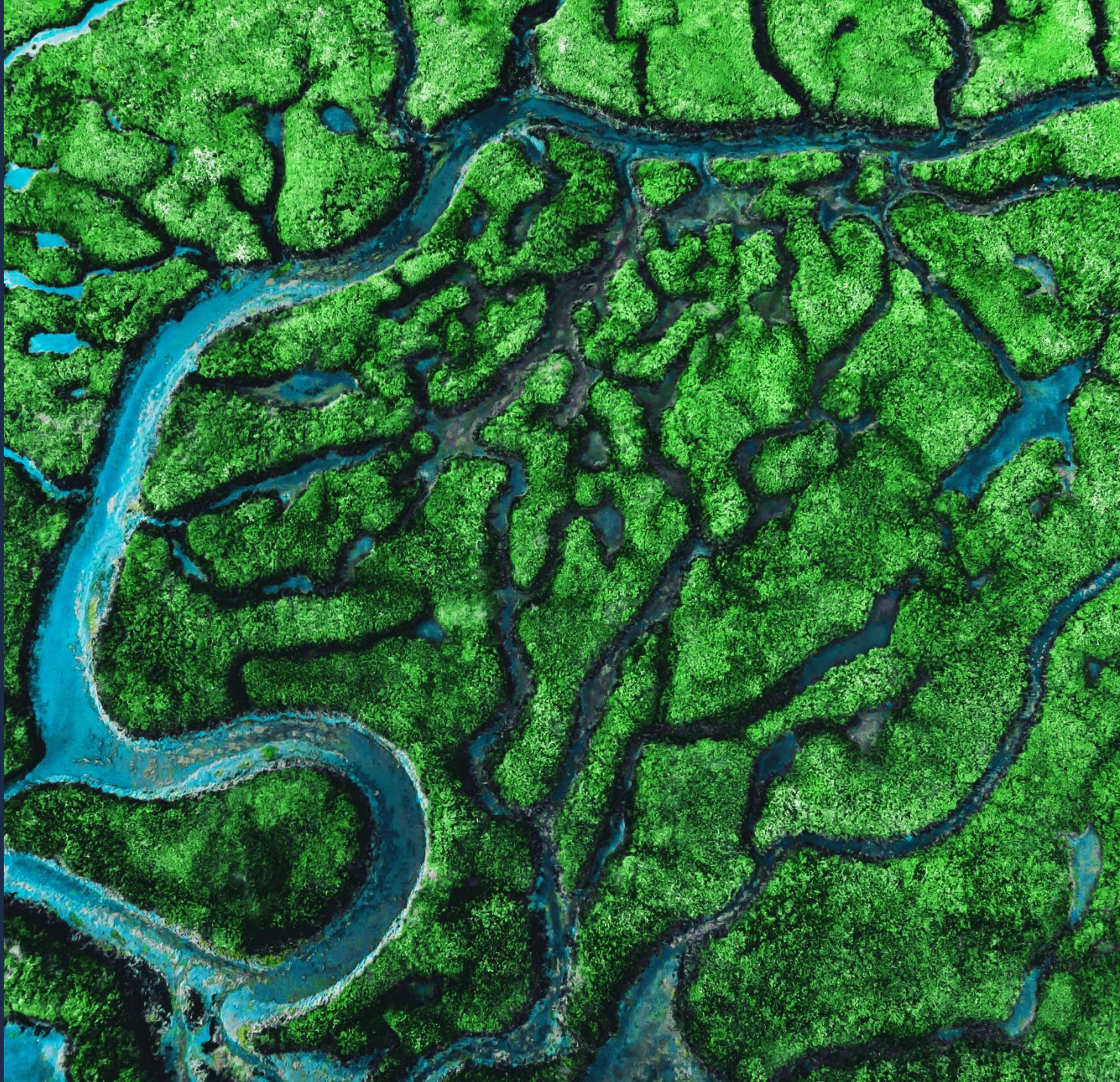




Agenda

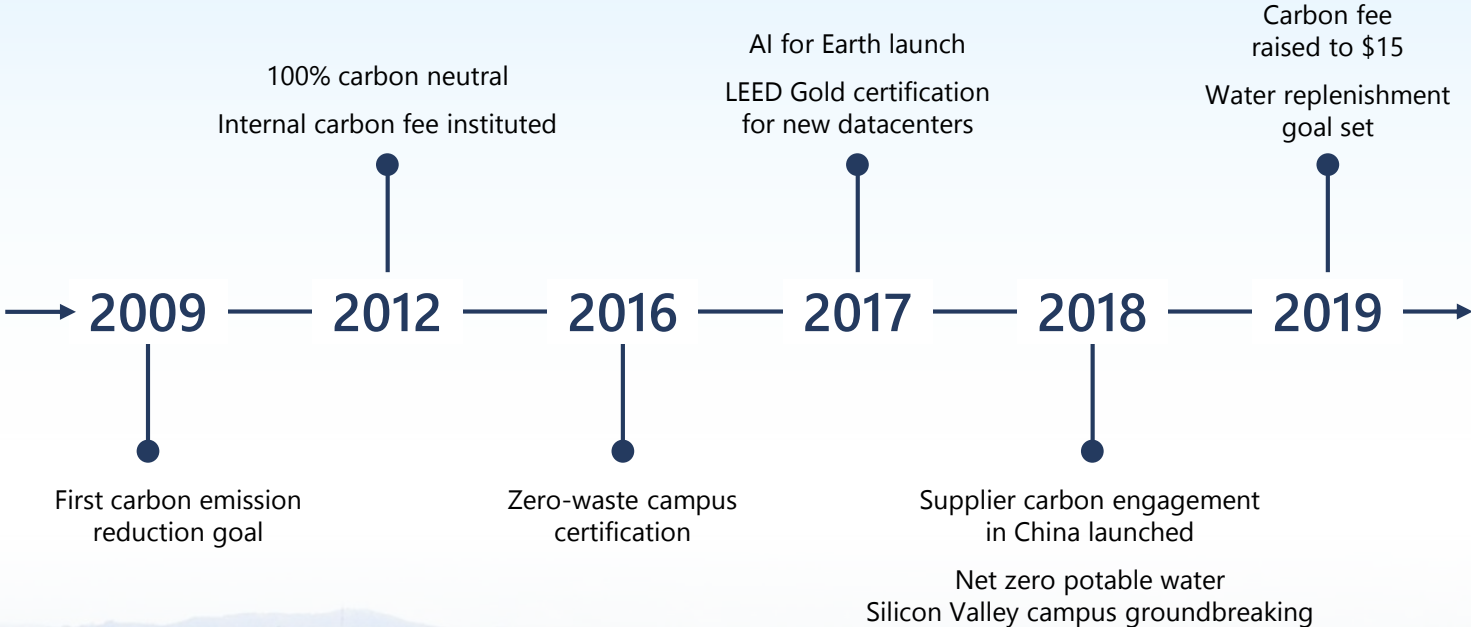
1. Sustainability journey
2. Microsoft Cloud for Sustainability
3. Microsoft Sustainability Manager
