

# Achieving sustainability together

Microsoft is making good initial progress against its 'moonshot' goals for sustainability, and is also helping partners and customers follow suit

BY ELLY YATES-ROBERTS

In a 'State of the Planet' address at Columbia University in December 2020, United Nations secretary general Antonio Guterres urged every country, city and company to adopt plans for a transition to net zero emissions by 2050.

At the start of the same year, Microsoft made a 'moonshot' pledge to become carbon negative by 2030. It also promised that by 2050 it will remove from the environment all the carbon that the company has emitted either directly or by electrical consumption since it was founded in 1975.

"While the world will need to reach net zero, those of us who can afford to move faster and go further should do so," said Microsoft president Brad Smith, at the time of the announcement. "That's why we are announcing an ambitious goal and a new plan to reduce and ultimately remove Microsoft's carbon footprint."

There has been immediate progress, with a 6 per cent reduction in annual carbon emissions to 10.9 tonnes in the year to January 2021. Microsoft has been exploring the purchase of renewable energy for all of its data centres by 2025 and will eliminate its use of diesel fuel by 2030. It has also created a \$1 billion Climate Innovation Fund, of which \$50 million will be

invested in the Energy Impact Partners' global platform, which works with energy providers to transition towards cleaner fuels.

Microsoft has also collaborated with partners to affect environmental change outside of its own organisation. It formed the Transform to Net Zero coalition with founding members A.P. Moeller – Maersk, Danone, Mercedes-Benz, Natura & Co., Nike, Starbucks, Unilever and Wipro to help businesses reach their sustainability goals.

"We cannot achieve our sustainability ambitions alone – this update reflects an extraordinary amount of hard work and dedication across Microsoft and with customers, partners, non-governmental organisations and others around the world," said Lucas Joppa, chief environmental officer at Microsoft, during an announcement at Inspire 2020. "Working together, we can build a more sustainable future."

Michelle Lancaster, director of sustainability partnerships, sales and products at Microsoft, has witnessed the acceleration in the company's sustainability journey and is proud to help customers follow suit.

"We have been working with very large commercial customers in this space that are looking





at not only reducing their footprint, but also at how they can adapt and change their business,” she says.

One such customer is BP. The oil and gas business has been working with Microsoft on its commitment to become a more diversified energy provider. Using the internet of things (IoT) and artificial intelligence (AI), Microsoft is helping BP to drive decarbonisation efforts by understanding its existing business, helping it to become more efficient and reducing its methane emissions from existing oil and gas operations.

“But we’ve also been working with the business on how to reimagine its offshore oil rigs,”



“Working together,  
we can build a more  
sustainable future”

LUCAS JOPPA, CHIEF ENVIRONMENTAL  
OFFICER, MICROSOFT

says Lancaster. “For example, we want to answer questions such as ‘Where are the best locations to transform those into offshore wind sites?’ We want to understand what the pace of transformation will be and how best to utilise BP’s assets in that transformation. IoT, deep data, analytics and digital twins are all part of this.



# EVERY BATMAN NEEDS AN ALFRED

At Giacom, we like to think of ourselves as your Alfred Pennyworth. Trusty cloud services support you can rely on – working hard in the background to provide the expert know-how, tools and back-up you need to be a super hero for your customers.

