

ENVIRONMENT AND PLACE OVERVIEW AND SCRUTINY COMMITTEE



Report subject	Email and Document Storage Retention – Impact Analysis on Costs and Environmental Factors & Recommendations
Meeting date	9 July 2025
Status	Public Report
Executive summary	<p>This report evaluates the current email and document storage, carbon and costs footprints of BCP Councils use of Microsoft 365.</p> <p>The primary reason for bringing this report is to address the scrutiny request to “<i>establish the current data use and retention policies of the council, and whether there is scope for reduction of the environmental and financial impact of those policies</i>”.</p> <p>The report outlines three options for consideration: reducing how much data the Council retains in its compliance libraries, transitioning to alternative cloud or on-premises solutions, and completing activity to profile users to enable potential re-mapping to lower costs licence types.</p>
Recommendations	<p>It is RECOMMENDED that:</p> <p>(a) As per Option (A), The Committee considers a reduction in the number of years that the Preservation Hold Library is configured to retain Microsoft 365 email and documents for, down from 5 years. Thereby reducing the Councils carbon footprint in this area.</p> <p>(b) As per Option (B), The Committee supports the continuation of activity already underway, as part of the Councils Data and Innovation Programme, to re-assess and profile Microsoft 365 end-user licensing requirements, moving colleagues to lower-costs licenses where appropriate.</p>
Reason for recommendations	<p>Reducing the retention period for Microsoft 365 email and documents from 5 years will decrease the amount of data stored, thereby reducing the Council's carbon footprint. This aligns with the Council's commitment to sustainability and environmental responsibility, ensuring that data storage practices contribute to a greener future.</p> <p>Supporting the continuation of the Council's Data and Innovation Programme to re-assess and profile Microsoft 365 end-user licensing requirements will help identify opportunities</p>

	to move Officers and Councillors to lower-cost licenses where appropriate. This will further optimise licensing costs, ensuring that resources are allocated efficiently while maintaining the necessary functionality for users. This approach promotes cost-effectiveness and supports the Council's goal of financial prudence.
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Wards	Council-wide
Classification	For Recommendation

Background

1. Issue requested for Scrutiny: *The impact financially and environmentally on email and other electronic document retention, whether the Council could be improving its data retention and use strategy to reduce its Digital Carbon emissions, as well as the cost impact.*

To establish the current data use and retention policies of the council and assess whether there is scope for reduction of the environmental and financial impact of those policies.

2. BCP Council utilises Microsoft365 as its primary email/document productivity and storage suite for Officers and Councillors.

Microsoft 365 is a subscription-based service that offers a suite of productivity tools designed to help Officers and Councillors work, communicate, create and collaborate more effectively. It is a core component of the delivery of BCP Councils [IT Technical Strategy & Standards](#).

Microsoft 365 includes popular applications like Word for document creation, Excel for spreadsheets, PowerPoint for presentations, and Outlook for email and calendar management. Additionally, it provides cloud storage with OneDrive and SharePoint, allowing colleagues to securely access their files from anywhere, and Teams for online collaboration and to facilitate in-person or remote meetings.

Also included in this subscription is a service called the Preservation Hold Library (PHL). The PHL is an area in Microsoft 365 that automatically stores copies of Office files and emails to assist with legal searches and compliance reasons.

Within BCP Council the PHL was configured in 2019 to retain these items for 5 years.

Current Storage and Carbon Footprint

3. BCP Council's storage footprint within Microsoft 365 is structured into 3 areas:
 - Exchange Online **44.68 terabytes (Tb)** – all data related to **email and calendars**, including document attachments. Includes the Preservation Hold Library.
 - SharePoint Online **54.2Tb** – all data contained within **SharePoint and Teams**, including unstructured data such as word documents, spreadsheets and presentations that are not stored in structured data sources, such as line of business applications. Includes the Preservation Hold Library.
 - OneDrive Online **56Tb** – all data contained within colleague **personal data stores**, including unstructured data such as word documents, spreadsheets and presentations that are not stored in structured data sources such as line of business applications. Includes the Preservation Hold Library.

