasonality of our business, such as our heating oil business in the United Kingdom. Additionally, improvements in motor vehicle fuel efficiency and increased consumer adoption of electric vehicles can lead to reduced demand for conventional fuel products and related services. Furthermore, changes in regulatory policies, increased awareness, and adverse publicity in the global marketplace about potential impacts on climate change by us or other companies in our industry could result in a reduction in the demand for hydrocarbon products that are deemed to contribute to GHGs. This could harm our reputation and adversely impact our sales of fuel products.

Other risks

Additional risks may include geographical, political, supply disruptions, and health and safety incidents. These risks also have the potential to adversely affect our ability to attract or retain talent due to a generally negative perception of fossil fuels and the energy industry overall.

Strategy

As a global energy management company who provides energy procurement advisory services and supply fulfillment within the aviation, marine and land transportation industries, supplying energy in a safe, secure, and responsible manner *is our top priority*.

Our strategy to address transition risks

As markets change and customers expand the scope of their energy needs, we are well positioned to have a significant impact on advancing the global energy transition. We have been expanding our portfolio of low-carbon energy solutions and providing customers with greater access to sustainably sourced energy. Furthermore, we are leveraging the expertise of our energy management advisory team, within our World Kinect Energy Services brand, to help educate our customers' understanding of their environmental impact and guide them towards their own energy transition goals.

Achieving significant carbon emissions reductions in the transportation industry requires collaboration across the entire supply chain. This necessitates a comprehensive understanding of the available options for reducing carbon emissions, compensating for residual emissions, developing a long-term strategy for achieving reduction goals, and the availability and technological advancement of alternative energy sources.

We offer and will continue to develop innovative products and solutions to help our customers reduce their carbon emissions. Initiatives include:

- Cleaner, more sustainable fuels
- Sourcing renewable energy
- Carbon offsets

By combining the extensive experience of our World Kinect Energy Services employees with our deep domain knowledge in energy supply, distribution, and logistics, we have established teams in each of our segments dedicated to supporting our customers throughout their journey to a lower carbon world. Our expanded set of business solutions includes offerings where we work with our customers to establish their carbon baseline, develop an energy use reduction plan, and source renewable fuels and other lower carbon alternatives. We are also assisting our customers with managing both on-site solar solutions and offsite renewable energy projects, as well as power purchase agreements (PPAs). In addition, we source renewable power for our customers' offices and other operating facilities through the purchase of renewable energy certificates (RECs).

Cleaner, more sustainable fuels

Renewable & lower carbon fuels

As part of our efforts to provide more sustainable, climate-resilient solutions and products, we are working to increase the availability of renewable and lower-carbon fuels such as sustainable aviation fuel (SAF), renewable diesel (also known as hydrotreated vegetable oil or HVO), traditional biodiesel and renewable natural gas (biogas). While the supply of renewable fuels is relatively limited to a few key geographic areas at this time, we see significant opportunity in this sector and are committed to advancing the energy transition through these lower carbon fuels.

Some of our initiatives include partnering with renewable and lower carbon fuel suppliers to improve our supply chain efficiency and distribution channels, supporting industry events that showcase the use of alternative fuels, and investing in clean energy. We are also supporting renewable fuel suppliers by entering into offtake agreements and connecting them with end users, as well as investing in projects aimed at developing lower carbon alternative fuels.

Aviation

As a strategic partner to our commercial, business, and general aviation customers, we have long recognized the importance of enabling carbon reduction in the aviation industry. As a founding member of the Coalition of Sustainable Aviation Fuel (SAF), for instance, we are a strong supporter of the business aviation industry's goal to reduce carbon emissions by 50% by 2050 and carbon-neutral growth from 2020 onwards.

To further promote the widespread acceptance and adoption of alternative fuels like SAF, we have been actively participating and collaborating with other industry participants to educate customers about its use through providing SAF for demonstrations and test flights. We are also working with SAF suppliers such as World Energy and Neste to promote the use of SAF and are collaborating with them to secure strategic SAF off-take agreements for various aviation customers.