4. Emissions Impact Dashboard
5. Next Steps

Microsoft
Sustainability
Journey

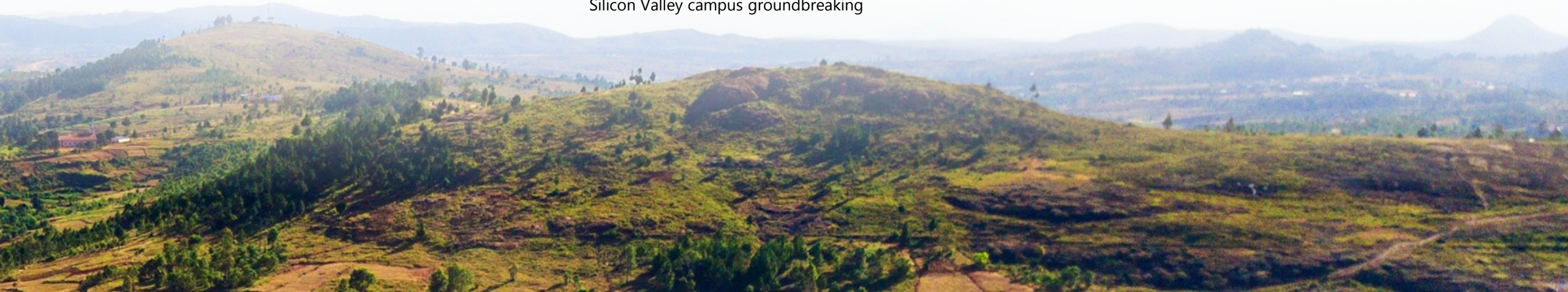
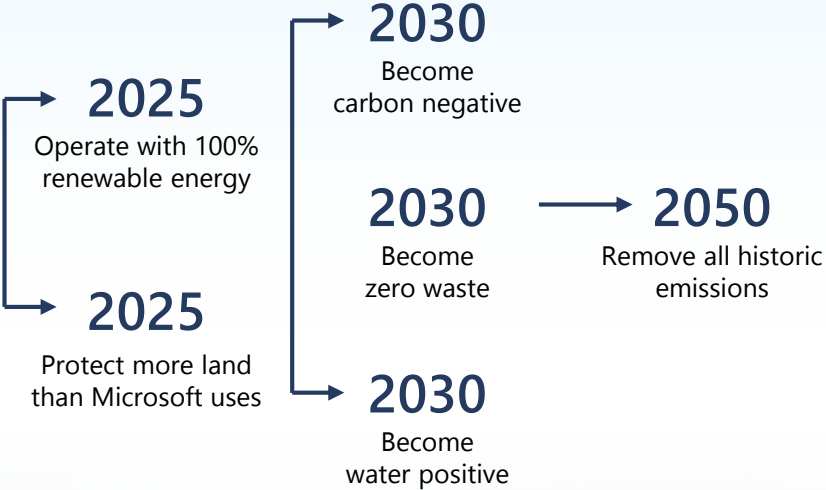


