AHR Architects Ltd
AHR Building Consultancy Ltd

Edition 1.2
(March 2023)

Carbon Reduction Plan

Commitment to achieving Net Zero

AHR Architects and AHR Building Consultancy Practices collectively employ circa 300 staff across 9 offices in the UK. Our commitment to climate and sustainability is central to our practice ethos.

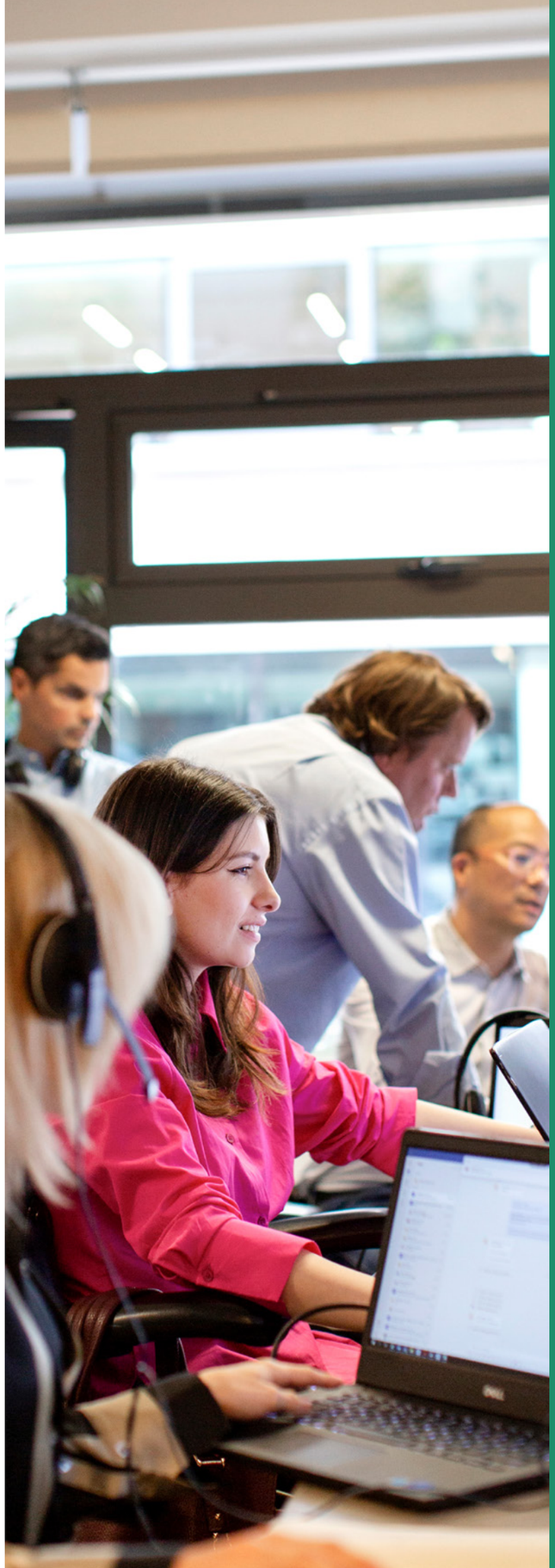
We are signatories to the RIBA 2030 Climate Challenge and Architects' Declare and have pledged to support our clients, and the wider built environment, with the climate challenges we all face.

When creating or caring for buildings and spaces, we believe every project counts. We have developed a reputation for delivering sustainable design solutions and our current portfolio is rich with projects that consider Operational Energy and Embodied Carbon from the outset.

In 2022 we operated out of eight permanently staffed offices which are strategically located across the country to provide design services to a broad range of public and private sector clients. All our office space is leased, as is the practice I.T infrastructure (i.e. hardware & software).

We welcome the opportunity to demonstrate to the UK Government and to our clients our commitment to managing carbon across the AHR's operations.

This Carbon Reduction Plan is now in its third year and continues to plan our ongoing journey to net zero. We have reviewed our progress and set ourselves realistic targets and we believe we can transition to Carbon Neutral by 2030 and to Net Zero by 2035.



We are an agile and progressive organisation and we believe we can complete the transition by 2030, in line with the aspirations of RIBA, RICS, and Architects Declare – ahead of the 2050 target date mandated by the Climate Change Act.

About the AHR Plan

This Plan summarises AHR's baseline carbon footprint and our commitment to reducing our Green House Gas (GHG) emissions to Net Zero. We are an agile and progressive organisation and we believe we can complete the transition – in line with the aspirations of RIBA, RICS, and Architects Declare and ahead of the 2050 target date mandated by the Climate Change Act.

The Scope of the AHR Plan is as defined by the GHG Protocol Corporate Standard. We have established our Operational Boundaries which have then determined the Scope 1, Scope 2 and Scope 3 categories that we have influence over.

