

**CARBON Reduction Plan**

CoMmitted

To achieving Net Zero by 2050.

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# Version Control Sheet

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| Document Title | Carbon Reduction Plan |
| Author | Operations Director |
| Owner | Operations Director |
| Approver | Senior Management Team |
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# Version History

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| --- | --- | --- |
| Version | Date | Summary of Changes |
| V1.0 | 05 February 2022 | Initial draft for approval |
| V1.1 | 01 March 2023 | Approved for publication |
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# Commitment to achieving Net Zero

PGL Training (Plumbing) Limited is committed to achieving Net Zero emissions by 2050. We have two net zero commitments:

* + Achieve net zero scope 1 and 2 carbon emissions from our own assets, leases and business travel by 2030
  + Achieve net zero carbon for all our emissions by 2050, working with our client chain to deliver this commitment in line with climate science and the Paris Agreement.

# 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.

PGL produced a baseline emission calculation based on 2020 data.

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| Baseline Year: 2020 | |
| Additional details relating to the Baseline Emissions Calculations | |
| PGL have set the 2020 reporting year as the baseline for the purposes of carbon reporting. The subset of the carbon emissions data reported can be found in Appendix 1. For this baseline year, we have included the scope 3 emissions from business travel. | |
| Baseline Year Emissions: | |
| EMISSIONS TOTAL (tCO2e) |  |
| Scope 1 | 9.1 |
| Scope 2 | 3.0 |
| Scope 3 | 42.7 |
| TOTAL EMISSIONS | 54.77 |

\*Carbon emissions calculated using verified measurements to reasonable assurance level.

1. We are not yet able to allocate the proportion of this to upstream transportation and distribution. However we will review as part of our sustainable procurement charter as we look to gather more robust supplier and product specific data for scope 3 reporting.
2. We are not yet able to allocate the proportion of this to downstream transportation and distribution. However we will review as part of our sustainable procurement charter as we look to gather more robust supplier and product specific data for scope 3 reporting.

# Current Emissions Reporting

|  |  |
| --- | --- |
| Reporting Year: 2021 (The UK subset of the verified carbon emissions data reported in our Annual report for the most recent reporting year is presented here.) | |
| EMISSIONS TOTAL (tCO2e) |  |
| Scope 1 | 1.8 |
| Scope 2 | 2.1 |
| Scope 3 | 43.4 |
| TOTAL EMISSIONS | 47.40 |

\*Carbon emissions calculated using verified measurements to reasonable assurance level.

1. We are not yet able to allocate the proportion of this to upstream transportation and distribution. However we will review as part of our sustainable procurement charter as we look to gather more robust supplier and product specific data for scope 3 reporting.
2. We are not yet able to allocate the proportion of this to downstream transportation and distribution. However we will review as part of our sustainable procurement charter as we look to gather more robust supplier and product specific data for scope 3 reporting.

Comparison Table: Baseline 2020 in comparison with 2021 current emissions report

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Description** | **Baseline 2020** | **2021** | **% Reduction** |
| **Total emissions** | Company CO2 Emissions (tons) | **54.77** | **47.40** | **13.46%** |
| Average CO2 Emissions per person (tons) | **1.369** | **1.185** | **13.44%** |
| Average CO2 Emissions per person per day (kgs) | **5.90** | **5.11** | **13.39%** |
| Equivalent airmiles travelled | **187,205** | **161,983** | **13.47%** |
| Trees required to offset | **55** | **47** | **14.55%** |

# Emissions reduction targets

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

* 1. Achieve net zero scope 1 and 2 carbon emissions from our own assets, leases and business travel by 2030
  2. Achieve net zero carbon for all our emissions by 2050, working with our value chain to deliver this commitment in line with climate science and the Paris Agreement.

PGL has set its net zero carbon emission commitments in its Environment and Climate Change Policy.

To meet these targets, we have set the following interim targets:

|  |  |
| --- | --- |
| Absolute scope 1 & 2 carbon emissions reductions (TCO2e) | |
| 2020 | Baseline |
| 2021 | 5% Reduction Actual = 13.46% Reduction |
| 2025 | 15% Reduction |
| 2030 | 35% Reduction |
| 2040 | 65% Reduction |
| 2050 | 100% Reduction |

# Carbon Reduction Projects and Completed Carbon Reduction Initiatives

The following environmental management measures and projects have been completed or implemented since the 2020 baseline. The scope 1, 2 and 3 carbon emission reduction achieved equates to 7.37 tCO2e, a 13.46% (see section 6) reduction against the 2020 baseline. Measures put in place to achieve these carbon savings will be applied to future contracts where applicable.