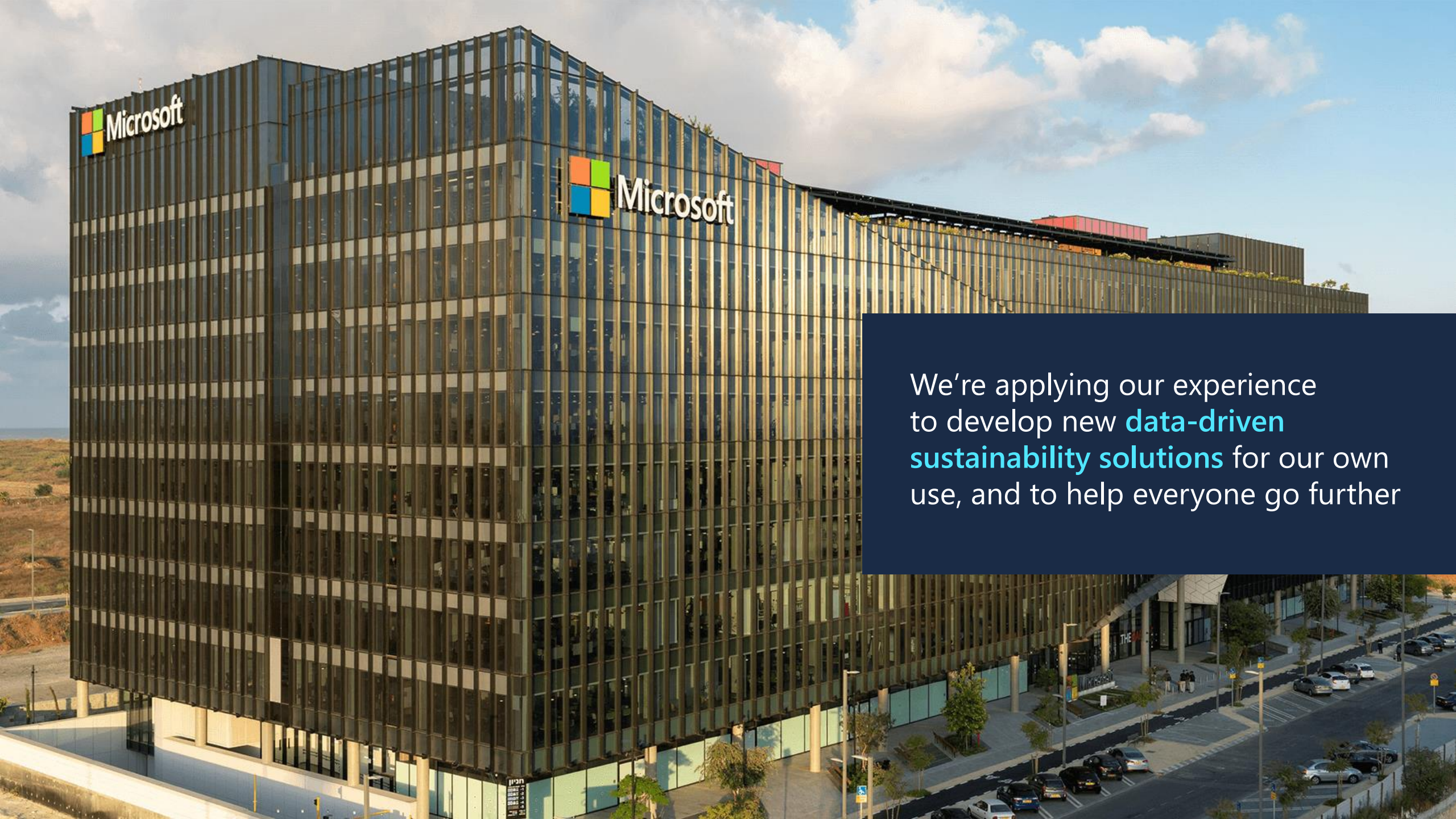
Decades of action

Our history 2009-2019



Our commitments 2020-2050





Microsoft

Microsoft

We're applying our experience to develop new **data-driven sustainability solutions** for our own use, and to help everyone go further

The Drivers, why now...



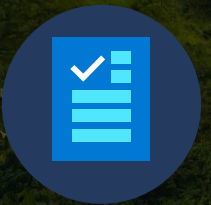
Consumer Demand

Consumers demanding more from their brands: 60% would pick a lower-impact brand given the choice.¹



Investor Pressure

Institutional investors incorporating environmental considerations into their investment decisions: 71% agree that there must be increased actions to tackle climate change.²



Regulation

New and proposed regulatory requirements drive a need to capture data on current emissions and reduce future environmental impact.

