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Task Force on Climate-related Financial Disclosures

January 1, 2021 – December 31, 2021

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Task Force on Climate-Related Financial Disclosures (TCFD)

## Cautionary Note Regarding Forward-Looking Statements

This report, our other reports and our filings with the Securities and Exchange Commission (“SEC”) contain and in the future may contain “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Statements other than those of current or historical fact, and all statements accompanied by terms such as “will,” “believe,” “project,” “expect,” “estimate,” “assume,” “intend,” “anticipate,” “target,” “plan” and similar terms, are intended to be forward-looking statements. Forward-looking statements are made subject to the safe harbor provisions of the federal securities laws pursuant to Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934.

From time to time, we also include written or oral forward-looking statements in other publicly disclosed materials. Such statements relate to our intent, belief and current expectations about our strategic direction, prospects, and future results, and give our current expectations or forecasts of future events; they do not relate strictly to historical or current facts. Management believes that these forward-looking statements are reasonable as and when made. However, caution should be taken not to place undue reliance on any such forward-looking statements because such statements speak only as of the date when made.

Forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from our historical experience and our present expectations or anticipated results. These risks and uncertainties, include, but are not limited to: continued uncertainties related to the impact of the COVID-19 pandemic on our business and operations, financial performance and liquidity, our customers and suppliers and on the global economy; changes in general economic conditions, in the U.S. or internationally; significant competition on a local, regional, national and international basis; changes in our relationships with our significant customers; changes in the regulatory environment in the U.S. or internationally; increased or more complex physical or data security requirements; legal, regulatory or market responses to global climate change; results of negotiations and ratifications of labor contracts; strikes, work stoppages or slowdowns by our employees; the effects of changing prices of energy, including gasoline, diesel and jet fuel and interruptions in supplies of these commodities; changes in exchange rates or interest rates; uncertainty from the expected discontinuance of LIBOR and transition to any other interest rate benchmark; our ability to maintain our brand image; our ability to attract and retain qualified employees; breaches in data security; disruptions to the Internet or our technology infrastructure; interruptions in or impacts on our business from natural or man-made events or disasters including terrorist attacks, epidemics or pandemics; our ability to accurately forecast our future capital investment needs; exposure to changing economic, political and social developments in international and emerging markets; changes in business strategy, government regulations or economic or market conditions that may result in impairment of our assets; increases in our expenses or funding obligations relating to employee health, retiree health and/or pension benefits; potential additional U.S. or

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international tax liabilities; potential claims or litigation related to labor and employment, personal injury, property damage, business practices, environmental liability and other matters; our ability to realize the anticipated benefits from acquisitions, dispositions, joint ventures or strategic alliances; our ability to realize the anticipated benefits from our transformation initiatives; cyclical and seasonal fluctuations in our operating results; our ability to manage insurance and claims expenses; and other risks discussed in our filings with the Securities and Exchange Commission from time to time, including our [Annual Report on Form 10-K](#) for the year ended December 31, 2021, our [Quarterly Report on Form 10-Q](#) for the quarter ended March 31, 2022 and subsequently filed reports. You should consider the limitations on, and risks associated with, forward-looking statements and not unduly rely on the accuracy of predictions contained in such forward-looking statements. We do not undertake any obligation to update forward-looking statements to reflect events, circumstances, changes in expectations or the occurrence of unanticipated events after the date of those statements. Company environmental, social and governance (“ESG”) goals are aspirational and not guarantees or promises; no assurances can be provided that any such goals will be met due to dependence on technological innovations and other available resources needed to drive environmental change, many of which are outside of our control. Statistics and metrics relating to ESG matters are estimates and may be based on assumptions or evolving standards.

## **This Report**

In 2017, the Financial Stability Board released a report using the developed framework by the Task Force on Climate-Related Financial Disclosures to promote consistent, reliable, clear, and efficient information for lenders, insurers, and investors. UPS values our stakeholders and supports the TCFD’s efforts to create transparency around the risks and opportunities from climate change. In this report, UPS identifies climate-related risks within our operations and opportunities to create resiliency in the future.

Measurement of certain disclosed metrics includes estimates and assumptions that are subject to inherent measurement uncertainty resulting, for example, from accuracy and precision of conversion and other factors. The selection by management of different but acceptable measurement methods, input data or assumptions may have resulted in materially different amounts or metrics being reported.

The acquisition of Roadie and divestiture of UPS Freight did not have a significant impact on the company.