Emissions have been calculated using the 'Control Approach'. That is to say, we have accounted for 100 percent of the GHG emissions from operations over which AHR has full financial control. Full calculations are available on request.

Surpassing CO2e forecast for 2022

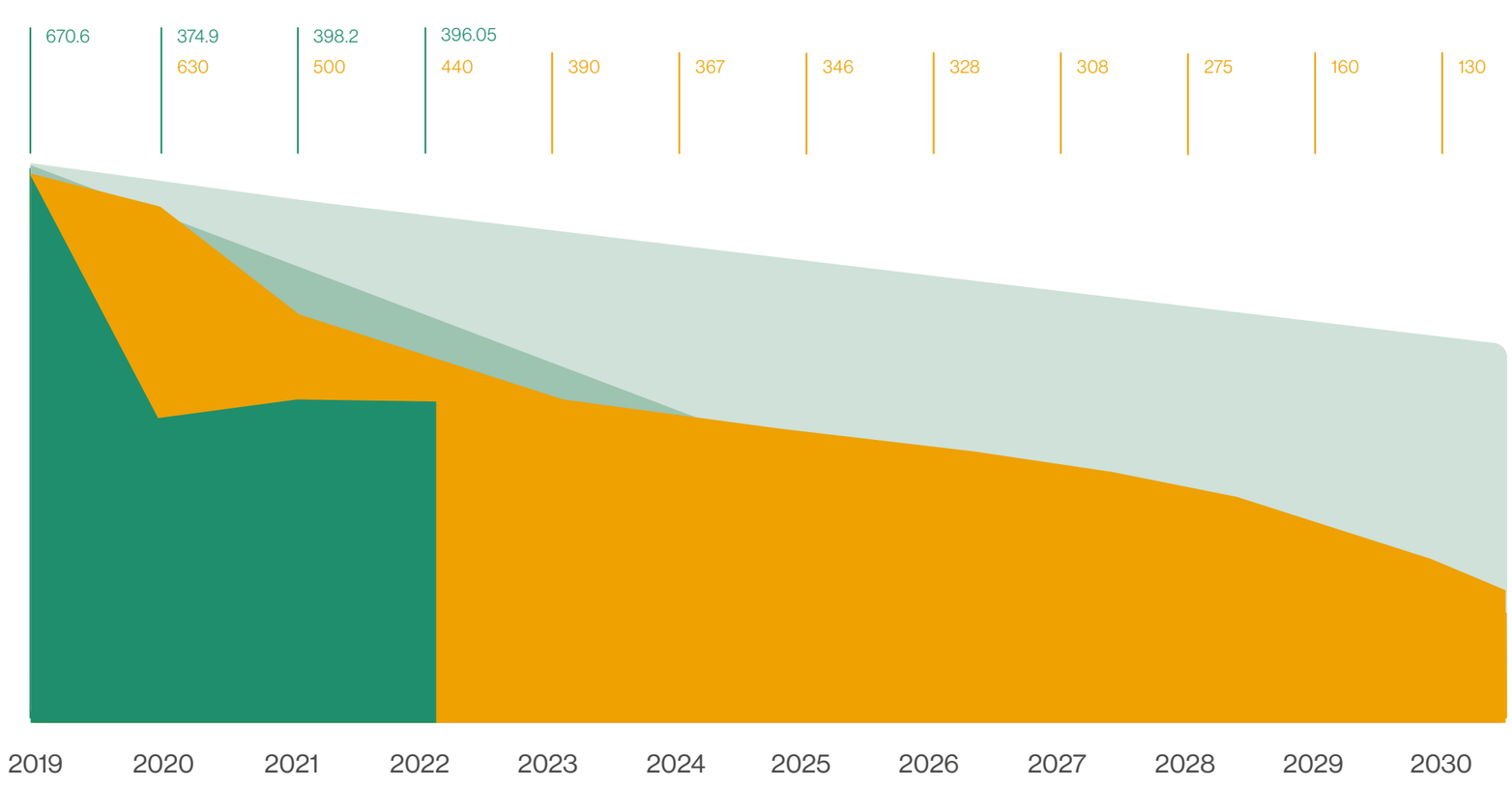
Note: The figures and information we've used in the below calculations are, to the best of our knowledge, accurate. However, our commitment to continually improving the quality of our data may from time to time flag a requirement to re-calibrate our statistics. In such instances we reserve the right to do this without penalty.

Our CO2e reductions for 2022 exceeded expectations. The post C-19 surge in business travel we factored in for 2023 didn't occur: Our 2021 Hybrid Working commitment was rolled out, reducing CO2e levels associated with the staff commute, and our archive waste stream was largely turned off.