¹ PwC Tech Landscape: Sustainability Solutions

² Accenture COVID-19 SDG Impact Report

Targeted investments deliver greater value



Build brand
trust

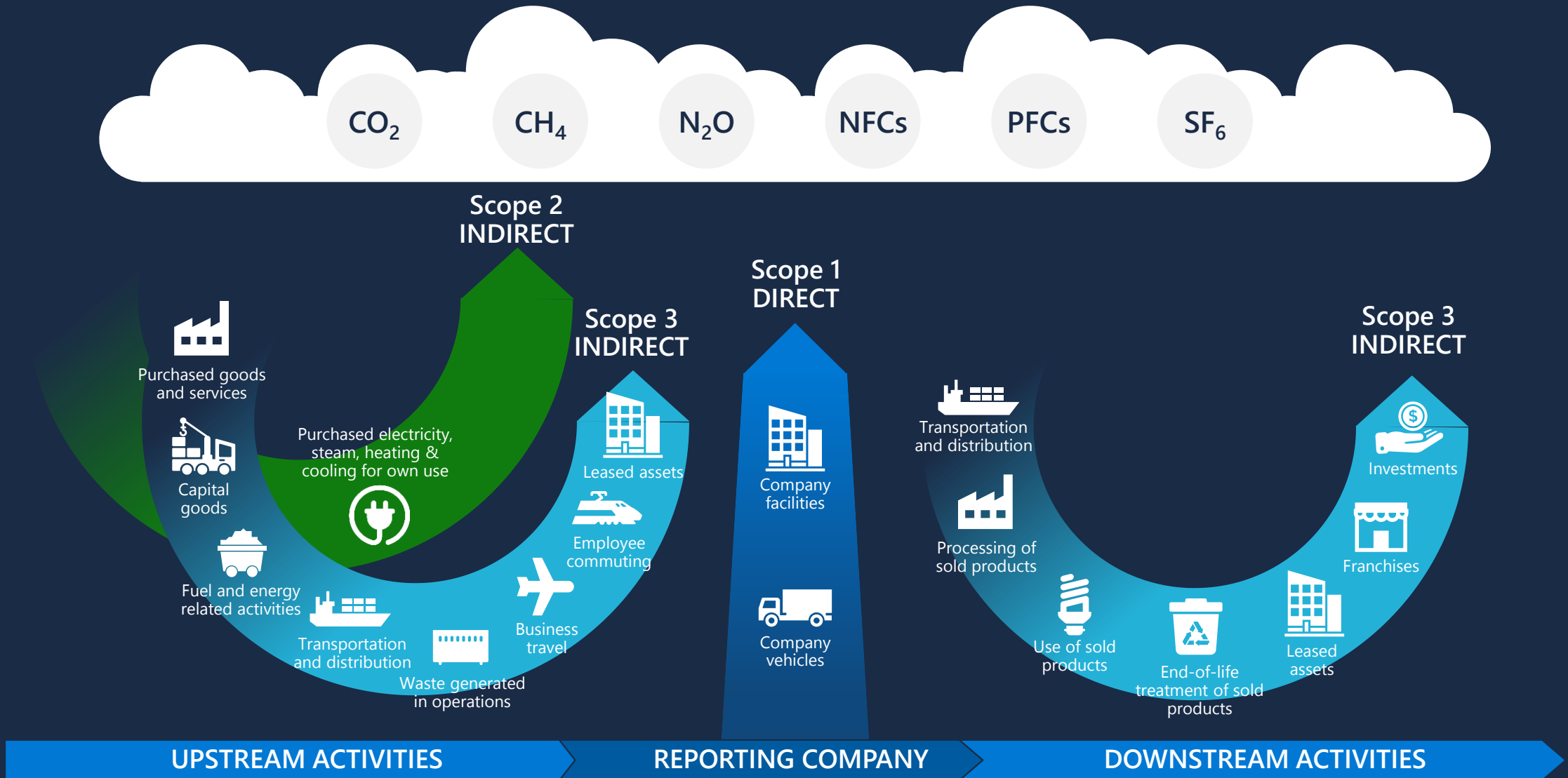


Enhance
efficiencies



Improve
margins and
revenue

Scopes and emissions across the value chain



Sustainability challenges