## GOVERNANCE

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### **1a. Describe the board's oversight of climate-related risks and opportunities.**

The highest governance body of the company is the Board of Directors (referred to as the Board). Members of the Board meet in committees tasked with specific oversight responsibilities. The Risk Committee of the Board is one of four committees<sup>1</sup> composed entirely of directors meeting our director independence requirements and those of the New York Stock Exchange (NYSE).

The Board, which is responsible for strategic oversight of the company, delegates authority for day-to-day management of the company, including as it pertains to environmental topics, to management. This oversight responsibility includes oversight of management's efforts relating to developing values, strategies and policies related to ESG impacts.

The Board is briefed regularly on issues of concern for stakeholders, including customers, unions, employees, retirees, investors, governments, influencers, communities, suppliers, and the environment. Issues include the impact of policies related to ESG matters. Stakeholder engagement is an essential aspect of our corporate governance. Management shares feedback from these engagements with the Board and committees as appropriate. Stakeholders who wish to communicate directly with a member of our Board, or with our independent directors as a group, may do so by writing to UPS via our corporate secretary.

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### **1b. Describe management's role in assessing and managing climate-related risks and opportunities.**

The chief corporate affairs officer is a member of the UPS Executive Leadership Team (ELT<sup>2</sup>) and leads the company's execution of its overall sustainability strategy, which includes:

- Assessing and managing climate-related risks and opportunities,
- Introducing innovative and environmentally responsible products,
- Establishing key performance indicators, goals, and transparent reporting for the company,
- Partnering with the company's chief diversity, equity, and inclusion officer (CDEIO) to support the company's diversity goals, and
- Encouraging employee engagement in the communities where they live and work.

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<sup>1</sup> Information about each of these committees is provided in the 2022 Annual Meeting Proxy Statement — Committees of the Board of Directors, page {29}. Our website also includes detailed information about other corporate governance matters at UPS, including our policies and processes.

<sup>2</sup> ELT consists of the Company's most senior executive officers reporting directly to the CEO.

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The chief corporate affairs officer is also a member of the company's ELT Risk Committee, which is an internal committee of senior management that meets quarterly to review the enterprise risk strategy. Under the management of the chief corporate affairs officer, our sustainability team works cross-functionally with our businesses to implement programs that create value and drive progress toward UPS's sustainability goals. The team convenes individual working groups to address specific sustainability issues and initiatives, such as urban logistics and last-mile delivery, electric vehicles (EVs), renewable electricity and airline efficiency.

## STRATEGY

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### **2a. Describe the climate-related risks and opportunities the organization has identified over the short, medium- and long term.**

Global climate change presents challenges to our business which could materially adversely affect us. The effects of climate change create financial and operational risks to our business, both directly and indirectly. We have made several public statements regarding our intended reduction of carbon emissions, including our most recent goal to achieve carbon neutrality by 2050 and our other environmental sustainability goals. We may be required to expend significant additional resources to acquire assets or on remediation efforts to meet these goals, which could significantly increase our operational costs. We could also be required to write down the carrying value of assets, which could result in impairment charges.

Further, there can be no assurance of the extent to which any of our goals will be achieved, or that any future investments we make will meet investor expectations or any legal standards regarding sustainability performance. Our ability to meet our goals depends in part on significant technological advancements with respect to the development and availability of reliable, affordable, and sustainable alternative solutions, including aviation fuel and alternative fuel vehicles. Moreover, we may determine that it is in our best interests to prioritize other business, social, governance or sustainable investments over the achievement of our current goals based on economic, regulatory or social factors, business strategy or other factors. If we do not meet these goals, then, in addition to regulatory and legal risks related to compliance, we could incur adverse publicity and reaction, which could adversely impact our reputation, and in turn adversely impact our results of operations. While we remain committed to being responsive to climate change and reducing our carbon footprint, there can be no assurance that our goals and strategic plans to achieve those goals will be successful, that the costs related to climate transition will not be higher than expected, that the necessary technological advancements will occur in the timeframe we expect, or at all, or that proposed regulation or deregulation related to climate change will not have a negative competitive impact, any one of which could have a material adverse effect on our capital expenditures, operating margins and results of operations.

