UKCloud Ltd

Carbon Reduction Plan (CRP)
for Year Ended 31.12.2019

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Finalised on: 01.10.2021

Prepared in accordance with the requirements of PPN 06/21

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Carbon Reduction Plan for UKCloud Ltd

Reporting Year to 31.12.2019

Commitment to Achieve Net Zero

UKCloud Ltd is committed to achieving Net Zero carbon emissions by 2030.

Note: whilst UKCloud is already a validated CarbonNeutral® Company, this net zero commitment reflects UKCloud's intention to continually reduce the amount of carbon produced (which then requires a validated offset) to zero by 2030.

Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that have been produced by UKCloud Ltd in the past, prior to the introduction of the latest round of environmental strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction in the future can be measured.

Baseline Reporting Year: 2019

This report summaries UKCloud's Baseline Emissions from 2019.

Note that UKCloud has been operating as a validated CarbonNeutral® Company since 2011 and providing CarbonNeutral® Cloud Services to its UK public sector customers since 2014.

It is of note that 2019 represented a normal year of UKCloud activities, prior to the exceptional circumstances which COVID-19 pandemic working introduced in 2020 and 2021.

Baseline Year Emissions (2019)

Scope 1	0.00 tCO2e
Scope 2	0.00 tCO2e
Scope 3	390.55 tCO2e
Total Emissions	**390.55 tCO2e**

2019 Actual Emissions

Scope 1	0.00 tCO2e
Scope 2	0.00 tCO2e
Scope 3	390.55 tCO2e
Total Emissions	**390.55 tCO2e** [1]

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. Additional guidance has been sought from DEFRA where clarifications have been required.

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 UKCloud Board of Directors.

Signed on behalf of UKCloud Ltd

Signature: *John A Godwin*

Name: John Godwin

Position: Director of Compliance & IA

Date: 01.10.2021

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[1] Note: UKCloud maintains CarbonNeutral® Company and CarbonNeutral® Cloud Service statuses, confirming that after all possible carbon reduction activities have taken place, any residual carbon footprint is offset in validated and independently audited carbon offset projects (VCS/Gold Standard).

UKCloud Emissions Reduction Targets (2019)

1. Use of sustainable/renewable energy sources on operating sites

UKCloud's use of data centre space rented from A already benefits from being 100% powered from renewable energy resources. It is not possible to improve upon this metric, although regularly monitoring with the supplier will confirm that this continues to be the case.

UKCloud's use of office space rented from Q and H is starting to benefit from energy-efficient lighting, including motion-activated sensors which further reduce energy consumption when no employees are present.

The anticipated reduction target, at this early stage, is to implement detailed reporting on this subject, which can be used to assess a year-on-year reduction in the energy use attributed to an average on-site employee.

2. Assessment of hybrid working model for employees

UKCloud has recorded an intention to explore increased flexibility of home working options for its employees, where practical. It is acknowledged that some personnel may have to work on-site, due to the specific tasks or sensitivity of workloads that they are delivering.

The Company has commenced the implementation of Microsoft Teams, including telephony, and shared collaboration environments that will remove some of the conventional technical barriers to the development of remote working options. UKCloud continues to identify and adopt secure cloud-based SaaS applications which will support this initiative, including personnel management, expenses management, CRM activities and information security risk assessments, to name but a few.

The anticipated reduction target, at this early stage, is to implement detailed reporting on this subject, which can be used to assess a year-on-year increase in the average number of home working days taken by each employee.

3. Increased segregation of waste products for recycling

UKCloud's use of office space rented from Q and H includes a provision of waste disposal. Similar facilities extend to the data centre space which is rented from A. UKCloud is looking to increase the visibility it has from each of its landlords to identify the percentage of waste which is segregated for sending to Material Recycling Facilities (MRF) and away from conventional landfill.

The anticipated reduction target, at this early stage, is to implement detailed reporting on this subject, which can be used to assess a year-on-year increase in the percentage of waste which is being diverted away from conventional landfill disposal.

4. Car sharing, electric vehicles and public transport use

Where it is possible, and provides an opportunity to reduce conventional transportation-related emissions, UKCloud is actively encouraging its colleagues to consider how they might:

a) Identify commuting and business travel journeys where car sharing is possible, over the use of separate vehicles

b) Where appropriate to the destination, prioritise the use of rail journeys as an alternative to driving a vehicle

c) Support colleagues who wish to invest in electric vehicles, by lobbying site landlords to provide suitable charging infrastructure

d) Understand the positive impacts of a potential increase in the use of home working options on commuting-originated carbon emissions

The anticipated reduction target, at this early stage, is to implement detailed reporting on this subject, which can be used to assess a year-on-year:

i) reduction in fossil-fuel based business mileage per employee

ii) reduction in commuting mileage which can be attributed to home working

5. Technical Innovation

UKCloud has always sought to identify and implement suitable technical components (both for customer-facing cloud services and internal personnel use) as well as giving full consideration to any environmental benefits which may be realised by changing configurations or operating parameters. This statement is made with acknowledgement of the importance of meeting the technical security requirements mandated by many of UKCloud's public sector customers.

There is no defined reduction target at this stage, but a Working Group has been created to formalise a strategy which will allow reporting in subsequent years.

Explanatory Notes for 2019 Reporting

1. Scope 1 Emissions

UKCloud does not own operate from its own premises, and as such is a tenant of three different landlords (Q, H and A). It has been assessed that UKCloud does not have any Scope 1 emissions, as it does not operate its own infrastructure for the servicing of its offices and data centres, nor does it own or operate any vehicles on behalf of the Company.

