

# DHL and FedEx are tackling carbon emissions on a war footing

July 10, 2019



As populism paralyses climate change action worldwide, logistics giants DHL and FedEx are making profound progress in reducing carbon emissions



Samuel Abraham

The climate change policies of governments across the world vary drastically based on their political priorities. Global multinational corporations, however, need consistent climate change action to maintain stakeholder trust. This means the movers of the world – the logistics giants DHL and FedEx – need to be at the forefront of climate change action as they are responsible for a sizeable share of the global carbon emissions. While governments vacillate on climate change action, DHL

and FedEx are making massive changes to the way they lift and move goods across the world.

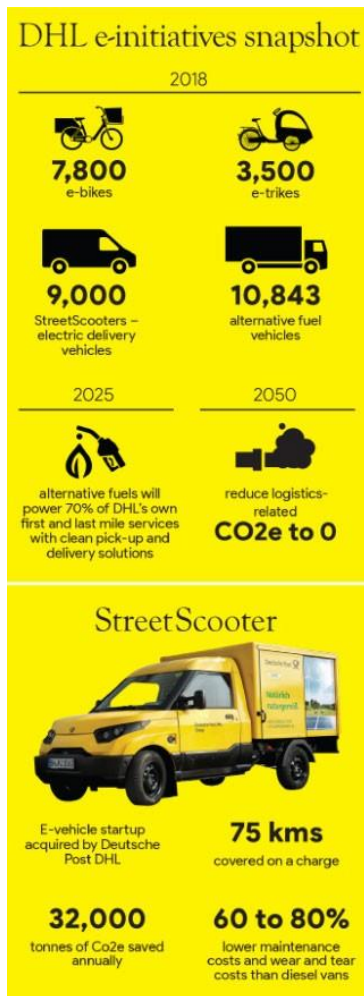


Deutsche Post DHL and FedEx have unambiguously embraced the modern environmental zeitgeist with a slew of e-mobility and alternative fuel initiatives that have major short-term and long-term implications. Under DHL's Mission 2050 initiative, it seeks to reduce logistics-related carbon emissions to zero by 2050. Today, DHL has more than 10,000 alternative fuel vehicles on the roads across the world as part of a switch to e-mobility. FedEx has been pursuing a 'Reduce, Replace, Revolutionise' strategy to reduce its carbon emissions intensity. The logistics giant is undergoing transformational change to increase the carbon efficiency of its legacy vehicle fleet. FedEx's strategy focuses on reducing the impact on the environment of its legacy cargo fleet and improving their productivity while creating new, more efficient, and innovative fleet solutions. FedEx claims that these efforts have so far contributed to a 37 percent reduction in carbon dioxide emissions intensity on a revenue basis across the company since financial year 2009 (FY09), a period in which revenue grew by 84 percent. FedEx also reduced 2.7 million metric tonnes of carbon dioxide emissions through fuel and energy saving initiatives last fiscal year alone, the company claims.

## **E-vehicles slowly taking over logistics majors' fleets**

In 2018, DHL's fleet already had 10,843 alternative fuel vehicles out on the road and more than 9,000 of these vehicles are StreetScooters – the electric delivery vehicle now designed and manufactured by Deutsche Post DHL Group. In addition, DHL uses 3,500 e-trikes and 7,800 e-bikes for postal delivery in Germany. "Partnerships

with major cities are a particularly interesting aspect of our activities – we lead by example, demonstrating that e-mobility can become the norm in logistics,” a DHL company spokesman told **International Finance**.



On the road to zero-emission logistics, Deutsche Post DHL Group wants to provide 70 percent of its own first and last mile services with clean pick-up and delivery solutions by 2025. “Delivery by foot, bicycle, and electric vehicles are the modes of choice for reducing carbon emissions and local air pollutants in urban areas. More and more of our vehicles feature e-mobility solutions – from all electric drive vehicles and cargo bikes for short distances, to plug-in hybrids and fuel cells for longer distances,” the DHL spokesman told **International Finance**.

DHL’s StreetScooter e-vehicles cover a distance of 75 kilometres on full charge and save 32,000 tonnes of carbon dioxide emissions annually. E-mobility solutions also support smarter operations at DHL. The total cost of ownership of StreetScooter e-vehicles has proven to be comparable to that of diesel vehicles. Even though the cost of purchase of e-vehicles is higher, DHL has observed that the maintenance and wear and tear costs of StreetScooter e-vehicles are 60 percent to 80 percent lower than diesel vans. DHL Express has also announced that it will add 63 electric cargo vans to its US fleet of green delivery trucks in 2019. And, since April 2016, DHL Express in Paris has been operating one of the first ten 100 percent electric MAN eTGE vans.

In FedEx’s Global Citizenship Report released to **International Finance**, the company announced that it will be adding 1,000 Chanje V8100 e-vehicles to the FedEx Express fleet in California. These e-vehicles can travel more than 150 miles on full charge and are expected to save FedEx 2,000 gallons of fuel while avoiding 20 tonnes of emissions per vehicle each year. FedEx added 445 e-vehicles in FY18, bringing the total number of its e-vehicles on the road to more than 2,554.

On May 24, DHL Express and StreetScooter announced their collaboration on a new electric delivery vehicle. The new ‘H2 Panel Van’ will become the first 4.25 tonne e-vehicle with an added fuel cell, which will provide additional power and enable a range up to 500 kilometres. In a first step, DHL Express has ordered 100 of the fuel cell vehicles with delivery expected from 2020 through 2021.