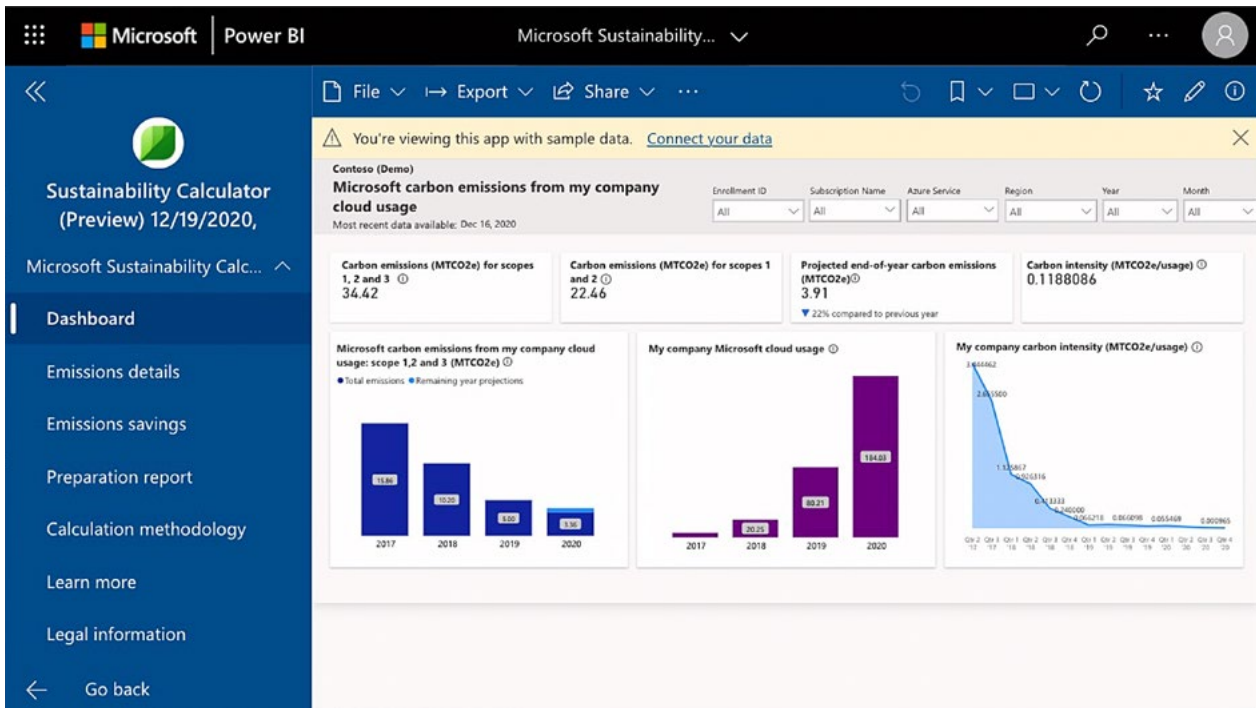
DISCOVER MORE AT [CLOUDMARKET.COM/BATMAN](https://cloudmarket.com/batman)  
OR CALL [0330 1277 018](tel:03301277018)

**YOUR CUSTOMER-  
FIRST CLOUD  
SERVICES  
DISTRIBUTOR**

**YOUR FAST, EASY  
LINK TO WORLD  
CLASS SMB  
VENDORS**

**YOUR  
EFFICIENT,  
EFFECTIVE  
IT BUSINESS**

**GIACOM™**  
It's all about you



“We have a growing interest in renewable energy and a commitment to be fully renewable by 2025. In addition to us helping BP with that work, BP is also a strategic renewable energy partner for Microsoft.”

There are also many small companies playing an important role in sustainability. For example, SilviaTerra uses AI to understand the health and species of trees for capturing and storing atmospheric carbon dioxide. It began working with Microsoft through the AI for Earth programme, which was set up to help small and mid-size non-profits to access Microsoft Azure and training resources to combine environmental science with computer science.

“Forestry is still a really big business and trees are now valuable for both their timber and their carbon sequestration abilities,” says Lancaster. “It is important to know the overall state of forest health, especially for carbon offset projects.”

“We worked with SilviaTerra to move its mapping applications onto Azure. Using satellite imaging and AI to fill in the gaps, the firm can look at any plot of land and find out the number, species, height and health of the trees. These are the key factors in estimating their carbon value.”

Microsoft’s sustainability commitments have focused heavily on removing carbon from the atmosphere. It has invested in 26 offset projects

to remove 1.3 million metric tons of carbon and its partnership with SilviaTerra is building on this commitment.

“We have also worked with the firm to take its algorithm to organisations that certify land for carbon-offset projects and we have agreed to purchase the first set of the carbon offsets that are generated as a result of their calculation,” says Lancaster.

Many organisations are aware of human impact on the environment and seek more sustainable operations, but struggle to implement procedures to affect change. Lancaster says that Microsoft can help address this.