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## **2b. Describe the impact of climate-related risks and opportunities on the organization's business, strategy, and financial planning.**

Global climate change, severe weather conditions, or other natural or man-made disasters, including storms, floods, fires, earthquakes, epidemics, pandemics, conflicts, unrest, or terrorist attacks, have in the past and may in the future disrupt our business. Customers may reduce shipments, or our costs to operate our business may increase, either of which could have a material adverse effect on us. Any such event affecting one of our major facilities could result in a significant interruption in or disruption of our business.

See our [2021 Annual Report Form 10-K 1A: "Risk Factors"](#).

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## **2c. Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including 2 degrees Celsius or lower scenario.**

To mitigate the risks from climate change, UPS is monitoring and innovating our operations to perform more efficiently and resiliently. See Item 4c for additional information.

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## RISK MANAGEMENT

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### **3a. Describe the organization's processes for identifying and assessing climate-related risks.**

Enterprise Risk Management (ERM) is an ongoing process at UPS. The first step in the process is Risk Identification, which is the process of documenting identifiable risks that could keep an organization or program from executing its strategic objectives. This is undertaken through multiple avenues including internal expertise, the use of external consultants, an annual ERM survey, Internal Audit results and/or findings, concerns raised through the UPS Ethics Hotline, and external benchmarking.

Once risks are identified, the organization completes a risk assessment of the potential impact of a risk by measuring or assessing both the likelihood and impact of the occurrence. Annually, the ELT and Board undertake a risk rating exercise that includes a review of current risks. ERM leverages responses from the ELT and Board's risk assessment, which includes an evaluation of new/emerging risk areas, to upgrade/downgrade risk. We also perform external benchmarking.

UPS's Business Continuity Groups checks that alternative plans are in place in the event business disruptions occur. Because of UPS's unique network, risks often generate opportunities. UPS has designed its extensive integrated network capabilities to minimize the impact of climate change disruptions affecting certain locations. This allows UPS to optimize our network across locations.

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## **3b. Describe the organization's processes for managing climate-related risks.**

Risks, including climate change, are assessed and managed through a matrix which was developed to quickly estimate risk severity based on relative likelihood and potential operational impact. UPS's success is focused on the efficiency and effectiveness of an extensive hub and spoke network. Risks to the network and supporting processes are evaluated and mitigated based on both asset cost and impact to the network's functionality, inclusive of facilities and equipment.

Risk-scenario planning is conducted to evaluate potential disruptions at key operating facilities from a variety of risk sources, including climate change issues related to weather and/or natural disasters and change in governmental policies. A Business Continuity Group develops alternative plans for deployment in the event a disruption was to occur, and UPS has designed its network capabilities to minimize the impact of climate change disruptions affecting certain locations. We also address climate risk with endeavors such as our "rolling laboratories" of alternative fuel vehicles (i.e., natural gas, propane, and of electric vehicles).

Risk ownership is the next stage in the process and individuals who are accountable for managing the risk are identified. At UPS, risk ownership is identified by the business unit. Risk Controls and mitigation activities are maintained within risk profiles and are owned by the risk owners. These are the controls, tools, or other mechanisms employed to manage each risk, taking into consideration people, processes, technology, and governance. Risk monitoring is the process of continuously identifying risks and establishing the best methods of dealing with those risks within our organization. At UPS, the risk owner is responsible for monitoring the day-to-day activities surrounding the risk mitigation strategy. The Enterprise Business Risk and Compliance Committee (EBRCC) reviews the status of risk mitigation efforts and provides feedback to the risk owner.

The final stage in the risk management process is Risk Reporting, the communication vehicle used to escalate issues as they arise across all business units. Risk reporting is done through our senior leadership, Business Risk and Compliance Committees (BRCCs), ELT Risk Committee and the Board of Directors' Risk Committee.

UPS prioritizes risks by classifying them into one of two risk level classifications, Tier 1 or Tier 2. To determine Tier 1 and Tier 2 status, we use a risk assessment matrix and heat map. The risk assessment matrix is used to rate the likelihood and impact on a scale of 1 – 5, Very Low, Low, Moderate, High, or Very High. When evaluating operational impact, three specific elements are rated on a similar 1-5 scale: Our Mission, Financial, and Operations/Brand. The results of the risk assessment are then plotted on a heat map to determine tier status. Risks that require Board level awareness that may be material, could be inherently high risk to the organization, or could potentially have a substantive financial impact (the potential to generate significant change in UPS's business operations, revenue, or expenditures, evaluated qualitatively and quantitatively), are defined as Tier 1 level risks.

