



# Carbon Reduction Plan

PPN06/21  
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## 1.0 Commitment to achieving Net Zero

P Ducker Systems is committed to achieving Net Zero emissions by 2030.

We refer to our scope 1 and 2 carbon emissions as our business operations carbon, as it relates to our own use of energy for our own operations and is under our control. We will achieve net zero for scope 1 and 2 by 2030. P Ducker Systems will use Carbon offsetting to go beyond Carbon Zero.

### 1.1 Our approach to carbon reduction

We have set out our approach to carbon reduction in accordance with PPN 06/21 and associated guidance and reporting standards for Carbon Reduction Plans to delivering Net zero:

<b>Avoid:</b>	We will review business decisions and work to avoid adding additional emission, wherever possible
<b>Reduce:</b>	We will apply efficiency principles across all our operations
<b>Substitute:</b>	We will adopt renewables and low carbon technologies where practicable
<b>Offset:</b>	We will create offsetting opportunities where we cannot reduce or eliminate carbon

### 1.2 Scopes and reporting boundaries

Our full reporting scope includes all Scope 1 and 2 emissions for the P Ducker Systems offices within our operational control. We also report on several Scope 3 emissions categories which have the most material impact.

Where P Ducker Systems has operational control, the calculation methods are detailed below. P Ducker Systems does not currently quantify Waste as we only have operational control over the Waste Electrical and electronic equipment, all other waste streams are shared by other tenants. District heating is also excluded as P Ducker Systems does not purchase heat from district heating systems.

Emissions	Scope	Method and Data Source
<b>Scope 1</b>		
<b>Diesel</b> Data unit is litres	Diesel fuel consumed by P Ducker Systems vehicles / Grey fleet/ hire vehicles	Data collection from receipts / fuel claims Diesel consumption we use the UK-based the carbon factors used to convert diesel consumption into emissions are sourced from DEFRA 2020 GHG Emissions Factors.
<b>Petrol</b> Data unit is litres	Petrol fuel consumed by P Ducker Systems vehicles / Grey fleet/ hire vehicles	Data collection from receipts / fuel claims Petrol consumption we use the UK-based the carbon factors used to convert diesel consumption into emissions are sourced from DEFRA 2020 GHG Emissions Factors.
<b>Natural Gas</b> Data unit is m3	Purchased natural gas at P Ducker Systems office	Data collected through meter reading (1088/REG/004) Our natural gas consumption occurs within UK, therefore the carbon factors used to convert gas consumption into emissions are sourced from DEFRA 2020 GHG Emissions Factors.
<b>Refrigerants</b> Data unit is kg	Refrigerant disposal and leakage from air conditioning systems	Air conditioning maintenance reports

Emissions	Scope	Method and Data Source
<b>Scope 2</b>		
<b>District heating</b>	Purchased heat from district heating systems	This category is excluded as P Ducker Systems does not purchase heat from district heating systems
<b>Electricity</b> Data unit is kWh	Emissions associated with electricity consumed at PDS office Olympus house	Data collected through meter reading (1088/REG/004) Carbon emissions associated with electricity consumption are calculated as both market-based and location-based emissions. Carbon factors used to convert electricity consumption into emissions are sourced DEFRA 2020 GHG Emissions Factors used for UK emissions

Emissions	Scope	Method and Data Source
<b>Scope 3</b>		
<b>Business travel</b> Data unit is miles	Emissions associated with business travel	Data collected through PDS expenses, flight, train, ferry, taxi bookings. Emissions associated with the majority of business travel are calculated using DEFRA 2020 GHG Conversion Factors and a miles travelled conversion factor. For a small number of international business travel movements miles travelled is not available. In these cases, a spend proxy is used.
<b>Employee commuting</b> Data unit is miles	Emissions associated with employees traveling into the office	Employee commuting using average miles commuted in to the office, then subtracted day of site work and working from home. Emissions associated with the travel are calculated using DEFRA 2020 GHG Conversion Factors and a mile travelled conversion factor.
<b>Cycling to work</b> Data unit is miles	Cycling associated with employees traveling into the office	Data collected through Strava
<b>Upstream transportation</b> Data unit is miles	Emissions associated with transportation	Data collected from finance. Emissions associated with the majority of transportation are calculated using DEFRA 2020 GHG Conversion Factors and a mile travelled conversion factor.
<b>Waste*</b> Data unit is tonnes	Waste to landfill generated in our construction projects	Data collected through waste transfer notes. *Not currently included within our NetZero plan as we are in a shared office and have no control over what enters the waste streams.