In 2020, for example, Microsoft launched its Sustainability Calculator to help businesses measure the carbon emissions that result from their cloud usage and provide insights on how to reduce them.

“This service not only helps customers understand the carbon value of using our products,” says Lancaster. “It also helps with reporting and is the first time that we’ve seen a business

Microsoft’s Sustainability Calculator helps businesses measure the carbon emissions of their cloud usage



“Investing in sustainability is a win-win for everyone”

SCOTT HARDEN, CHIEF TECHNOLOGY OFFICER OF WORLDWIDE ENERGY, MICROSOFT

# THREATLOCKER

Leading the cybersecurity market towards a more secure approach to blocking all **unknown** application vulnerabilities.

---

For more information visit  
[www.threatlocker.com](http://www.threatlocker.com)



SilviaTerra uses AI to understand the health and species of trees for capturing and storing atmospheric carbon dioxide

provide that level of transparency down to the customer level.

“If you’re using our services, we want you to have a really clear view of the carbon footprint of those services. We’re excited about this as it means that the carbon footprint associated with our services is going to continue to lessen over time. Just as our customers can trust Microsoft technology for its security and privacy protections, they can also trust us to handle that baseline sustainability concern.”

Microsoft is also building a suite of products and solutions to help businesses better understand the full breadth of their carbon footprint and help them reduce it.

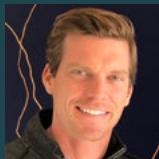
“Sustainability is a part of our DNA at Microsoft,” says Scott Harden, chief technology officer of worldwide energy at Microsoft. “Our team’s charter is to take the best practices from our own sustainability efforts and look at how we can leverage it for our customers and partners. This way they are able to push forward with their energy transition to meet their sustainability goals.

“We are also collaborating with other global technology pioneers to learn from their experiences in this space. For example, we have a strong marketing relationship with engineering and industrial software leader AVEVA, and we work perfectly in sync together. We are also developing partnerships with our customers and working with them closely on joint initiatives.

Investing in sustainability is a win-win for everyone. We have seen top energy customers leaning in wholeheartedly to sustainability commitments. Today, there is more awareness that developing a circular carbon economy not only saves the planet but also greatly benefits businesses.” ■

# Partner perspectives

We asked a selection of Microsoft partners how they are using technology to accelerate the journey towards sustainability



**Clay Westbay**  
*Vice President of Delivery  
at Synergy Technical*

“Sustainability initiatives have always been a priority for our organisation, both for internal operations as well as in our consulting practice. Our customers are actively embracing technologies that promote their sustainability initiatives. Even prior to the Covid-19 pandemic, eco-minded customers were deploying Microsoft Teams specifically with the goal to reduce travel-related carbon emissions. Customers are reducing their server farm footprints by moving applications and servers to Azure deployments, then measuring their sustainability impact as an outcome. Data shows that migrations to public cloud services can reduce carbon dioxide emissions by 59 million tons per year. That’s the equivalent of removing 22 million cars from the road. We work with our clients to continually analyse their environments to ensure we are proactive in implementing both the most cost-efficient and carbon-efficient IT practices.”

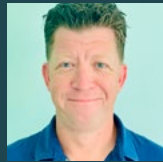
## COVER STORY

"Green is the new black. As an environmentally responsible company, VeriPark is not only working for the present, it is also investing in the future. The company makes a positive difference in the world by helping its customers to become more sustainable banks. Through its digital, internet and mobile banking solutions, VeriPark helps banks to reduce the carbon footprint and environmental impact of serving their customers.

By collaborating with VeriPark, banks take a step forward in creating a healthy and sustainable world. Thanks to VeriPark's innovative digital solutions, banking customers carry out many transactions using digital channels anytime, anywhere. Therefore, they avoid unnecessary trips to branches and reduce transportation-related environmental footprints. They also empower their customers to extend green living to the way they bank through reduced paper consumption and carbon dioxide emissions."