**Reduce Carbon Emissions:**

* + Implemented a range of energy efficiency measures including variable speed drives (VSD), LED lighting upgrades and improved monitoring and reporting systems.
  + Targeted driving behaviour to achieve fuel efficiencies and reduce environmental impacts.
  + Rolled out Office 365 to support remote and flexible working to reduce the need for travelling for both business and commuting.
  + Promote and develop a carbon conscious culture and capability within our organisation, across our delivery sectors, with our clients, and our learners.
  + Promote and deliver Renewable Energy City and Guilds qualifications and training to Trade and Professionals in Heat Pumps, Solar PV Systems, and Solar Thermal Hot Water.
  + A further element of the reduction has been driven by our need to respond to the change in societal and business behaviours linked to the pandemic.

**Avoid carbon emissions:**

* + Switch to renewable electricity across our sites wherever possible.
  + Develop a Sustainable Procurement Policy which will initiate engagement with our supply chain on net zero carbon to begin to address our scope 3 emissions.
  + Introducing electric and hybrid vehicle options for our company car and small commercial vehicle fleet.
  + Switch Petrol usage from E5 to E10. See note 1 below:

Note 1: E10 petrol contains up to 10% renewable ethanol, which will help to reduce carbon dioxide (CO2) emissions associated with petrol vehicles and tackle climate change. The introduction of E10 petrol at UK forecourts could cut transport CO2 emissions by 750,000 tonnes a year – the equivalent of taking 350,000 cars off the road, or all the cars in North Yorkshire.

Renewable fuel blends, such as E10 petrol, are generally introduced to reduce overall CO2 emissions. They have little impact on emissions associated with air quality and public health.

The production of renewable ethanol for blending with fossil petrol also results in valuable by-products, including animal feed and stored CO2. Source: [E10 petrol explained - GOV.UK (www.gov.uk)](https://www.gov.uk/guidance/e10-petrol-explained)

Carbon reductions have also occurred as a result of the temporary closure of some of our facilities, the reduction in direct usage of our facilities, home / hybrid working and the restrictions on travel during the response to the pandemic.

* + It should be noted that carbon reductions have also occurred as a result of the:
    - * temporary closure of some of our facilities and the restrictions on travel during the response to the pandemic
      * change in societal and business behaviours linked to the pandemic.

**Future Measures:**

* + Introduce an employee engagement programme called 'Go Green' to encourage, enable and celebrate local environmental and carbon improvements. Our Green Ambassadors promote environmental and carbon responsible behaviours and work practices.
  + Introduce an Energy Management System to our business, updating our energy policy and strategy to target energy efficiency.
  + Switch to energy saving LED light bulbs within our business.
  + Introduce motion sensor LED lighting to our training rooms and offices.
  + Switch off appliances rather than leave them on standby.
  + Switch to dual flush toilets.
  + Wherever possible, notwithstanding government contractual obligations, switch to digital records, computer-based systems and processes.
  + Complete a waste audit and implement the findings to include:
    - * Reduce the amount of waste going to landfill to less than 10% of overall waste.
      * Increase the proportion of waste which is recycled to at least 70% of overall waste.
  + Have Green Champions that encourage the efficient use of water, gas, electricity, and renewable energy.
  + Understand and reduce supply chain impacts and risks
  + Review our emission reduction targets taking into future net zero standards in order to continuously improve our carbon reporting and help meet our global customers' requirements.
  + Identify opportunities to decarbonise our heating systems as part of our next phase of Environment Strategy.
  + Join the [small business sustainability hub](https://www.fsb.org.uk/knowledge/fsb-infohub/small-business-sustainability-hub.html) and access the free resources.

# Declaration and Signature and Date

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, Scope 2 and Scope 3 emissions have been reported in accordance with Streamlined Energy and Carbon Reporting (SECR) requirements.

This Carbon Reduction Plan has been reviewed and signed off by the board of directors.

|  |
| --- |
| Director |
| Signature |
| Name |
| Date |

# Appendix 1 Data

## Baseline Data 2020

|  |  |
| --- | --- |
| **Total Scope Breakdown** | |
|  |  |
| **Scope** | **Total metric tons of CO2e** |
| Scope 1 | 9.1 |
| Scope 2 | 3.0 |
| Scope 3 | 42.7 |