Our "Book & Claim" Sustainable Aviation Fuel credit program

To overcome the challenges of scattered supply and limited demand for Sustainable Aviation Fuel (SAF), we offer a solution referred to as "Book & Claim" (B&C) or the Sustainable Aviation Fuel credit (SAFc) program. The program allows customers to cost-effectively enjoy the green attributes of SAF while mitigating the environmental impacts of transporting SAF over long distances.

We have continued to work to expand and develop the SAF supply chain with the vision to make SAF an everyday purchase. We recognize that the most effective utilization of this lower carbon fuel alternative is at airports in close proximity to SAF production facilities to minimize transport emissions.

Marine

We have also sought to take a leading role in developing a sustainable marine fuel supply chain. While the maritime industry faces certain challenges arising from their energy needs, particularly in long-distance shipping, we are highly focused on supporting our customers in identifying lower carbon alternatives and developing sustainability solutions to help them achieve their short and long-term sustainability goals. We have collaborated with Clean Energy Fuels Corp. since 2019, and in 2021 we worked together to supply liquefied natural gas (LNG) to Pasha Hawaii, an independent operating subsidiary of The Pasha Group. We supplied two natural gas-powered Pasha ships, which are expected to surpass the International Maritime Organization (IMO) 2030 standards for ocean vessels with zero sulfur emissions, a 90% reduction in nitrogen oxide, and a 25% reduction in carbon dioxide compared to liquid fuel oil.

Land

In the land transportation sector, demand for renewable diesel/HVO continues to grow in both North America and the United Kingdom (UK). Renewable diesel is chemically the same as petroleum-based diesel and can therefore be used in existing pipelines, storage tanks, and diesel engines, while producing fewer lifecycle carbon emissions than conventional diesel. In 2021, we increased our own inventory of HVO at key locations and we are continuing to focus on growing our renewable fuel offerings for our fleet customers in the coming years.

Sourcing renewable energy

As a global energy management company, we have focused on investing in and expanding our portfolio of sustainability products and services across the energy product spectrum. We offer our customers consulting and energy management services across various industries to assist them in sourcing energy efficiently and affordably.

Our professionals within our World Kinect Energy Services brand enable us to create a “one-stop-shop” for our customers’ sustainability journey in the energy transition. Together, we are continuing to develop renewable energy solutions, alternative fuel sources, and energy efficiency measures to lessen customers’ environmental impact and reduce their carbon footprint.

In addition, we also support our global customers in achieving their renewable energy targets by expanding our REC offerings beyond Europe and North America into Latin America and Asia. We are also investing in growing our renewable energy consultancy services. With this expansion, we expect to help our customers navigate different options of direct investments in renewable energy and PPAs across Europe, North America, and Australia.

Carbon offsets

As the supply for renewable fuels and other low-carbon alternatives continues to develop, many of our customers are faced with relatively limited opportunities to achieve their long-term sustainability goals with the availability of sustainable fuels in today’s marketplace. We believe carbon offsets can serve as a practical component of decarbonization strategies in the short term.

By using mechanisms such as carbon offsets, we are helping our customers achieve their carbon goals today, while they further develop plans to achieve their net zero goals in the future. As part of our sustainability solutions offerings, we provide a comprehensive carbon offset program, which includes advisory services and carbon offsets selected by our World Kinect Energy Services team. The program is derived from high-quality projects that encompass wind and solar technology, as well as forest conservation and afforestation efforts around the world. Our offsets range from fuel transaction bundles to significant annual residual offsets.

In addition, we offer carbon offset programs for our customers that are also fuel suppliers, such as fixed base operators (FBO) and marinas. These programs provide multiple options to make purchasing carbon offsets convenient and allow our customers to offer carbon offsets to their own customers. Customers can also purchase carbon offsets on a bulk or contract basis.

Metrics and Targets

We are committed to reducing our own carbon emissions and are taking the necessary steps to deploy solutions that enable a lower carbon future.