**Özkan Erener**  
*CEO of VeriPark*



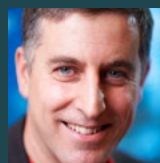
**Corey Hynes**  
*CEO of Learn on Demand Systems*

"Our business runs on Azure and we were inspired by Microsoft's commitment to sustainability to make our own commitment to carbon neutrality. We achieved that goal in 2019 through the carbon offset programme run by Terrapass, a champion in helping organisations understand and take responsibility for their climate impact.

We purchased credits with Terrapass to offset 233 metric tons of carbon dioxide. In 2020, our credit purchase offset 302 metric tons, an increase due to our data centre expansion around the world to support our customers' needs and their significant increase in online learning related to the Covid-19 pandemic. These purchases have now supported emissions reduction projects in communities around the world. The ability to positively impact our environment while supporting our customers enables us to expand our impact while continuing to reduce our footprint."

"Sharp is committed to promoting sustainable practices and tackling climate change – the Windows collaboration display from Sharp delivers a Microsoft certified standard, meaning those working from home experience a meeting as though it is happening in person. This reduces the pressure on employees who want to work from home and shrink their carbon footprint without losing productivity from not being physically present in meetings.

As well as being compliant with the latest 'Energy Related Product' European directive, fulfilling the required standards for energy efficiency, the Windows collaboration display features an IoT sensor hub to help monitor environmental conditions. The sensors feed data back to the Azure Digital Twins platform to help managers monitor air quality levels, ambient light, room occupancy and temperature. This can help organisations to realise the vision of a truly smart building which can intelligently manage environmental conditions, for example, by knowing when to turn off lights and air conditioning when a meeting room is not being used, helping to reduce costs and save energy."



**Chris Parker**  
*Senior Product Manager for Visual Solutions at Sharp Europe*

"Sustainability is vital to all industries today and technology is emerging as a key enabler for a sustainable future. At AVEVA, we have embraced this commercial, philosophical and ethical opportunity to help drive a sustainable future for our customers. We are accelerating our efforts into strategy around sustainability that will deliver human, economic and environmental value.

The UN predicts that an additional \$3 trillion is needed in the next decade to make its sustainable development goals a reality – that is roughly 3 per cent of Gross Domestic Product (GDP). Since the private sector represents 75 per cent of the global GDP, we have a critical role to play in ensuring we achieve this.

AVEVA's approach in realising this goal is materiality-based and stakeholder-inclusive. AVEVA and Microsoft are working together to help customers meet their sustainability objectives by using out joint technologies to secure a sustainable future and create energy efficient platforms and practices."



**Lisa Johnston**

*Chief Marketing Officer  
and Chief Sustainability  
Officer at AVEVA*

**Pirkka Lankinen**  
*CEO at PayiQ*

"PayiQ is innovating how people travel and access their tickets on a given mode of transport. We support collaborative transport use and sustainability and provide passengers with an easy-to-use mobile application for accessing public transport and micro-mobility services, as well as a carbon dioxide emissions calculator.

The foundation of this is PayiQ's white label application and its back end, which features secure payment and fraud management capabilities. The app automatically detects the mode of transport the traveller is using, and the back end's algorithms analyse the information to calculate its carbon dioxide effects. Passengers are then able to see real-time information of their carbon footprint. The app can show target results on a daily and monthly basis and provide travellers with a dashboard of which to be proud."

"We value our partnership with Microsoft, as both companies are dedicated to helping customers make meaningful progress on their sustainability journeys. ICONICS software strengthens our customers' sustainability efforts, helping them reduce energy usage, cut costs and curtail carbon emissions. Our IoT and cloud-ready solutions make the invisible visible, letting customers see things they might not have before, including energy flows, carbon expenditures, even the probability of equipment failure.

ICONICS designs its solutions to leverage multiple Microsoft technologies including Windows 10, Windows Server, SQL Server and of course, Microsoft Azure. We use Azure IoT to power the analytics, machine learning and online dashboards that drive optimisation programs, and we pull telemetry from equipment and facilities using Microsoft Azure Digital Twins, uncovering insights that help reduce operating costs and improve tenant satisfaction."

**Melissa Topp**

*Senior Director of Global  
Marketing at ICONICS*