|  |  |  |
| --- | --- | --- |
|  | **Description** | **Metric tons of CO2e** |
| **Scope 1** | Office emissions (gas) | 9.1 |
| Other Scope 1 emissions | 0.0 |
| **Scope 2** | Office emissions (electricity) | 3.0 |
| **Scope 3** | Homeworker electricity emissions (home office) | 0.5 |
| Homeworker electricity emissions (air-conditioning) | 0.0 |
| Homeworker gas emissions | 0.9 |
| Diesel emissions (commute) | 11.6 |
| Petrol emissions (commute) | 20.8 |
| Hybrid emissions (commute) | 1.7 |
| Motorbike emissions (commute) | 0.7 |
| Train emissions (commute) | 0.0 |
| Bus emissions (commute) | 0.0 |
| Taxi emissions (commute) | 0.0 |
| Train emissions (in work travel) | 0.0 |
| Diesel emissions (in work travel) | 0.8 |
| Petrol emissions (in work travel) | 1.7 |
| Hybrid emissions (in work travel) | 0.2 |
| Bus emissions (in work travel) | 0.0 |
| Taxi emissions (in work travel) | 0.0 |
| Plane emissions | 0.0 |
| Hotel emissions | 0.1 |
| Additional estimates for purchases of goods and services | 3.8 |
| Other Scope 3 emissions | 0.0 |
| **Total emissions** | Company CO2 Emissions (tons) | **54.77** |
| Average CO2 Emissions per person (tons) | **1.369** |
| Average CO2 Emissions per person per day (kgs) | **5.90** |
| Equivalent airmiles travelled | **187,205** |
| Trees required to offset | **55** |

|  |  |
| --- | --- |
| Average CO2 Emissions per person (tons) per Year (UK) | **4.870** |

Source: [United Kingdom: CO2 Country Profile - Our World in Data](https://ourworldindata.org/co2/country/united-kingdom#per-capita-how-much-co2-does-the-average-person-emit)

## Reporting Data 2021

|  |  |
| --- | --- |
| **Total Scope Breakdown** | |
|  |  |
| **Scope** | **Total metric tons of CO2e** |
| Scope 1 | 1.8 |
| Scope 2 | 2.1 |
| Scope 3 | 43.4 |

|  |  |  |
| --- | --- | --- |
|  | **Description** | **Metric tons of CO2e** |
| **Scope 1** | Office emissions (gas) | 1.8 |
| Other Scope 1 emissions | 0.0 |
| **Scope 2** | Office emissions (electricity) | 2.1 |
| **Scope 3** | Homeworker electricity emissions (home office) | 0.5 |
| Homeworker electricity emissions (air-conditioning) | 0.0 |
| Homeworker gas emissions | 0.9 |
| Diesel emissions (commute) | 11.6 |
| Petrol emissions (commute) | 20.8 |
| Hybrid emissions (commute) | 1.7 |
| Motorbike emissions (commute) | 0.7 |
| Train emissions (commute) | 0.0 |
| Bus emissions (commute) | 0.0 |
| Taxi emissions (commute) | 0.0 |
| Train emissions (in work travel) | 0.0 |
| Diesel emissions (in work travel) | 0.8 |
| Petrol emissions (in work travel) | 1.7 |
| Hybrid emissions (in work travel) | 0.2 |
| Bus emissions (in work travel) | 0.0 |
| Taxi emissions (in work travel) | 0.0 |
| Plane emissions | 0.0 |
| Hotel emissions | 0.0 |
| Additional estimates for purchases of goods and services | 4.6 |
| Other Scope 3 emissions | 0.0 |
| **Total emissions** | Company CO2 Emissions (tons) | **47.40** |
| Average CO2 Emissions per person (tons) | **1.185** |
| Average CO2 Emissions per person per day (kgs) | **5.11** |
| Equivalent airmiles travelled | **161,983** |
| Trees required to offset | **47** |

|  |  |
| --- | --- |
| **Average CO2 Emissions per person (tons) per Year (UK)** | **5.150** |

Source: [United Kingdom: CO2 Country Profile - Our World in Data](https://ourworldindata.org/co2/country/united-kingdom#per-capita-how-much-co2-does-the-average-person-emit)

## Comparison Baseline 2020 and Reporting Data 2021

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Description** | **Baseline 2020** | **2021** | **% Reduction** |
| **Total emissions** | Company CO2 Emissions (tons) | **54.77** | **47.40** | **13.46%** |
| Average CO2 Emissions per person (tons) | **1.369** | **1.185** | **13.44%** |
| Average CO2 Emissions per person per day (kgs) | **5.90** | **5.11** | **13.39%** |
| Equivalent airmiles travelled | **187,205** | **161,983** | **13.47%** |
| Trees required to offset | **55** | **47** | **14.55%** |

## Resources

[Government conversion factors for company reporting of greenhouse gas emissions - GOV.UK (www.gov.uk)](https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting)

[Greenhouse gas reporting: conversion factors 2021](https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021)

[Greenhouse gas reporting: conversion factors 2020](https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020)

[Homeworking Emissions Whitepaper 2020.pdf (eco-act.com)](https://info.eco-act.com/hubfs/0%20-%20Downloads/Homeworking%20emissions%20whitepaper/Homeworking%20Emissions%20Whitepaper%202020.pdf)

[Carbon footprint calculator for UK businesses (sseenergysolutions.co.uk)](https://www.sseenergysolutions.co.uk/small-business-sustainability/carbon-footprint-calculator)