Tier 2 level risks are defined as potentially significant, emerging, or approaching limits that would result in being considered Tier 1 risks. Both Tier 1 and Tier 2 level risks are discussed with the Board, ELT, BRCCs, Audit Committee, and Risk Committee to provide a clearer view of the depth and breadth of our full risk inventory.

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Currently, certain climate change related risks at UPS are assessed as Tier 1 risks, see item 2.b for identified risks. To manage Tier 1 risks and integrate into our business strategy, UPS utilizes BRCCs, which are broad cross-functional teams within a business-unit, function, or location. UPS currently has active region and business unit level BRCCs globally, with additional district/country-level BRCCs as well. The BRCC identifies, evaluates, and prioritizes risks, including oversight of mitigation efforts, and when necessary, escalation of risks to the ELT. The EBRCCs connects ERM practices between relevant Corporate and Region/Business-Unit BRCC stakeholders. The Committee also provides the forum in which the mitigation activities for Tier 1 and Tier 2 risks are evaluated on a periodic basis.

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### **3c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.**

Our risk assessment process considers all risks, including those related to climate. We have a standardized framework for assessing, reporting, and monitoring risks that involve management and the Board.

## TARGETS AND METRICS

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### **4a. Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.**

In alignment with our strategy and risk management process, the primary metrics UPS reports to assess climate-related risks and opportunities are:

- Package carbon intensity (metric tonnes of CO<sub>2</sub>/package)
- Percentage alternative fuels (including synthetic and bio renewable fuels)
- Renewable electricity in facilities (including direct sourcing and purchasing of renewable energy certificates (RECs))
- Sustainable aviation fuel (gallons purchased or procured)

UPS discloses progress on these metrics in our Global Reporting Initiative (GRI) Index. See the environmental section indicators 302 and 305 thereof for more details.



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### **4b. Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas emissions, and the related risks.**

UPS discloses Scope 1, Scope 2, and Scope 3 greenhouse gas (GHG) emissions, along with an extensive breakdown of our GHG reporting policies in indicator 305 of our GRI Index.

2021 CO <sub>2</sub> e emissions in '000 Metric Tonnes	
Scope 1	15,668
Scope 2	654
Scope 3	19,486

Regulation of GHG emissions exposes our transportation and logistics businesses to potentially significant new taxes, fees, and other operational costs. Compliance with such regulation, and any increased or additional regulation or associated costs is further complicated by the fact that various countries and regions are following different approaches to the regulation of climate change.

We are subject to federal, state, and local environmental laws and regulations across all our operations. These laws and regulations cover a variety of processes, including, but not limited to: properly storing, handling and disposing of waste materials; appropriately managing waste water and storm water; monitoring and maintaining the integrity of underground storage tanks; complying with laws regarding clean air, including those governing emissions; protecting against and appropriately responding to spills and releases and communicating the presence of reportable quantities of hazardous materials to local responders. We maintain site- and activity-specific environmental compliance and pollution prevention programs to address our environmental responsibilities and remain compliant. In addition, we maintain numerous programs which seek to minimize waste and prevent pollution within our operations.

In the past several years in the United States, Congress has considered various bills that would regulate GHG emissions, but these bills so far have not received sufficient Congressional support for enactment. Nevertheless, some form of federal climate change legislation is possible in the future. Even in the absence of such legislation, the Environmental Protection Agency could move to regulate GHG emissions, especially aircraft or diesel engine emissions, and this could impose substantial costs on us.

In addition, the impact that the re-entry into the Paris Climate Accord may have on future U.S. policy regarding GHG emissions, on CORSIA and on other GHG regulation is uncertain. The extent to which other countries implement that accord could also have an adverse direct or indirect effect on us.

Potential costs to UPS of increased regulation regarding GHG emissions globally, especially aircraft or diesel engine emissions, include an increase in the cost of the fuel and other energy we purchase, and capital costs associated with updating or replacing our aircraft or vehicles prematurely. We cannot predict the impact any future regulation would have on our cost structure or our operating results. It

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is possible that such regulation could significantly increase our operating costs and that we may not be willing or able to pass such costs along to our customers. Moreover, even without such regulation, increased awareness, and any adverse publicity in the global marketplace about the GHGs emitted by companies in the airline and transportation industries could harm our reputation and reduce customer demand for our services, especially our air services.

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## **4c. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.**

We take a comprehensive, global approach to reducing energy use and GHG emissions within our network, as well as major portions of our value chain, including customers and suppliers.