Lack of standards

Slow manual processes

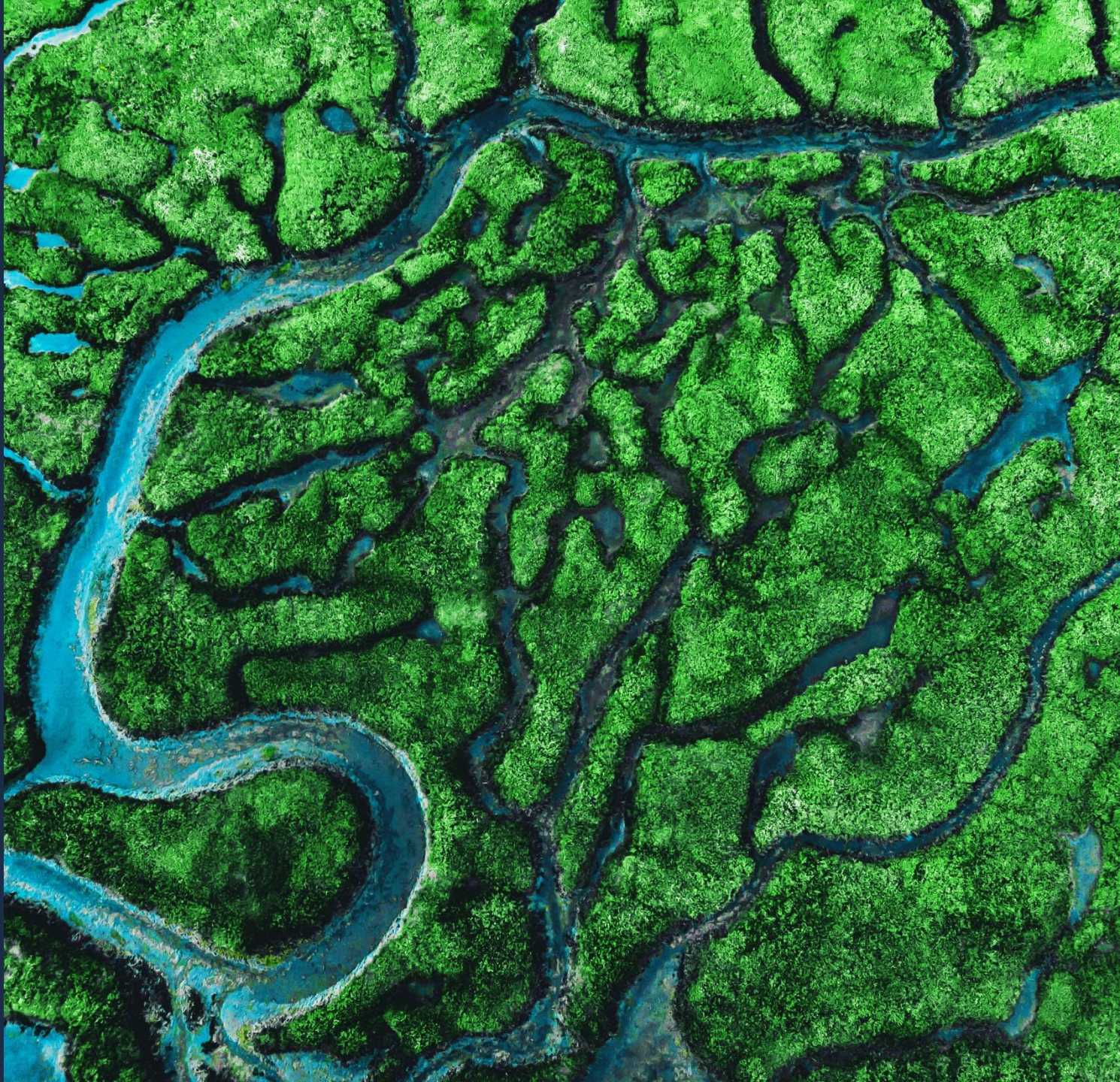
Siloed data

Value chain transparency

Capital investment tradeoffs



Microsoft Cloud for Sustainability





Microsoft Cloud
for Financial Services



Microsoft Cloud
for Healthcare



Microsoft Cloud
for Manufacturing



Microsoft Cloud
for Nonprofit