## 2.0 Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured.

Baseline Year: 2019	
Additional Details relating to the Baseline Emissions calculations.	
2019 is being used as our baseline targets for carbon emissions, it is thought that our Scope 2 and Scope 3 emissions would rise slightly due to PDS now having a better reporting process, as historically PDS had not reported on all scopes as only fuel consumption and purchased energy had been reported on.	
Baseline year emissions:	
EMISSIONS	TOTAL (tCO <sub>2</sub> e)
Scope 1	49.93 (tCO <sub>2</sub> e)
Scope 2	49.40 (tCO <sub>2</sub> e)
Scope 3 (Included Sources)	6.31 (tCO <sub>2</sub> e) Business travel (flights) 65.65 (tCO <sub>2</sub> e) Employee commuting 52.18* Tons Waste generated in operations 384* miles Cycle to Work miles
Total Emissions	171.29 (tCO <sub>2</sub> e) *Not recoded as tCO <sub>2</sub> e

## Current Emissions Reporting

Reporting Year: 2020	
EMISSIONS	TOTAL (tCO <sub>2</sub> e)
Scope 1	49.84 (tCO <sub>2</sub> e)
Scope 2	63.85 (tCO <sub>2</sub> e)
Scope 3 (Included Sources)	1.30 (tCO <sub>2</sub> e) Business travel (flights) 28.99 (tCO <sub>2</sub> e) Employee commuting 52.96* Tons Waste generated in operations 441* miles Cycle to Work miles 116* Birch tree planted
Total Emissions	145.03 (tCO <sub>2</sub> e) *Not recoded as tCO <sub>2</sub> e

Reporting Year: 2021	
EMISSIONS	TOTAL (tCO <sub>2</sub> e)
Scope 1	49.97 (tCO <sub>2</sub> e)
Scope 2	34.84 (tCO <sub>2</sub> e)
Scope 3 (Included Sources)	10.32 (tCO <sub>2</sub> e) Business travel (flights) 36.39 (tCO <sub>2</sub> e) Employee commuting 1.37 (tCO <sub>2</sub> e) Upstream Transportation and distribution 52.16* Tons Waste generated in operations 396* miles Cycle to Work miles
Total Emissions	130.89 (tCO <sub>2</sub> e) *Not recoded as tCO <sub>2</sub> e

Reporting Year: 2022	
EMISSIONS	TOTAL (tCO <sub>2</sub> e)
Scope 1	42.81 (tCO <sub>2</sub> e)
Scope 2	32.45 (tCO <sub>2</sub> e)
Scope 3 (Included Sources)	26.97 (tCO <sub>2</sub> e) Business travel (flights) 45.95 (tCO <sub>2</sub> e) Employee commuting 0.16 (tCO <sub>2</sub> e) Upstream Transportation and distribution 52.73* Tons Waste generated in operations 3038.6* miles Cycle to Work miles
Total Emissions	148.51 (tCO <sub>2</sub> e) *Not recoded as tCO <sub>2</sub> e

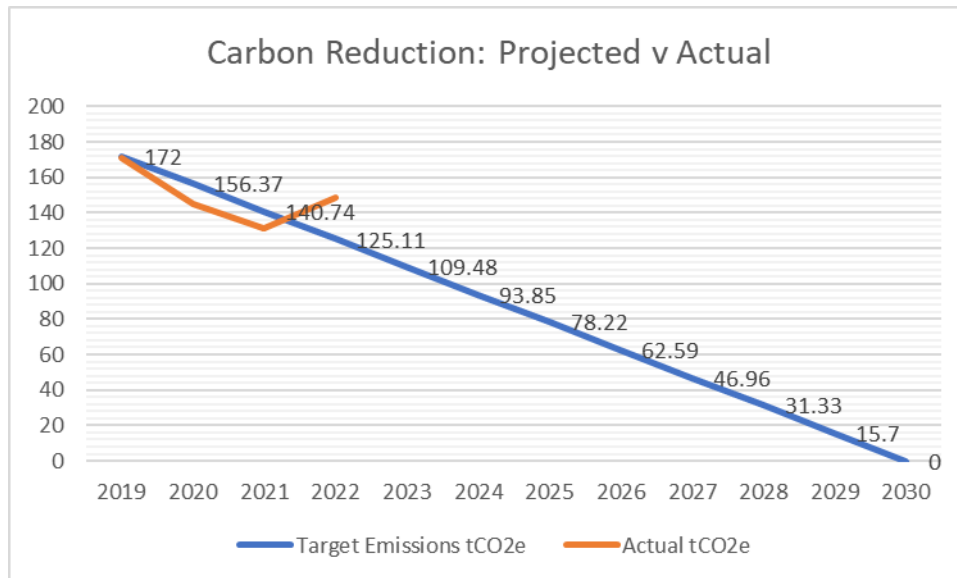
### 3.0 Emissions reduction targets

In order to continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets.