The total storage footprint for BCP Council across all 3, including the Preservation Hold Libraries, is currently **154.88Tb**.

Direct comparisons with other similar sized local authorities are difficult to assess. Dorset Council have shared that they currently hold **97Tb** of data within their Microsoft 365 environment, with approximately 700 fewer licensed users. Dorset Council did not provide details regarding the setup and scope of their PHL.

Note: 1 terabyte (Tb) is roughly equivalent to 250,000 hi-resolution photos or 500 hours of high-definition video.

For the previous 12 months BCP Councils overall emissions generated by its use of Microsoft 365, is **14.014 metric tons of carbon dioxide equivalent (mtCO2e)**.

Over the month of April 2025 this equated to 195 grams of carbon per user, roughly the same amount of carbon generated by driving half a mile in a petrol engine vehicle.

Current Costs

4. Microsoft 365 is a subscription-based service, meaning organisations pay a regular fee to access a suite of productivity tools that include Word, Excel, Outlook, PowerPoint, SharePoint, OneDrive, Teams, and more.

These tools are hosted in the cloud, so our colleagues can access them, and the files they create, securely from anywhere with an internet connection. Microsoft offers different levels of licenses depending on the features and business needs, ranging from basic email and file storage to advanced security and compliance tools.

The Microsoft 365 E5 license is the most comprehensive option available. It includes everything from the lower-tier plans, but adds powerful features designed for larger organisations and those with complex needs, such as BCP Council. With the Microsoft 365 E5 licence, colleagues get not only the core productivity tools but also benefit from:

- Advanced security tools to help protect against cyber threats like phishing and ransomware.
- Enhanced compliance features to help meet legal and regulatory requirements.
- Advanced analytics through tools like Power BI Pro, which helps users visualise, understand and then act on data.

- Phone system and audio conferencing, allowing users to make and receive calls directly in Microsoft Teams.

In short, the E5 license is ideal for organisations such as us that need top-tier productivity, storage, security and communication tools.

Licence use is closely monitored and controlled by IT & Programmes. Authorised colleagues within the department have access to considerable metrics and dashboards which enable them to ensure licences are allocated correctly and removed, for example, as soon as a user leaves the organisation, enabling its re-use elsewhere.

BCP Council currently provides **5,767** E5 user licences to colleagues requiring these services at a Local Government price of **£344.64 per user, per annum. This equates to £1,987,538 annually.**

Options Appraisal

5. Three options have been explored for Committee consideration that could lead to a reduction in the environmental and financial impact of the current position:
6. **Option (A):** Consider a reduction in the number of years that the Preservation Hold Library is configured to retain email and documents for, down from 5 years.

Advantages:

- Will reduce the overall storage footprint of emails and documents held within Microsoft 365.
- Information Governance Teams have confirmed that this can be safely re-configured without conflicting with existing Departmental Document Retention Policies.

Disadvantages:

- Will **not** reduce costs.
- Could limit the Councils ability to retrieve historical email and document data if needed for investigations.

Recommendation:

- The Council should consider if a reduction in the configured PHL is appropriate and that a new value and scope can be agreed.
- IT & Programmes and Law and Governance will be responsible for implementing and communicating the change to all colleagues.

7. **Option (B):** Continue *Data and Innovation Programme* activity to re-assess and re-profile the licensing needs of the userbase. This work enables analysis to be undertaken that can look to reduce the overall cost footprint of the Microsoft 365 E5 licences by potentially allocating lower-tier (cheaper) licences to some colleagues.

Advantages:

- Will reduce the overall cost footprint of Microsoft 365 subscription licensing.
- Activity is already underway as part of Data and Innovation Programme, to audit and re-assess all users Microsoft 365 service needs and licence accordingly.

Disadvantages:

- Profiling is intensive and complicated process in large complex environment such as BCP Council, with many hundreds of different role profiles across the organisation.

Recommendation:

- IT & Programmes continue with Data and Innovation activity to re-assess, profile and if appropriate re-licence users to lower cost, but still functional, licence types.
- IT & Programmes continue to proactively monitor licence usage across the Council and capture opportunities to re-provision existing procured licences where possible.