Microsoft Cloud
for Retail



Microsoft Cloud for Sustainability

Microsoft Cloud



Modern
work



Business
applications



Infrastructure



Digital and
app innovation



Data & AI

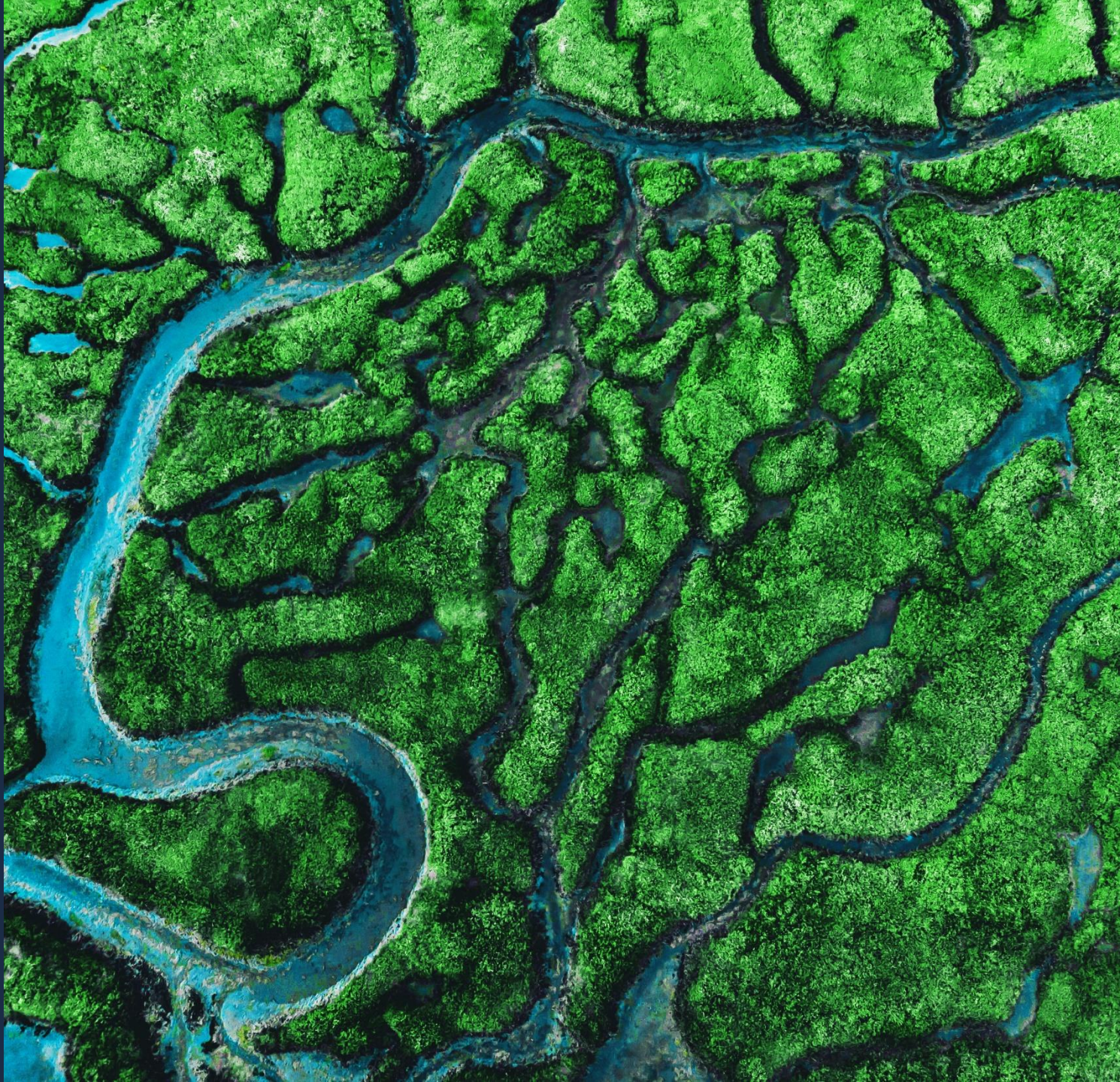


Security

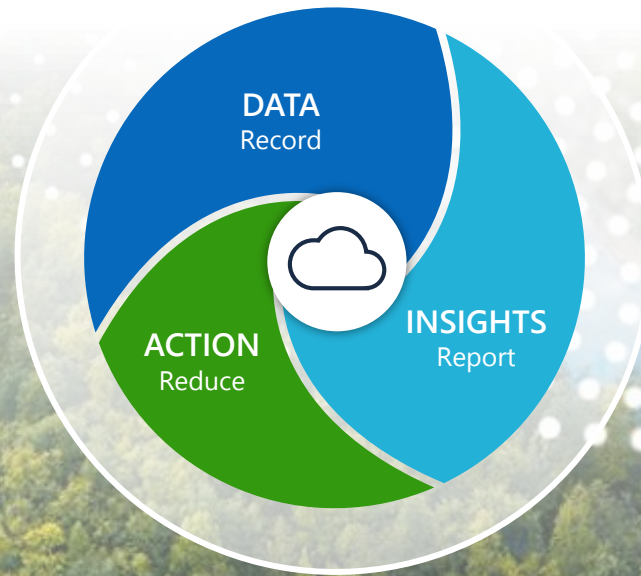
The most trusted and comprehensive cloud