Metrics

Across our facilities worldwide, we track and report emissions on a variety of climate-related metrics, including direct and indirect emissions (Scope 1 and 2) and renewable energy procured on behalf of our customers. We track and calculate our carbon emissions in accordance with the World Resources Institute and World Business Council for Sustainable Development Greenhouse Gas Protocol (GHG Protocol).

Performance

In 2019, we established the baseline carbon footprint of our global operations from which to measure our progress thereafter. For our initial carbon footprint, our total Scope 1 carbon emissions came primarily from the operation of fuel transportation vehicles in the U.S. and the U.K., as well as from the vessels we use to store and deliver marine fuels and other products to our customers in certain countries. Our total Scope 2 emissions, meanwhile, consisted principally of electricity consumed worldwide in our offices and other physical fueling locations directly controlled by us.

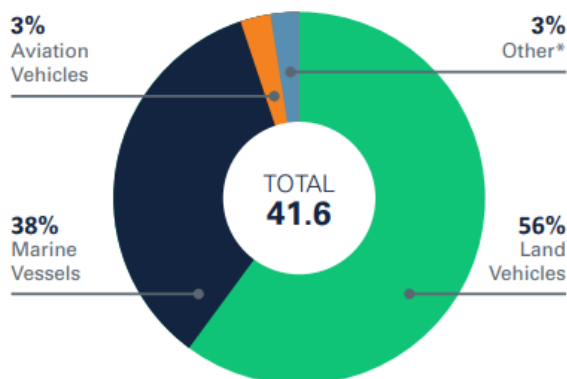
For 2020, we again measured our global Scope 1 and Scope 2 emissions across our entire business in accordance with the GHG Protocol. In the process of doing so, we further refined our data capture methodology and implemented a number of processes and key performance indicators (KPIs) to enhance our ability to measure the carbon emissions of the fuel transportation vehicles we own or control. To validate our updated methodology, we also gathered the same detailed information for our 2019 base year and recalculated the resulting carbon emissions to provide for a more precise comparison of our emissions reductions year-over-year.

Our Scope 1 and 2 emissions for 2020 represented a 19% overall reduction as compared to our recalculated 2019 base year.

2020 Scope 1 Emissions:

By Segment

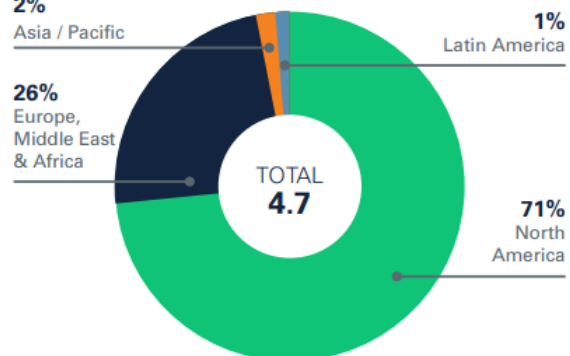
Amounts in thousands and metric tons of CO₂e



2020 Scope 2 Emissions:

By Region

Amounts in thousands and metric tons of CO₂e



For 2020, we utilized carbon offsets derived from projects to fully compensate for our Scope 1 emissions. We offer these and other similar products to our customers through our World Kinect Energy Services brand. By purchasing offsets from accredited carbon reduction projects, we continue to support not only our own sustainability goals but also enable our customers and other stakeholders to participate and support their own environmental and social objectives.

For our Scope 2 emissions in 2020, we again chose to source renewable power for all of our facilities through the purchase of renewable energy certificates (RECs). In doing so, we were able to effectively reduce our Scope 2 emissions to zero for a second year in a row.

Understanding and identifying Scope 3 emissions

Measuring and reducing the Scope 3 emissions of our full value chain is a key element of our overall climate strategy. We intend to expand our data gathering and reporting capabilities to include our Scope 3 emissions in the future. We are currently working to identify and quantify specific categories of our Scope 3 emissions so that we can begin to better define targets and measure our progress towards decarbonizing our value chain. However, we have already taken steps to reduce these emissions through initiatives such as adopting new technologies that minimize business travel and promoting sustainable commuting.