8. **Option (C):** Investigate the costs and options associated with moving away from Microsoft 365, either back to a traditional 'on-premises' service delivery model or via another cloud services productivity provider (e.g. Google or open-source alternatives).

Advantages:

- Would reduce the current cost of Microsoft 365 subscription licensing.

Disadvantages:

- High Initial Costs: Setting up new fit for purpose on-premises infrastructure requires significant upfront investment in hardware, software, skilled support personnel and end-user training. This will be a substantial financial burden compared to the subscription-based model of Microsoft 365.
- Limited Collaboration Features: Microsoft 365 offers robust collaboration tools such as Teams, SharePoint, and OneDrive, which are seamlessly integrated. Open-source alternatives lack the same level of integration and user-friendly features, potentially hindering productivity and collaboration in a hybrid working environment.
- Disaster Recovery: Implementing effective disaster recovery plans for on-premises infrastructure is costly and complex. Microsoft 365 offers built-in redundancy and disaster recovery options, ensuring secure data availability and business continuity for colleagues from anywhere with an internet connection.

Recommendation:

- This option is not recommended and has been discounted due to the high costs and business disruption caused by a shift away from the Microsoft Office ecosystem.

Summary of financial implications

9. Microsoft 365 is a subscription service based on a per-user licence. The annual revenue impact of these licences, assigned to 5,767 colleagues, is £1,987,538 per annum. This is currently funded from IT & Programmes base revenue budget. Progression of **Option 2** is expected to reduce the annual cost of current number of Microsoft 365 end-user licenses.

Summary of legal implications

10. The legal implications of adopting **Option (A)** have been explored with Law and Governance colleagues. Law and Governance advice is that any reduction in the Preservation Hold Library does not present any additional legal implications due to the requirement of Services to have retention periods on the records they hold. The Preservation Hold Library contains information that has been deleted from Microsoft 365 by end-users following the expiry of the Service retention period. There is no requirement on the Council to continue to retain information beyond agreed Service retention periods.

Summary of human resources implications

11. There are no human resources implications associated with the recommendations within this report.

Summary of sustainability impact

12. IT & Programmes worked alongside colleagues from our Sustainability Teams to verify the validity of the metrics and data made available to us by Microsoft.

Using Microsoft 365 can significantly contribute to a more sustainable and environmentally friendly way of working. One of the biggest advantages is its support for remote and hybrid work, which reduces the need for daily commuting. Fewer vehicles on the road mean lower carbon emissions, less air pollution, and reduced congestion. This shift not only benefits the planet but also improves the quality of life for our residents and colleagues.

Adoption of Microsoft 365 has also helped BCP Council reduce our physical infrastructure needs. With cloud-based tools like Teams, SharePoint, and OneDrive, we have been able to hugely reduce our reliance on on-site servers and paper-based processes. This leads to lower energy consumption, less waste, and a smaller office footprint.

By enabling digital collaboration, document sharing, and virtual meetings, Microsoft 365 supports a more efficient and eco-conscious way of working within BCP Council, helping us meet our sustainability goals while staying productive and connected.

Microsoft provide detailed metrics on the datacentre emissions it generates, on our behalf, by providing Microsoft365 services to our colleagues. The figures are inclusive of all emissions associated with use of Exchange Online (Outlook), OneDrive, Teams, Word, Excel and PowerPoint.

These metrics are calculated in line with the [Greenhouse Gas Protocol](#), as recognised by our local Sustainability Team and are broken down into three scopes, as defined below. Emissions are calculated for BCP Council based on its actual usage of Microsoft365 services. The algorithm calculates a usage factor which provides emissions per unit of customer usage in our UK region data centre.

Scope 1: Direct Emissions.

Includes emissions from the combustion of diesel fuel and emissions from the use of refrigerants for cooling, proportionate to BCP Council use.

Scope 2: Indirect Emissions.

Includes emissions from direct power consumption used to power Microsoft datacentres that host BCP Councils services, proportionate to BCP Council use.

Scope 3: Other indirect Emissions.