Introducing Microsoft Sustainability Manager



Record, Report and Reduce: Microsoft Sustainability Manager



Using data to drive insights, results
—and transformation

Microsoft Sustainability Manager main capabilities



End-to-end Sustainability Journey

DATA
Record

INSIGHTS
Report

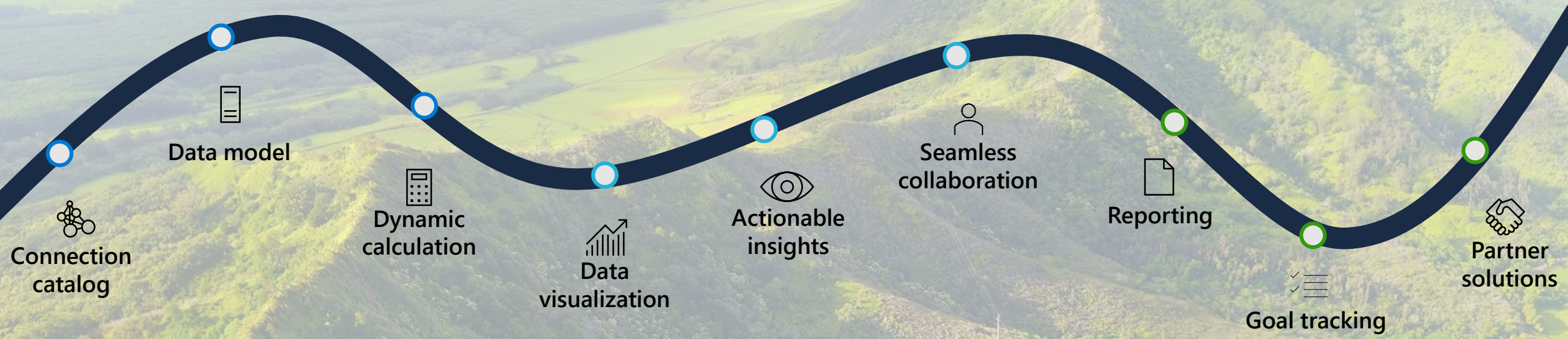
ACTIONS
Reduce



