# Carbon Reduction Plan 2025-2026 - Technical Additions for DBAAs Ltd

## **Baseline Carbon Footprint Assessment (2024 Baseline Year)**

Digital Business As A Service (DBAAs) Ltd has conducted a comprehensive carbon footprint assessment following the Greenhouse Gas Protocol Corporate Standard and ISO 14064-1:2018 guidelines. Our baseline assessment covers all three emission scopes, establishing a robust foundation for our carbon reduction strategy.

#### **Total Carbon Footprint: 78.4 tCO2e annually**

Our emissions profile reveals that Scope 2 emissions (purchased electricity) represent 58% of our total carbon footprint, primarily driven by our cloud infrastructure and office energy consumption. Scope 3 emissions account for 28% of our footprint, with business travel and employee commuting being the largest contributors. Scope 1 emissions, representing 14% of our total, are primarily from heating our office premises and company vehicle fuel consumption.

## **Detailed Emissions Analysis by Source**

#### Scope 1 Emissions (Direct): 11.2 tCO2e (14%)

Our direct emissions stem from natural gas consumption for office heating (6.1 tCO2e) and diesel fuel for our three company vehicles (5.1 tCO2e). The heating emissions are calculated using UK Government conversion factors, with our office consuming approximately 28,000 kWh of natural gas annually across our 450m² premises.

#### Scope 2 Emissions (Energy): 45.1 tCO2e (58%)

Electricity consumption represents our largest emission source, totaling 233,600 kWh annually. This includes office electricity consumption (68,000 kWh) and the electricity associated with our cloud infrastructure services (165,600 kWh). We have applied the UK grid average emission factor of 0.193 kg CO2e/kWh for 2024.

#### Scope 3 Emissions (Indirect): 22.1 tCO2e (28%)

Our value chain emissions include business travel (8.4 tCO2e), employee commuting (6.2 tCO2e), purchased IT equipment and services (4.1 tCO2e), waste generation (1.8 tCO2e), and

homeworking emissions (1.6 tCO2e). Business travel calculations include 45,000 air miles and 12,000 rail miles annually.

## **Carbon Reduction Targets and Trajectory**

Emission Scope	2024 Baseline (tCO2e)	2025 Target (tCO2e)	2026 Target (tCO2e)	% Reduction by 2026
Scope 1	11.2	9.8	7.3	35%
Scope 2	45.1	38.2	31.5	30%
Scope 3	22.1	19.4	16.8	24%
Total	78.4	67.4	55.6	29%

Our science-based targets align with the UK's Sixth Carbon Budget and support limiting global warming to 1.5°C. The 29% reduction by 2026 represents an annual reduction rate of 7.4%, exceeding the minimum 4.2% required for 1.5°C alignment in the IT services sector.

## **Key Carbon Reduction Initiatives 2025-2026**

#### **Energy Transition and Efficiency (Primary Focus)**

**Renewable Energy Procurement**: We will transition to a 100% renewable electricity contract by March 2025, eliminating all Scope 2 emissions from our operations. This single measure will reduce our carbon footprint by 45.1 tCO2e annually, representing a 57% reduction in total emissions. The renewable energy contract includes Renewable Energy Guarantees of Origin (REGOs) certification and will cost approximately £2,400 additional annually compared to standard tariffs.

Cloud Infrastructure Optimization: Through partnership with green cloud providers and implementation of serverless architecture, we project a 20% reduction in cloud-associated energy consumption by 2026. This includes migrating 65% of our applications to more efficient platforms and implementing automated resource scaling to eliminate idle capacity.

**Office Energy Efficiency**: Installation of LED lighting throughout our premises, smart heating controls, and improved insulation will reduce our natural gas consumption by 25% by 2026, saving 1.5 tCO2e annually while reducing energy costs by £1,200 per year.

#### **Transportation Decarbonization**

**Electric Vehicle Transition**: All three company vehicles will be replaced with electric alternatives by September 2025, eliminating 5.1 tCO2e annually. The transition includes installation of workplace charging infrastructure and driver training on efficient EV operation.

**Business Travel Reduction**: Implementation of a "virtual first" meeting policy, targeting an 80% virtual meeting rate, will reduce business travel emissions by 40% by 2026. This policy is supported by investment in high-quality video conferencing equipment and collaboration platforms.

**Employee Mobility**: Enhancement of our cycle-to-work scheme and flexible working arrangements will increase remote working to an average of 2.5 days per week per employee, reducing commuting emissions by 30%.

#### **Supply Chain and Operational Measures**

**Supplier Engagement**: By 2026, we will ensure that suppliers representing 70% of our procurement spend have established their own carbon reduction targets. This includes mandatory carbon disclosure in our tender processes and preferential scoring for suppliers with verified emission reduction plans.

**Circular Economy Principles**: Implementation of equipment lifecycle management will extend IT hardware lifespan by 25% and ensure 95% of e-waste is properly recycled through certified WEEE partners.

**Digital Solutions Optimization**: Development of energy-efficient coding practices and database optimization techniques will reduce the carbon intensity of our client solutions by 15% on average.

# **Investment and Financial Analysis**

The total investment required for our 2025-2026 carbon reduction program is £127,500, comprising:

- Electric vehicle transition and charging infrastructure: £78,000
- Building energy efficiency improvements: £31,500
- Renewable energy contract premium: £4,800 (two-year total)
- Green technology and software solutions: £13,200

Expected annual cost savings from reduced energy consumption and fuel costs total £18,200, providing a simple payback period of 7.2 years. However, when accounting for carbon price benefits using the UK Government's central carbon price of £96/tCO2e, the net present value over five years is positive at £34,600.

#### **Monitoring and Verification Framework**

Monthly carbon accounting will be implemented using specialized software to track energy consumption, fuel usage, and travel data in real-time. Quarterly reviews will assess progress against targets, with annual third-party verification of our carbon footprint calculation ensuring accuracy and credibility.

Key performance indicators include absolute emissions (tCO2e), emissions intensity (tCO2e per £100k revenue), renewable energy percentage, and supplier engagement metrics. All data will be collected following the GHG Protocol guidelines and verified against the ISO 14064-1 standard.

## **Risk Management and Contingency Planning**

Primary risks to achieving our targets include potential delays in electric vehicle delivery, supplier availability for building improvements, and changes to the UK electricity grid emission factor. Mitigation strategies include early procurement, alternative supplier identification, and conservative emission factor assumptions in our calculations.

We have also considered climate-related physical risks, including potential office flooding and extreme weather impacts on our cloud service providers. Our business continuity planning incorporates climate resilience measures and alternative service arrangements.

# Stakeholder Engagement and Governance

Carbon reduction oversight sits with our Executive Management Team, with monthly reporting to the Board of Directors. All employees will receive carbon literacy training by June 2025, and individual performance objectives will include sustainability metrics for relevant roles.

Client engagement includes offering carbon footprint assessments for our digital solutions and promoting energy-efficient development practices. We will publish annual progress reports and maintain transparency through our corporate website and industry networks.

This comprehensive approach positions DBAAs Ltd to not only meet but exceed our carbon reduction commitments while maintaining business growth and client satisfaction throughout 2025-2026.