Includes emissions that result from raw material extraction, product manufacturing and packaging, product transport, warehouse storage and recycling/landfill of hardware such as servers and network equipment.

For the previous 12 months BCP Councils overall emissions across all 3 scopes has been calculated as **14.014** metric tons of carbon dioxide equivalent (mtCO₂e).

Shown diagrammatically in figures 1 and 2 on the next page.

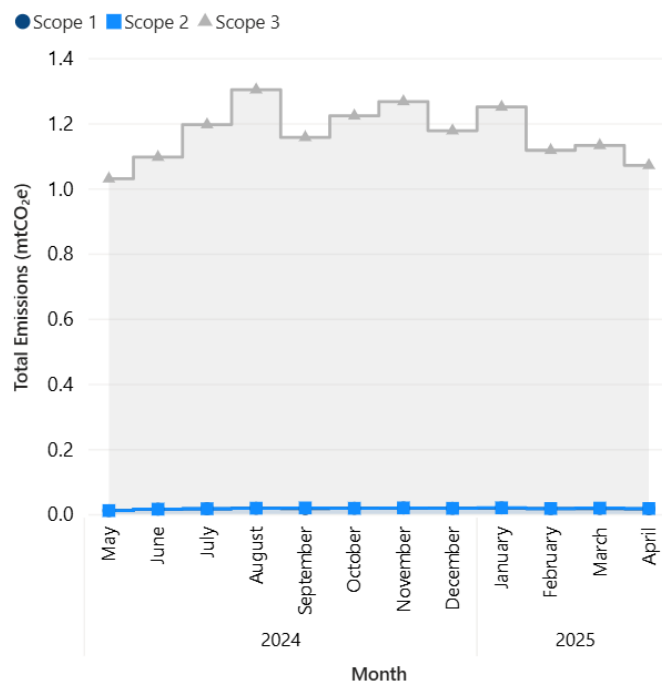


Figure 1: Total Emissions per month across all users

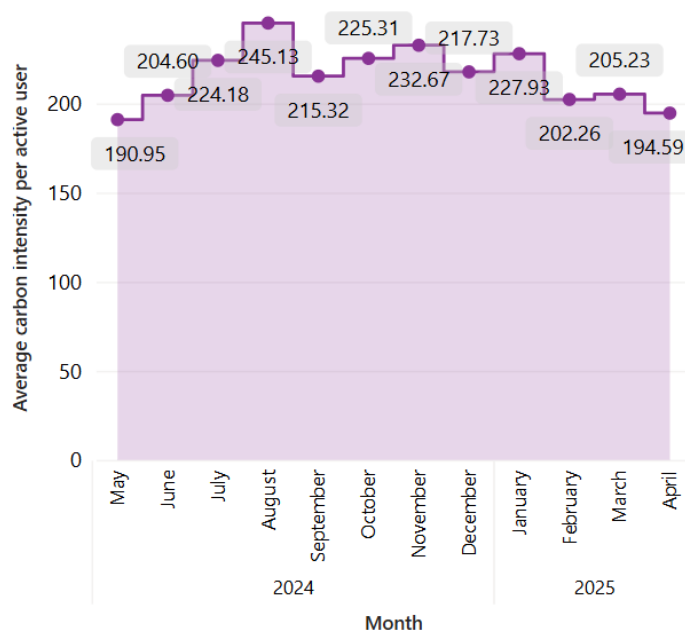


Figure 2: Carbon intensity in grams of CO₂e per Microsoft365 user, per month for BCP Council

Summary of public health implications

13. There are no public health implications associated with the recommendations within this report.

Summary of equality implications

14. No EIA or EIA conversation has been had with respect to the recommendations in this report as it was not considered relevant.

Summary of risk assessment

15. One risk has been identified and associated with the implementation of Option 1, as recommended by this report:
 - Option 1: Reduce the PHL
 - **Risk:** There is a risk that by reducing the PHL that this may mean the Council is unable to retrieve copies of emails and documents that may be supportive to investigations or legal challenges.

Background papers

[IT Technical Strategy and Standards](#)

[Greenhouse Gas Protocol](#)

Appendices

There are no appendices to this report