PDS commits to reduce absolute Scope 1 and 2 GHG emissions 100% by 2030 from a 2019 base year and scope 3 emissions by 100% over the same timeframe.

We project that carbon emissions will decrease over the next five years to 78.22 tCO<sub>2</sub>e a 54.5233% reduction against the 2019 baseline.

Progress against these targets can be seen in the graph below:



For 2022 P Ducker Systems were 23.23 tCO<sub>2</sub>e over the predicted emissions for 2022, this was mainly due to working being carried out over in Gibraltar as there were 16 flights to Gibraltar with equated to 15.2 tCO<sub>2</sub>e, there was also some improved reporting on train and taxi journeys were carried out which gave a short rise in scope 3 reporting.

Scope 1 reduction of 14.26% from 2019 base year

Scope 2 reduction of 32.45% from 2019 base year

Scope 3 reduction of 30% from 2019 base year

Total reduction of 13.2% from 2019 base year

## 4.0 Carbon Reduction Projects

### Completed Carbon Reduction Initiatives

The following environmental management measures and projects have been completed or implemented since the 2019 baseline.

These include the following: -

#### **Strategic: -**

Continued certification to ISO 14001 Environmental Management Systems (PDS Achieved ISO 14001 in October 2013)

Promote the Cycle to Work Scheme

We have started to migrate our fleet to low emission models and currently now have one Hybrid vehicle and one PHEV in our fleet with a view to expand this as our vehicle leases expire.

All new equipment is assessed for its energy efficiency before being purchased

Switched to renewable energy supplier

#### **Energy Reduction Projects: -**

- Old monitors have been replaced with energy efficient flat screen models
- PIR sensors have been fitted around the office, providing automatic lighting control
- Set the heating not to come on over weekends
- Arranged the office to ensure that radiators are not obstructed by office equipment and furniture
- Photocopiers have been removed, and replaced with low energy printers
- We have removed all kettles from the office and replaced these with more energy efficient Zipp taps

We also expect our Scope 2 & 3 to slightly increase during the reporting period due to better reporting.

#### *Scope 1 - Mobile combustion*

- Look at engineers sharing vehicles and moving to a more energy efficient, lower emission fleet (Hybrid / Electric / Hydrogen).

#### *Scope 2 - Electricity*

- Look for cleaner energy provider –
- Look towards PDS producing their own energy, identify energy usages within the building (lights / server / Ziptaps) to then be able to establish what energy could be saved and where.
- EPC assessment to be carried out to identify other areas where energy can be saved (building insulation) better control of the heating in the office (To be set to go off after 17:00). Look at benefits of LED lighting within the office.
- Advanced building management systems controlling energy consumption

#### *Scope 3: Business Travel*

- Only using flying where there are no other options.
- Look to use Microsoft Teams where this is best to do so.
- Further promote the Cycle to Work scheme.
- Using Hybrid Working to reduce that amount of employee commuting.
- Reduce the number of waste collections carried out.

*Other green issues: -*

- Reduce the use of plastic
- Increases biodiversity in the PDS office garden.
- Introduce plant-based options where client lunches are being held
- Look to work with Suppliers who are ambitious on delivering on green issues

As a business we will continue to investigate areas for improvement, in the future we hope to implement further measures such as: -

- Carbon offsetting to go beyond Carbon Zero by Offsetting CO2 emissions by investing in Certified International Carbon Offsetting Projects.
- Continue migration of our fleet to lower emission and electric models.

**4.1**      *Carbon reduction projects carried out during 2022.*

The following carbon reduction measures and projects have been completed or implemented during 2022: -

- LED lighting installed to the office – Nov 2022
- 1755 days worked from home – promoted hybrid working.
- Cycling to work 3,038 miles (equivalent to cycling from our office in Derby to Kazakhstan) previous year 396 miles
- 2,745.58 litres less fuel
- 47,740 KWh down from base year

**4.2**      *Carbon reduction projects to be carried out during 2023.*

The following carbon reduction measures and projects are planned for 2023:-

- Getting solar quotes with a view of installing 2023.
- Getting EV quotes / Installing EV chargers at the Derby office.
- Migrating some vehicles over to electric.
- Rolling our employees Electric Vehicle Salary sacrifice scheme.
- Installing showers to promote cycling to work / wellbeing.
- Installing planters into the garden area to increase biodiversity.
- Recycling old hard hats that have expired

## 5.0 Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard and uses the appropriate Government emission conversion factors for greenhouse gas company reporting.

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard.

This Carbon Reduction Plan has been reviewed and signed off by the Managing Director.

<b>Name</b>	Nathan Lawson
<b>Position</b>	Managing Director
<b>Signed</b>	<i>N Lawson</i>
<b>Date</b>	27 Mar 2023





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