We are currently focusing on identifying and quantifying our Scope 3 emissions in key areas, including:

- Transportation and distribution;
- Use of sold products;
- Business travel; and
- Employee commuting.

We continuously seek to collaborate with our upstream suppliers and our third-party carriers, that deliver fuel on our behalf, to discuss sustainability objectives and methods to decarbonize the value chain. Our initiatives, products and solutions mentioned in the Strategy section of this Report are testaments to our commitment. Similarly, we aim to educate our customers and other industry participants on lower carbon alternatives to meet their existing energy needs, as well as develop our global supply and distribution channels with the goal of increasing availability of renewable fuels.

Targets

We have not yet publicly set climate-related targets, but we are working on establishing goals and targets aimed at reducing our Scope 1 and 2 carbon emissions. We are also working on setting goals for growing our renewable fuel volumes and sustainability solutions to better enable our customers, suppliers, and other stakeholders to achieve their own sustainability goals and thereby reduce GHG emissions for the various participants in our value chain.

Task Force on Climate-related Financial Disclosures Index

We are committed to regularly updating our stakeholders on our climate change risk management, governance, and performance. The table below shows how the disclosures in this report align with the recommendations of the Financial Stability Board’s Task Force on Climate-related Financial Disclosures (TCFD) and where the relevant information can be found in this report.

TCFD Recommendation		Location
Governance		
Disclose the organization’s governance around climate-related risks and opportunities.	(a) Describe the organization’s governance around climate-related risks and opportunities.	Board of Directors’ oversight of climate-related risks and opportunities
	(b) Describe management’s role in assessing and managing climate-related risks and opportunities.	Management’s role in assessing and managing climate-related risks and opportunities
Strategy		
Disclose the actual and potential impacts of climate-related risks and opportunities on the organization’s business, strategy and financial planning where such information is material.	(a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long terms.	Climate-related risks and opportunities
	(b) Describe the impact of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning.	Our strategy to address transition risks
	(c) Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2° C or lower scenario.	Our strategy to address transition risks
Risk Management		
Disclose how the organization identifies, assesses and manages climate-related risks.	(a) Describe the organization’s processes for identifying and assessing climate-related risks.	Identifying and assessing climate-related risks
	(b) Describe the organization’s processes for managing climate-related risks.	Process for managing climate-related risks
	(c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization’s overall risk management.	Identifying and assessing climate-related risks
Metrics and Targets		
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	(a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	Metrics
	(b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 GHG emissions and the related risks.	Performance
	(c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	Targets

INFORMATION RELATING TO FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements. Forward-looking statements include predictions, forecasts and other statements that may indicate or imply future results, performance or achievements. You can identify forward-looking statements by words such as “believe,” “anticipate,” “expect,” “estimate,” “project,” “could,” “would,” “will,” “will be,” “will continue,” “will likely result,” “plan,” or words or phrases of similar meaning. Specifically, this report includes forward-looking statements about (i) certain of our goals, plans and expectations with respect to sustainability, the environment, diversity and other social responsibility issues and impacts, (ii) our actions and expectations regarding the transition to a low carbon world, (iii) the expansion of our renewable energy products, service offerings and sustainability solutions, and (iv) the business and sustainability strategies of our customers and our ability to assist them in achieving their goals. Actual results may differ materially from any forward-looking statement due to risks and uncertainties, including, but not limited to: inflationary pressures and their impact on our customers or the global economy, including sudden or significant increases in interest rates and adverse conditions in the markets or industries in which we or our customers and suppliers operate; our ability to capitalize on new market opportunities; risks related to the complexity of current and future U.S. and foreign regulations; and our ability to effectively leverage technology and operating systems and realize the anticipated benefits. These forward-looking statements are qualified in their entirety by cautionary statements and risk factor disclosures contained in our Securities and Exchange Commission (SEC) filings. This report should be read in conjunction with our most recent Annual Report on Form 10-K and other periodic reports filed with the SEC. We assume no obligation to revise or publicly release the results of any revisions to these forward-looking statements in light of new information or future events, except as required by law.

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