



**CIONET**

DISCUSSION SUMMARY

---

**HOW CAN IT  
SUPPORT THE  
CORPORATE  
SUSTAINABILITY  
AGENDA?**

This article was written by Roger Camrass, Director of Research for CIONET, and is based on conversations during a virtual event on 21st July 2021 on the topic of sustainability and how the IT organisation can contribute to this critical agenda item. The event was sponsored by ADOBE Enterprise

---

## How Natwest is tackling climate change

COVID has been a powerful catalyst to tackle climate change by reducing the flow of paper and frequency of business travel to near-zero. ADOBE opened the discussion evening by sharing a case study associated with NatWest. In 2020 the Bank responded to beleaguered small businesses by arranging payment holidays and bounce back loans. All inquiries were handled electronically with no paper involved in either client on-boarding or subsequent banking transactions. Over nine million pieces of paper were saved.

This new way of working with external parties has been embedded in the rebranding of RBS and NatWest and is supported directly by the new CEO, Alison Rose, and main board. It demonstrates that sustainability has reached board agendas across the FTSE 100 and elsewhere. Our CIONET event sought to understand how IT is contributing to this new agenda.

## ESG reaches the board agenda

Environmental, Social and corporate Governance (ESG) is no longer a 'nice to have'. As severe floods affecting much of Europe demonstrated this summer, climate change is the most fundamental challenge to affect the planet for many millennia. According to David Attenborough[1] over population, deforestation and carbon pollution have presented an existential challenge to governments and corporation across the globe since 1950.

Financial institutions are responding with ESG investment products and are actively discriminating against those organisations that do not have a sustainability policy. ESG and climate change have also found their way onto corporate risk registers and KPIs.

Efforts are now being made to educate staff about the environment and NatWest has appointed dedicated resources to oversee initiatives aimed at net-zero emission

targets in the coming decade. Helpful factors at corporate level include:

- Moves to hybrid working that is reducing travel
- Elimination of paper from processes and workflows
- Modern building stock that operates with renewable energy

## Impact of processing and data storage on the environment

At the infrastructure level, much can be done to reduce power consumption. Laptops and desktops are notorious for being power hungry, as are modern data centres. One leading bank commented that the adoption of 'thin client' helps reduce power consumption dramatically across an estate of two hundred thousand devices. Equally, the move to public cloud services can help mitigate the many thousands of on-premises servers that have grown up over the years.

However, as one University CIO stated, academic research in areas such as pharma requires the growing use of high-performance computers (HPC). Perhaps the advent of Quantum computing may help alleviate such power 'monsters. Two quantum computers each the size of a postage stamp could replace the world's largest HPC computer, Summit. On the other hand, this university is mobilising its 30,000 students and 8,000 researchers to achieve net-zero emissions by 2030. One initiative has been to replace course notes with electronic note books.

The current popularity of cryptocurrency is another blot on the IT horizon. Bitcoin mining consumes hundreds of Terawatts per annum and is equivalent to twenty times the power of Google's entire infrastructure. Some governments are destroying such mining equipment to reduce demands on their national grids.

## Workflow transformation can contribute to the sustainability

As referred to in the NatWest case study, traditional workflows such as customer and employee onboarding required extensive paper trails. COVID has reduced such dependencies dramatically. Equally, banks continue to post physical statements to businesses. Moving to an all-digital format can save billions of pieces of paper.

Public service delegates were less optimistic about the willingness of government

organisations to replace paper-based systems, especially in frontline services such as healthcare and policing. It remains a remarkable fact that some 50% of a frontline professional's time is spent filling in paper forms. This reduces the capacity of such services to serve the public whilst at the same time generates masses of paper that needs to be transported and stored. Culture rather than technology is a key factor here.

BREXIT is an example of an event that has increased the amounts of paper associated with imports and exports due to added levels of bureaucracy and political interference. Companies such as Amazon have been helpful in devising ways of overcoming such obstacle and eliminating paper trails.

All delegates agreed that processes and associated workflows have evolved over many decades to become far too complex and bureaucratic, involving unnecessary amounts of paper and manual work steps. Introducing API interfaces and robotic process automation can help simplify end-to-end processing with consequences for less human intervention and reduced power consumption. A leading insurance company mentioned that modular architectures will go some way towards eliminating complexity, as pioneered by digital natives. This company includes sustainability in all its RFPs.

## Investment in IT can reduce carbon footprints

One delegate provided an interesting example of how investment in IT can contribute to the broader sustainability agenda. SITA is a multinational information technology company providing IT and telecommunication services to the air transport industry. The company provides its services to around 400 members and 2,800 customers worldwide, which it claims is about 90% of the world's airline business. New applications have been able to reduce the carbon footprint of its members by monitoring emissions at airports and optimising flight patterns.

Another latent contribution of IT is the extensive use of sensors embedded within large physical assets such as power stations and oil refineries. Environmental conditions can be closely monitored and controlled in real time using modern IT systems. Modern buildings also employ similar techniques to reduce power usage.

Depending on occupancy, air conditioning and lighting can be micro-managed to eliminate unnecessary consumption. Wearables will further encourage microclimates in public spaces such as hotels and travel centres.

## Where does it go from?

The discussions illustrated three imperatives for IT executives:

- Sustainability is now a Board level topic that imposes new KPIs on all functional activities including IT
- IT has its own challenges in reducing carbon footprint derived from devices, data centres and associated infrastructures
- IT can help the wider community by reducing workflow complexity and introducing IoT based applications to monitor and optimise environmental conditions.

The event, sponsored by ADOBE encourages all IT professional to consider these three imperatives. In its own case, ADOBE has already achieved 47% renewable energy in its office worldwide. It promotes the concept of 'designing for sustainability' that should help influence every aspect of the IT agenda.



## About CIONET

CIONET is the leading community of more than 10,000 digital leaders in 20+ countries across Europe, Asia, and the Americas. Through this global presence CIONET orchestrates peer-to-peer interactions focused on the most important business and technology issues of the day. CIONET members join over a thousand international and regional live and virtual events annually, ranging from roundtables, programs for peer-to-peer exchange of expertise, community networking events, to large international gatherings. Its members testify that CIONET is an impartial and value adding platform that helps them use the wisdom of the (IT) crowd, to acquire expertise, advance their professional development, analyse and solve IT issues, and accelerate beneficial outcomes within their organisation.

[cionet.com](https://cionet.com)