UPS is reimagining our network through an innovation-driven strategy that includes electric ground and air vehicles, cleaner-burning fuel, and climate-conscious facilities. We believe in shared responsibility for improving energy efficiency and reducing GHG emissions. UPS supports global efforts to mitigate the impact of climate change and contributes to public discussions about environmental sustainability. This includes collaborating with leading non-governmental organizations (NGOs) and regulators. We also participate in public policy forums, where we advocate for prudent innovation and investment in new technologies and infrastructure development. In November 2021, UPS participated in the United Nations Climate Change Conference (COP26) for opportunities to collaborate with global leaders on sustainable solutions to chart a more environmentally resilient path forward for the planet. Additionally, UPS was the Official Logistics Partner of Expo 2020 Dubai. Guided by a clear purpose to move our world forward by delivering what matters and our strategy – Customer First, People Led, Innovation Driven – we are integrating sustainability into all aspects of our business. With our global footprint and customers in more than 220 countries and territories, we have seen how our business can impact the communities in which we operate and are committed to fostering a more equitable, just, and resilient world.

Our guiding principles are:

- Lead with integrity,
- Execute a holistic vision of sustainability,
- Deliver impact not just promises,
- De-link volume growth from that of GHG emissions, and
- Take a fiscally-responsible approach based on sound engineering principles.

In keeping with our purpose and mindful of the ESG issues that matter most to our stakeholders, in 2021 we announced ambitious new sustainability goals, including a goal of carbon neutrality across Scope 1, 2 and 3 by 2050.

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## Roadmap to Carbon Neutrality by 2050

We set a goal to achieve carbon neutrality by 2050 across Scope 1, 2, and 3 emissions (as measured in CO<sub>2</sub>e). We chose carbon neutrality by 2050 rather than a net zero commitment which requires the adoption of a science-based target in accordance with the Science Based Target initiative's ("SBTi") standards. As noted above, our current targets have been developed based on sound engineering principles. We do not currently believe that, based on such principles, scalable solutions for aircraft exist at this time that would allow for the achievement of a science-based target by 2030 or 2035, as required by the SBTi.

Setting goals alone does not define our strategy. Rather, a roadmap is necessary to show stakeholders how we intend to achieve these goals. With milestones identified, we are collaborating cross-functionally to have 40 percent alternative fuel used in our ground operations and 25 percent renewable electricity powering our facilities by 2025. By 2035, we intend to use 30 percent sustainable aviation fuel (SAF) in our air network, achieve a 50 percent reduction in CO<sub>2</sub>e per package delivered (from a 2020 baseline), and have 100 percent renewable electricity powering our facilities.

## UPS Environmental Sustainability Goals Defined:

### **40 percent alternative fuel used in our ground operations by 2025**

Fuel in ground operations is defined as all fuel used in on-road and off-road vehicles for mobile ground operations. This includes our tractor-trailers ("feeders"), package cars, ground support equipment for loading/unloading aircraft, forklifts in our facilities, and shifters for moving trailers on UPS property. Alternative fuels are any fuels other than conventional gasoline and diesel, such as compressed natural gas (CNG), liquified natural gas (LNG), propane, bio-diesel, renewable diesel, ethanol, and renewable natural gas (RNG).

### **25 percent renewable electricity powering our facilities by 2025**

Renewable electricity is wind and solar renewable electricity outside of electricity currently provided on the grid. This energy may be sourced from on-site solar projects or the procurement of renewable electricity through power purchasing agreements (PPAs) and other financial instruments.

### **30 percent sustainable aviation fuel in our air network by 2035**

We are committed to sourcing 30 percent of our aviation fuel from sustainable sources by 2035. SAF is a biofuel used to power aircraft and has similar properties to conventional jet fuel but with a smaller carbon footprint. Depending on the feedstock and technologies used to produce it, SAF can reduce lifecycle GHG emissions dramatically compared to conventional jet fuel. Current SAF production is less than 1 percent of global jet fuel consumption, and 3-4 times more expensive.

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## 50 percent reduction in CO<sub>2</sub>e per package delivered by 2035 (2020 baseline)

We recognize that as we continue to serve customers around the world and meet their shipping needs, we must delink the growth of our GHG emissions from the increase in the volume of our business. The key indicator of our carbon reduction performance is how much CO<sub>2</sub>e is generated per package we deliver. Included in this metric are the total Scope 1 and 2 emissions for our global operations. Rather than only calculating CO<sub>2</sub>, we use CO<sub>2</sub>e, the equivalent sum of CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O. Carbon intensity in 2021 was 2.55 Kg of CO<sub>2</sub>e per package delivered, up from 2.51 in 2020.

