

# 2021 IMPACT REPORT





## Cargo bikes are best for saving CO2 emissions

We finished 2021 with 107 cargo bikes and 5 EVs. Over the course of the year our fleet of cargo bikes delivered 621,000 parcels and saved 433 tonnes carbon compared to delivering using a diesel van. Cargo bikes save over 90% CO2 emissions per km compared to an electric van. They are better than EVs for urban deliveries, by a city mile.

13



11



3



8



## Our mission is aligned with the UN SDGs

Zedify's mission is to create less polluted, less congested and more liveable cities that are better for everyone.

We're building a system for deliveries that is fit for the future and better in all ways; zero emission by default (no offsetting here), intuitive and flexible (a great customer experience) and better for people (we're an accredited Living Wage employer - no gig economy for us).

We've identified the UN Sustainable Development Goals that we can impact the most.

- 13- Climate Action
- 11- Sustainable Cities
- 3- Good Health and Wellbeing
- 8- Decent Work and Economic Growth



Air pollution is the biggest environmental threat to health in the UK, with between 28,000 and 36,000 deaths a year attributed to long-term exposure.

That's why we eliminate tailpipe emissions at source and create liveable cities that are more inviting for active travel.



## Better deliveries are better for everyone

We've been a Living Wage employer since day one and all our staff are employed- there's no gig economy for Zedify's people. We believe creating better cities isn't just about adding bike lanes or banning diesel cars. It's also about creating fair, decent and enjoyable jobs. The benefits that our teams get from being employed over zero hours contracts include sick pay, parental leave, holiday pay and during 2020 and 2021, access to the furlough scheme.

We're proud to promote employees across the network, and three members of our central team started out working in our delivery hubs. In 2021, we appointed our new National Operations Manager. Tom started out as a rider for us 10 years' ago and went on to run our Cambridge Hub before becoming a regional and then national manager.

# WHAT'S THE IMPACT?

## 433T CO2

433 tonnes CO2 were prevented by Zedify's delivery service in 2021. Many logistics companies' carbon neutral claims are based on offsetting their emissions rather than eliminating emissions from their own operations. With the transport sector accounting for the biggest chunk of the UK's carbon footprint and 32% of that arising from HGVs and vans, we've simply got to get a handle on real emissions reductions. Zedify are on a mission to shift the norm and create a model for urban logistics that's fit for a net zero future.

That's the **equivalent of..**

 **10,142** days of life saved

 **1,291** square meters of arctic ice melting

 Emissions from **8,828** football pitch-sized forest fires

## 77,625 RIDER HOURS

In 2021, we employed over 100 riders across our 10 hubs and all of them were paid the real Living Wage. Every rider passes through our rigorous training programme. This means our riders are well equipped to carry out their work safely and confidently. We work hard to create a work culture that is positive and jobs that are better for health and wellbeing than driving vans.

Our riders and hubs deliver a truly exceptional service for our clients and their customers. Our 2021 customer survey put our net promoter score at 86 compared with an industry standard in the logistics sector of between 0 and 46.

## 849KG NOX

NOx and PM2.5 are both emitted in significant quantities by diesel vans, and their health implications are severe. Short term exposure to NOx can cause inflammation of the airways and can increase the likelihood of respiratory infections. Exposure is particularly risky for those with existing lung and heart conditions. PM2.5 has been shown to cause asthma, COPD, coronary heart disease, stroke, and lung cancer. There is now evidence that also links PM2.5 to low birth weight, diabetes and diseases such as Alzheimer's and Parkinson's.

Zedify's service prevents 0.56g of NOx per km and by eliminating tailpipe emissions at source our service is helping to reduce the poor health outcomes for people living in cities where air pollution is currently often exceeding legal limits. According to the World Economic Forum, delivery vans are going to increase 78% by 2030. The Energy Saving Trust shows that over 50% of all goods could be moved using cargo bikes. In the fight for clean air, cargo bike logistics are an important tool, already having a significant impact.



 **ZEDIFY**



# THE STATS

## Which figures are we using to **state our impact** on emissions savings?

Vehicle	NO <sub>x</sub> (kg)	CO <sub>2</sub> (t)
Diesel van	849	315
EV	0	96
Cargo trike	0	8

In 2021 Zedify travelled **1,516,320km** on our trikes. This table shows total operating emissions for that same distance using diesel vans, EVs or cargo trikes. Our total annual savings figure of 433t CO<sub>2</sub> includes embodied carbon on top of operating emissions.

## Our 2021 impact figures are based on the following **data sources**

1/ CO<sub>2</sub> emissions from standard 3.5t diesel van <https://www.commercialfleet.org/tools/van/co2-emissions/?BodyType=large-panel-van&Manufacturer=mercedes-benz&Model=&CO2To=&EqualMpgFrom=&SortBy=Manufacturer&SortDesc=False&FuelType=diesel>

2/ CO<sub>2</sub> emissions from energy used to charge 3.5t EV with 55kWh battery [https://www.icax.co.uk/Grid\\_Carbon\\_Factors.html](https://www.icax.co.uk/Grid_Carbon_Factors.html) work out at 60g CO<sub>2</sub> per km

3/ CO<sub>2</sub> emissions from energy used to charge trike and EAV with 1000 watt hour batteries and range of 35km, would use 165g CO<sub>2</sub> to charge each battery and therefore 5g CO<sub>2</sub> per km

4/ We used NO<sub>x</sub> savings figure for cargo bikes from Cross River Partnership here [https://crossriverpartnership.org/wp-content/uploads/2019/05/20190520\\_Element-Energy\\_Cycling-logistics-study\\_FINAL-REPORT.pdf](https://crossriverpartnership.org/wp-content/uploads/2019/05/20190520_Element-Energy_Cycling-logistics-study_FINAL-REPORT.pdf) and that says 14.1kg of NO<sub>x</sub> are saved annually by using cargo bike instead of van if that cargo bike is travelling 80km a day; ours travel an average of 60km a day, so 10.6kg annually or 0.56g per km

5/ We used the figures of embodied carbon for production and disposal of diesel vans and EVs here <https://www.mdpi.com/2071-1050/11/9/2690/pdf> and assumed a figure of 4% of that for cargo bikes and trikes related to weight. Diesel vans: 6t CO<sub>2</sub>; EVs: 8.5t CO<sub>2</sub>; Cargo Trikes: 0.25t CO<sub>2</sub>

6/ Our figures for annual distance travelled come from an assumption that each cargo trike travels 60km each day and is based on an average of 81 cargo trikes in the fleet over the course of 2021

7/ When tonnes are stated in this report, we are referring to metric tonnes.