2. Scope 2 Emissions [2]

UKCloud does not own operate from its own premises, and as such is a managed tenant of three different landlords (Q, H and A). Whilst UKCloud has visibility of its electricity consumption, waste production and (where appliable) refrigerant loss at each of its site, they are reported in this Carbon Reduction Plan for information purposes only.

Readers of this report should note that Scope 2 emissions will be reported and addressed by the landlord of each site, this information being provided to avoid the possibility of double accounting for carbon emissions.

For baseline reporting year 2019, UKCloud has assessed and reports:

2a. Site Q (UKCloud Offices) – for information purposes only

Electrical consumption: 144,489.00 kWh

Associated tCO2e emissions: 36.93 tCO2e

Average No of Employees using Site Q: 250

Average Emissions per Employee: 0.15 tCO2e

2b. Site H (UKCloud Offices) – for information purposes only

Electrical consumption: 5,779 kWh

Associated tCO2e emissions: 1.47 tCO2e

Average No of Employees using Site H: 10

Average Emissions per Employee: 0.14 tCO2e

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[2] All calculations shown are in accordance with DEFRA Guidance for 2019: https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2019

2c. Site A (UKCloud Data Centres) [3] – for information purposes only

Electrical consumption: 6,645,027 kWh

Associated tCO2e emissions: 1,698 tCO2e

Average No of VMs (virtual machines) in Data Centres: 16,466

Average Emissions per VM: 0.103 tCO2e

3. Scope 3 Emissions [4]

3a. Scope 4 (Upstream Transportation) [5] – for information purposes only

Assessment of emissions for 2019: 2.994 tCO2e

3b. Scope 5 (Waste Generated in Operations)

Assessment of associated waste emissions at Site Q:

Percentage of waste being recycled/incinerated = 80% / 20%

Total emissions of waste = 97.1kg = 0.097 tCO2e

Average No of Employees using Site Q: 250

Average Emissions per Employee at Site Q: 0.00039 tCO2e

Assessment of associated waste emissions at Site H: 0.0039 tCO2e

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[3] Note: Ark Data Centres sources renewable energy from "100% REGO Backed Renewable" schemes (REGO = Renewable Energy Guarantees of Origin). Therefore, these statistics are provided for comparison purposes only, and are not included within UKCloud's summary of emissions shown on Page 3 of this report.

[4] All calculations shown are in accordance with DEFRA Guidance for 2019: https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2019

[5] Readers of this report should note that these emissions are already reported under PPN 06/21 by the supplier, this information is provided to avoid the possibility of double accounting for emissions.

Average No of Employees using Site H: 10

Average Emissions per Employee at Site H: 0.0003939 tCO2e

Assessment of associated waste emissions at Site A [6]

Total emissions from waste = 0.0967 tCO2e

3c. Scope 6 (Business Travel)

   i.   Total business mileage = 62.12 tCO2e (193,116 miles)
   ii.   Total nights hotel accommodation = 11.4 tCO2e (520 nights)
   iii. Total rail = 15.41 tCO2e (232,818 miles)
   iv. Total flights taken = 16.1 tCO2e (30 flights)

Total emissions from i-iv above: 105.03 tCO2e

Average number of employees during 2019: 260

Average business travel emissions per employee during 2019: 0.40 tCO2e

3d. Scope 7 (Employee Commuting)

   i.   Total commuting mileage = 278.55 tCO2e (853,882 miles)
   ii.   Public transport commuting = 5.483 tCO2e (82,801 miles)

Average number of employees during 2019: 260

Average commuting travel emissions per employee during 2019: 1.09 tCO2e

3e. Scope 9 (Downstream Transportation and Distribution)

Assessment of outbound courier emissions for 2019 = 1.3 tCO2e

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[6] Note: on rare occasions, UKCloud is required to physically destroy hard drives in order to meet HM Government security requirements. This produces a minimal amount of electronic waste. No such activities are reportable for 2019.

Appendix 1: Background to UKCloud's Environmental Framework

UKCloud was formed in 2011, and from day one implemented and maintained a commitment to carbon neutrality by understanding and reducing its carbon emissions where possible. For those that could not be reduced, UKCloud became a CarbonNeutral® Company (via Natural Capital Partners) by engaging in an ongoing programme of validated carbon offset projects which have supported the implementation of green technologies in a selection of developing countries.

In 2014, and to enhance the recognition that well-managed cloud services provide significant environmental benefits over legacy, standalone IT environments, UKCloud worked with National Capital Partners to develop CarbonNeutral® Cloud Services. By understanding the detailed energy consumption and associated carbon emissions of cloud services provided to its public sector customers, UKCloud commenced providing validated carbon offsets to match the consumption of each customer each month – all at no additional cost to the customer.

2021 marked the next milestone for UKCloud's environmental commitments, with its investment in the innovative Co-Forest project, a new carbon offsetting forest near Bath. As well as progressing UKCloud to a carbon negative position, its personnel are gaining hands-on experience in planting and managing UKCloud's trees, providing a credible legacy for the benefit of future generations.

UKCloud remains actively committed to achieving Net Zero carbon emissions by 2030. This net zero commitment can be seen on the UK Government's Business Climate Hub website [7]. Details of how UKCloud is progressing towards this commitment are detailed within this report, which is regularly published to meet the requirements of UK Government requirements, for example Procurement Policy Note (PPN) 06/21, which requires regular Carbon Reduction Plans to be completed.

- End of Report -

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[7] https://businessclimatehub.org/smes/?ul_filter_nickname=ukcloud