AHR Actual' figures can be seen to rise slightly in 2022: this is not due to failures in Carbon Reduction Initiatives – rather us employing an additional 37 staff. In fact, Carbon Reduction Initiatives for 2022 saw CO2e levels by head of staff drop from 1.58 tonnes to 1.37 tonnes compared to the previous year.

With regard to AFR Forecast figures, these have been pessimistically adjusted from 2023 onwards to reflect our uncertainty at the speed at which the 'greening' of National Infrastructure is being achieved. Despite this pessimism we remain confident that AHR's carbon emissions will decrease over the next five years by 46% when measured against the 2019 baseline figure

- Net Zero timeline (2050)
- Net Zero timeline (2030)
- AHR Forecast
- AHR Actual



Carbon Reduction Initiatives

2022 saw us roll-out the following environmental management initiatives: -

Fleet vehicles
50% of our fleet became hybrid / all-electric in 2022. We moved away CO2e calculation process away from the GHGP Transport Tool to our own CO2e calculator. This uses UK Government GHG Conversion Factors for Company Reporting and actual vehicle engine data – to yield more accurate results.

Business travel
A new expense claims module was rolled out in 2022, via our MS, to capture actual miles travelled at the point of claiming. The data generated has introduced a new layer of accuracy to our travel statistics which were previously generated manually.

Hybrid working
Hybrid working practices now allow staff to work at home no less than 2 days per week, helping to lessen the CO2e burden of the daily commute. This has had the single largest impact on CO2e reductions in 2022, reducing our CO2e burden by 68.29 tonnes compared to the baseline model.

Purchased goods
In June 2022 the Practice switched to a new printer/plotter contract, with associated consumables provided (and accounted for) by the service provider. AHR access to dashboard information regarding purchasing and distribution statistics has helped us more accurately account for and control our consumables CO2e footprint.

Other benefits to report:
Regarding business travel, despite C-19 travel restrictions being lifted throughout 2022, staff continued to embrace chatroom technologies, to host and to attend meetings. The spike in business travel we predicted for 2022 did not occur and is not thought likely to occur, moving forward.

Hands up, we made an error!
Regarding office waste (WFE & recycling), the 2019 Baseline and consequent 2020 / 2021 and 2022 projections used the wrong conversion factor. As a consequence, AHR has been over-estimating the amount of CO2e generated by our WFE and recycling waste streams. On discovering the error we re-calibrated our historic data plus all future predictions - adjusting the 2019 baseline down, so as to not distort our achievements to date.

2022 shortfalls:
Throughout 2022 our hire car policy mandated the exclusive use of hybrid hire vehicles. Unfortunately, our supply chain was unable to support us with this mandate, due to vehicle and parts shortages across the UK. The initiative will be extended through 2023 therefore.

Measures to be implemented in the future

Implementing this programme in our own business has provided invaluable first-hand experience to be transferred across our projects.

Informing the development of our Zero Carbon Today Methodology and Retrofit Toolkit – an achievable, design led solution to reaching Net Zero Carbon across new-build and refurbishment projects now.

Staff awareness
AHR has established a pro-active Sustainability Group, who will work with AHR staff in promoting our drive towards Net Zero Carbon.

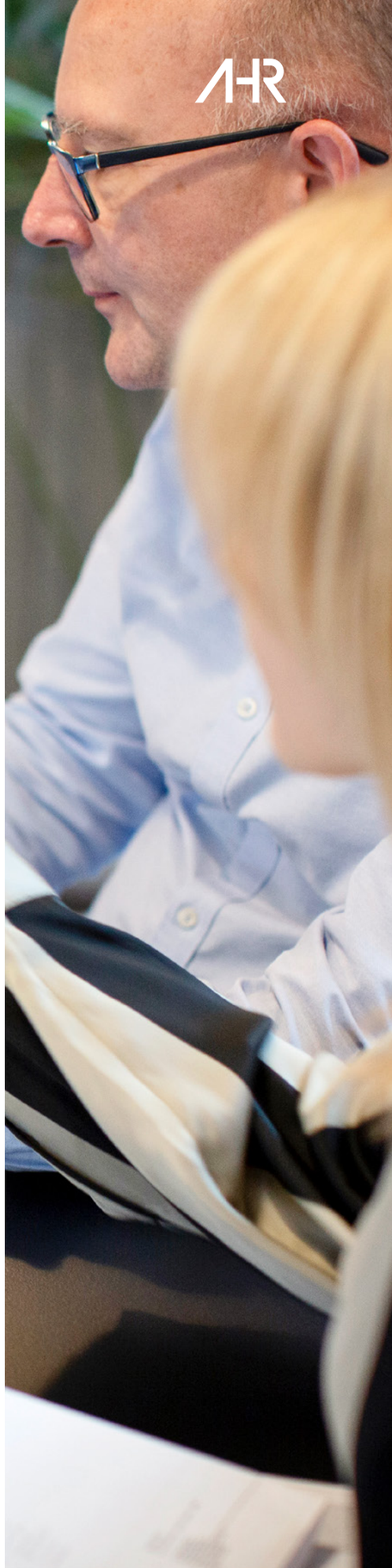
Business travel
Our hire car policy mandates the use of hybrid hire vehicles. As the negative effects of Brexit lessen, it's hoped that local supply chains can provide us with the vehicles we need to make this happen.