Like the larger WORK XL, the H2 Panel Van will be produced in collaboration with Ford. The new van fits into DHL’s larger environmental goals. “With the H2 Panel Van, DHL Express becomes the first express provider to use so many electric vehicles with fuel cells for last-mile logistics. This underscores our aspiration to be not only the fastest and most reliable provider on the market but also the most climate-

friendly,” Markus Reckling, CEO of Deutsche Post DHL told the media earlier this year. “The H2 Panel Van is another example of how Deutsche Post DHL Group is working towards its zero-emission goal for 2050,” Reckling added.

DHL’s StreetScooter e-vehicles are currently on the road in Netherlands and Austria as well. In addition, DHL has also sold 500 StreetScooter e-vehicles to Japanese logistics company Yamamoto. DHL considers Japan to be a market of interest as far as e-mobility is concerned. The StreetScooter e-vehicles have penetrated rural areas of Germany as well, as they are being used for the joint delivery of mail and parcels.

FedEx Express is testing e-vehicles in China and Europe with the strategic goal of scaling the adoption of commercially viable e-vehicles in those markets as soon as possible. The logistics company also completed assessments to determine the return on investment of using electric forklifts instead of propane forklifts.

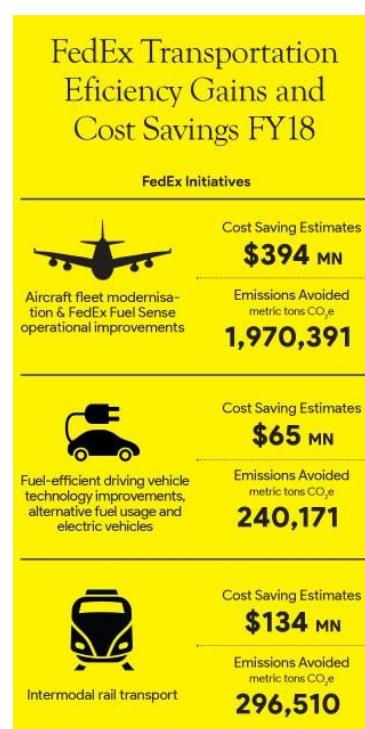
In future, FedEx Freight plans to incorporate Tesla Semi tractors into its fleet. As of now, FedEx is focusing on developing the charging infrastructure for e-vehicles with facilities to be upgraded to ensure that they can charge several vehicles at once. FedEx’ commitment to e-mobility starts at the top with FedEx Chairman and CEO Frederick W. Smith serving on the Electrification Coalition since 2009. The focus of the non-profit group of business leaders is to enable the mass deployment of e-vehicles.

## Going green also means efficient energy management

With the focus on deploying fuel-saving behaviours and systems, FedEx has saved 655 million gallons of jet fuel since 2006 across 59 projects. The Fuel Sense programme saved 94 million gallons of jet fuel in 2018. Under the Replace strategy, FedEx’ s aircraft modernisation programme saved 109.6 million gallons of fuel avoiding more than one million tonnes of carbon dioxide emissions. The company also seeks to revolutionise its energy management approach – for example, it plans to introduce onsite microgrid pilots with higher investments in fuel cell technology and solar energy.

Deutsche Post DHL implemented its Green Electricity Policy in 2018, which defines options for sourcing electricity and the process of purchasing electricity within the framework of the DHL Group’s environmental and energy policy. “We make sure that electricity generated from renewable sources, or ‘green electricity’ is the primary source of electric power in the group and aligns with relevant sustainability guidelines,” the DHL spokesman told **International Finance**. Overall, the use of green electricity across the DHL Group was already at 77 percent in 2018.

## Flying aircraft on 100 percent biofuel to reduce carbon footprint



An interesting part of these green initiatives at logistics companies is the effort to fly cargo aircraft on alternative fuels. FedEx's goal of obtaining 30 percent of jet fuel from alternative sources by 2030 met a key milestone last year. Red Rock Biofuels, which will supply low-carbon, renewable jet fuel to FedEx Express, broke ground on its biorefinery in Lakeview, Oregon in July 2018. The first delivery of alternative jet fuel is anticipated in 2020. Also in FY18, the ecoDemonstrator, a Boeing 777F built for FedEx Express, became the first FedEx plane to fly 100 percent on biofuel during a short-term period that also tested and gathered data on 35 new green technologies.

The Boeing 777F ecoDemonstrator is equipped with lasers and cameras, and it flies on 100 percent biofuel. It has a cargo bay outfitted with rows of computer test stations. DHL, until now, has not operated aircraft with low carbon emission fuels. However, the company has conducted tests in this regard and is working on options for running aircraft with alternative fuels in the future, the company spokesman told **International Finance**.

### **Stakeholder activism means MNCs have no other options**

According to the report from the Intergovernmental Panel on Climate Change (IPCC) it requires far-reaching transitions to the use of energy resources and transportation and the operations of the industry and infrastructure to limit global warming to 1.5 degree Celsius above pre-industrial levels. That includes reducing carbon emissions to 45 percent below 2010 levels in the next decade. Is this a realistic target? If left to governments alone, that goal might be too ambitious. The new generation of millennials and the Gen Z are taking activist positions on climate change. As they come to the forefront of society and business as investors and consumers, multinational corporations have no other option but to act according to their priorities and aspirations. The vast operational and infrastructural changes DHL and FedEx are making to reduce carbon emissions intensity are examples for other companies to consider climate change action as a core initiative beyond corporate social responsibility programmes or slogans for reputation management.