We are focused on five levers to achieve carbon neutrality by 2050: (1) Efficiency and innovation, (2) Increasing SAF procurement, (3) Fleet electrification, (4) Renewable / biofuel interval solutions, and (5) Renewable electricity transformation.

## Efficiency and innovation

Our actions resulted in a 14 percent reduction in CO<sub>2</sub>e per package from 2010 to 2020. Starting from the base year of 2020, we have set a goal to reduce CO<sub>2</sub>e per package delivered by an additional 50 percent by 2035. This will be achieved by meeting the milestones described above, along with network efficiencies to reduce miles driven and flown. We continue to work to reduce energy consumption in other ways as well, such as switching to LED lighting and more efficient conveyor motors.

Our GHG emissions strategy includes improving our operational efficiency and reducing fuel consumption. Specific examples include investing in new technologies like electric vertical take-off and landing (eVTOL) aircraft, and we are exploring using electric aircraft in our small feeder network, as well as reducing emissions through engine washing, installing winglets on our 767 aircraft and reducing discretionary fuel carried. All airline efficiencies implemented resulted in an absolute reduction of over 238,000 metric tonnes of GHG avoided in 2021.

Efficiency is core to sustainability: the greenest mile is the one not driven or flown. UPS continues to enhance its award-winning On-Road Integrated Optimization and Navigation (ORION) platform with Dynamic Optimization, which recalculates individual package delivery routes throughout the day as traffic conditions, pickup commitments and delivery orders change. ORION, first deployed in 2012, provides drivers with the most efficient route for deliveries and pickups in the United States, Canada, and Europe. ORION is a proprietary technology that uses advanced algorithms, artificial intelligence, and machine learning. UPSNav, a navigation tool integrated into the handheld devices package delivery drivers carry, introduced detailed turn-by-turn directions to guide local delivery drivers, not just to addresses, but to specific package drop-off and pickup locations like loading docks that are not visible from the street. The latest enhancements will significantly improve results and decrease overall miles driven and fuel used.

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## Increasing SAF procurement

In achieving carbon neutrality by 2050, in air transportation we are committing to source 30 percent aviation fuel from sustainable sources. At the current time, SAF supply remains limited and it has not reached economies of scale, making it cost prohibitive for wide adoption. Over the next several years, UPS will continue to work within the industry, including with fuel producers, customers, and peers to accelerate the commercial availability, scale, cost, and competitiveness shift to SAF, such as through our membership with the Sustainable Aviation Buyers Alliance (SABA).

## Fleet electrification

A key part of our carbon reduction strategy involves electrifying our package delivery cars (class 4 to 6). We are collaborating with vehicle manufacturers to develop vehicle concepts to UPS specifications and committed to purchase up to 10,000 purpose-built electric delivery vehicles which include advanced control and safety features. We continue to move forward in R&D and testing alternative fuels and technologies in our “Rolling Laboratory” and are currently testing wireless bi-directional electric vehicle charging. Additionally, we are making use of electric-assist cycles to reduce our emissions and contribution to congestion in densely populated areas and have worked with our suppliers on deploying e-assist cycles specifically designed with changes in urban delivery in mind. We intend to scale and increase the deployment of these solutions in the future, with intermittent deployment already occurring through European cities.

## Renewable / biofuel interval solutions

Not only are we working on fleet electrification, but also using alternative fuels in ground operations which serves as a bridging solution that will contribute to carbon reductions as we transition our fleet to zero-emission tailpipe vehicles. We are testing hydrogen Class 8 tractors and hydrogen package cars as a part of our “Rolling Laboratory”. In 2021, we continued investing in alternative fuels for our ground fleet, purchasing 156 million gallons of alternative fuels, which represented 26 percent of our total ground fuel usage, up from 24 percent in 2020.

## Renewable electricity transformation

Renewable electricity for our facility load and electric fleet will be acquired over the next decade. In 2021, total electricity being generated from renewable sources for owned and leased facilities reached 5 percent. This includes several rooftop solar arrays on UPS facilities and procurement of renewable electricity within our operations.

For more information on UPS’s management approach for energy and emissions, see our 2021 GRI Content Index, indicator 302.