We will explore options to reduce our 'grey fleet'

AHR's grey fleet drivers accounted for 20.56% of the organisation's CO2e emission in 2022. Our 'green fleet' could be grown, or a salary sacrifice scheme could be introduced, to incentivise staff switching to e-vehicles.

Premises
We'll migrate out of poorly insulated / poorly serviced office space to improve efficiencies in electricity consumption as our leases expire. We'll explore further the idea of changing AHR's operational model to deliver services from an increased number of smaller offices, to reduce business travel distances.

Offsetting
Our route-map to Net Zero requires a nominal 160 tCO2e to be offset using a UK-based verified project. This shortfall is attributable to factors we have no control over, such as the 'greening' of the National Grid and the national transport infrastructure as well as the slower transition to Net Zero (i.e. 2050) by our service providers.



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.

At a glance

165.5
tonnes CO2e
2019 scope 1 emissions

144.3
tonnes CO2e
2019 scope 2 emissions

306.8
tonnes CO2e
2019 scope 3 emissions

670.6
tonnes CO2e
2019 total emissions

84.50 ↓ 48%
tonnes CO2e
2022 scope 1 emissions

81.34 ↓ 43.6%
tonnes CO2e
2022 scope 2 emissions

230.21 ↓ 24%
tonnes CO2e
2022 scope 3 emissions

396.05 ↓ 40.9%
tonnes CO2e
2022 total emissions

Baseline Year: 2019

Additional Details relating to the Baseline Emissions calculations
Baseline emissions calculations commenced in January 2019, based on AHR's organisational and Operational Boundaries at that time.

Emissions have been calculated using the 'control' approach – calculated by office location before being consolidated for the purposes of reporting on overall tonnes CO2e, per Scope, for the Practice. The extent of each scope, as applicable to AHR's Organisational and Operational Boundaries, is set out below, along with the calculation methodology used.

Baseline year emissions:

Emissions	Total (tCO2e)	
Scope 1	165.5 tonnes CO2e	(Fleet emissions calculated using GHGP Transport Tool V2.6) (A/C emissions calculated from manufacturer performance data by A/C unt)
Scope 2	144.3 tonnes CO2e	Electricity GHG emissions calculated as kWh x CO2e (with CO2e figures derived from UK Government GHG Conversion Factors for Company Reporting 2018) Gas GHG emissions calculated as kWh x CO2e (with CO2e figures derived from UK Government GHG Conversion Factors for Company Reporting 2018)
Scope 3 (Included Sources)	360.8 tonnes CO2e	Includes business travel, staff commute, purchased goods & services, AHR waste streams, and fuel & energy-related services such as off-site Data Centres GHG emissions calculated as distance (or) weight (or) kWh per scope item x CO2e (with CO2e figures derived from UK Government GHG Conversion Factors for Company Reporting 2018) Staff commuter habits were accrued via staff survey
Total Emissions	670.6 tonnes CO2e	

Current Reporting Year: 2022

Emissions	Total (tCO2e)	
Scope 1	84.50 tonnes CO2e	(Fleet emissions calculated using car manufacturer engine data x mileage per annum) (A/C emissions calculated from manufacturer performance data by A/C unt)
Scope 2	81.34 tonnes CO2e	Electricity GHG emissions calculated as kWh x CO2e (with CO2e figures derived from UK Government GHG Conversion Factors for Company Reporting 2022) Gas GHG emissions calculated as kWh x CO2e (with CO2e figures derived from UK Government GHG Conversion Factors for Company Reporting 2022)
Scope 3 (Included Sources)	230.21 tonnes CO2e	Includes business travel, staff commute, purchased goods & services, AHR waste streams, and fuel & energy-related services such as off-site Data Centres. The downstream energy impact derived from the introduction of hybrid working has also been included in the 2022 calculation GHG emissions calculated as distance (or) weight (or) kWh per scope item x CO2e (with CO2e figures derived from UK Government GHG Conversion Factors for Company Reporting 2022) Staff commuter habits were measured using a staff survey (60.5% returns)
Total Emissions	396.05 tonnes CO2e	

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 board of directors (or equivalent management body).

Signed on behalf of the Supplier:

Anthony Langan
Managing Director,
Architecture

Allan Hunt
Managing Director,
Building Consultancy

For and on behalf of AHR: 10th March 2023

We approach every project with the same commitment to quality, excellence and integrity in all we do.

www.ahr.co.uk