Sustainability Team



Sustainability Manager



Connection catalog

Data model

Dynamic calculation

Data visualization

Actionable insights

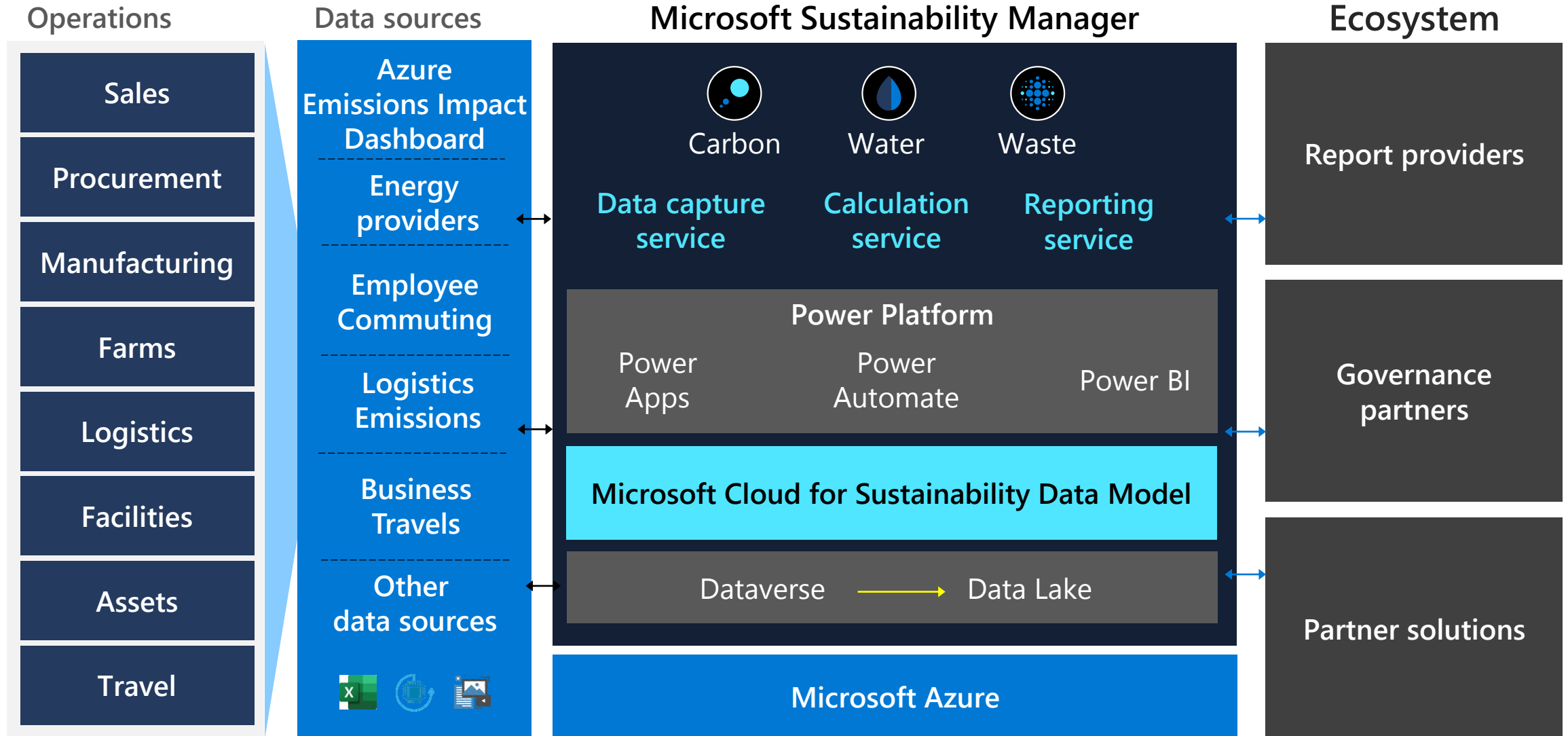
Seamless collaboration

Reporting

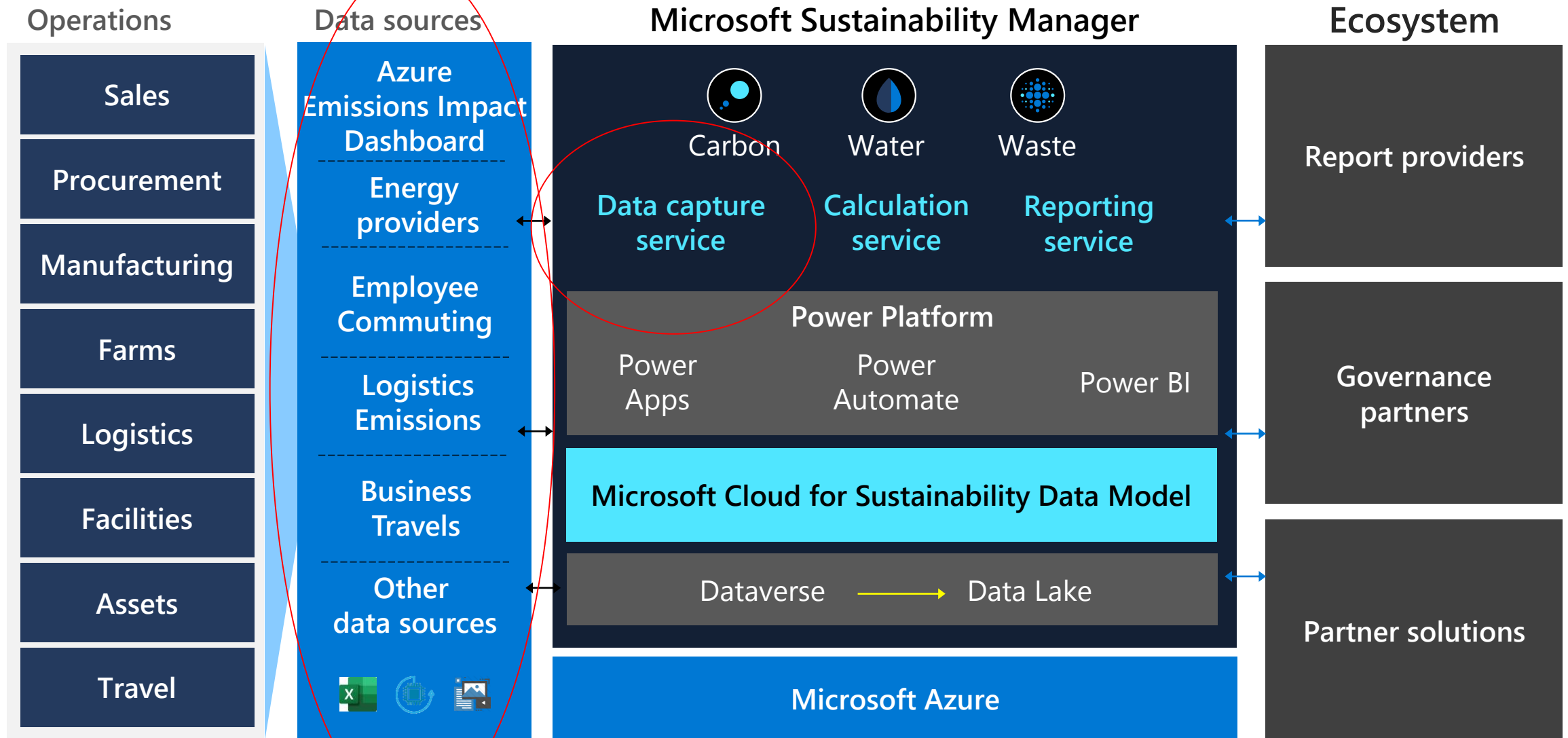
Goal tracking

Partner solutions

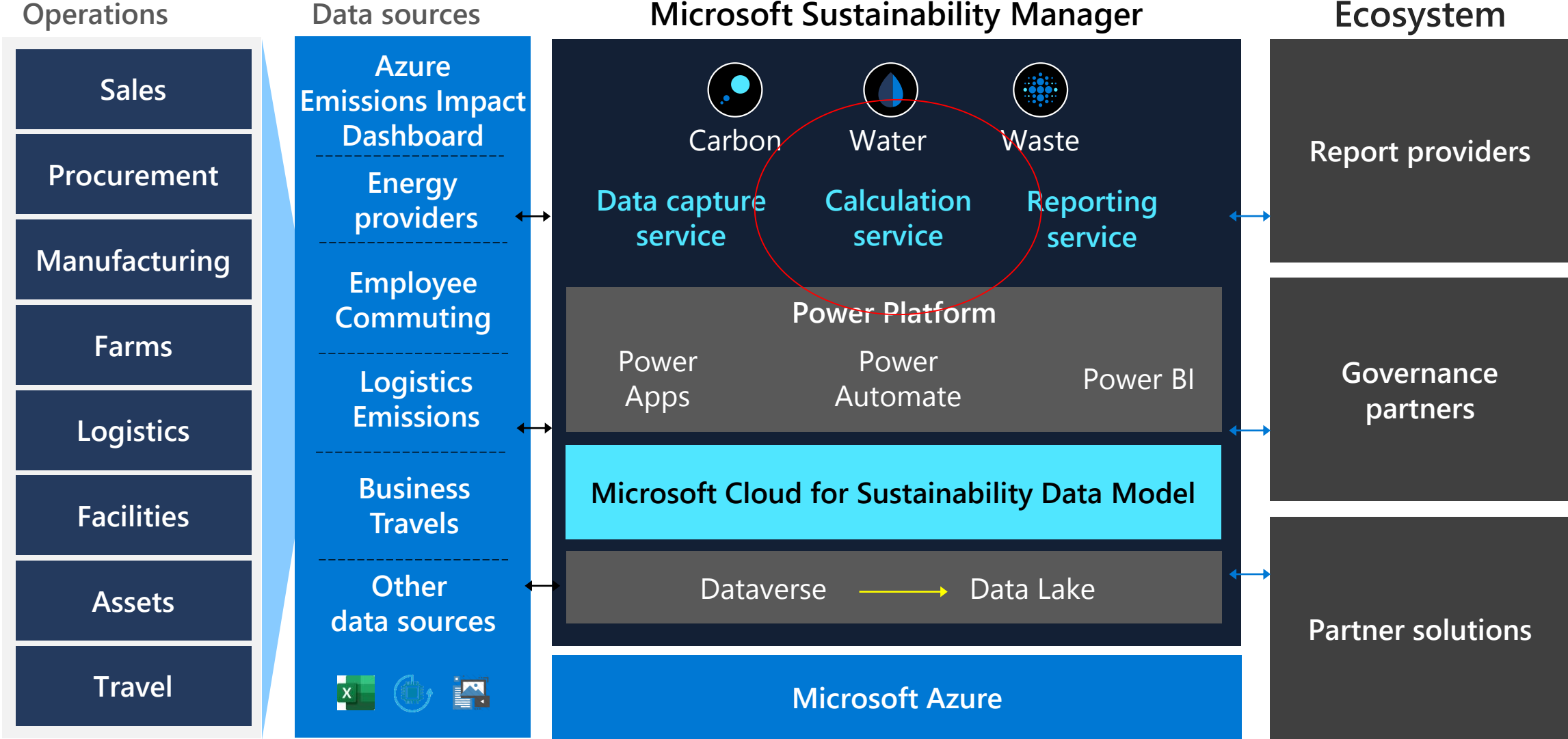
High Level Solution Overview



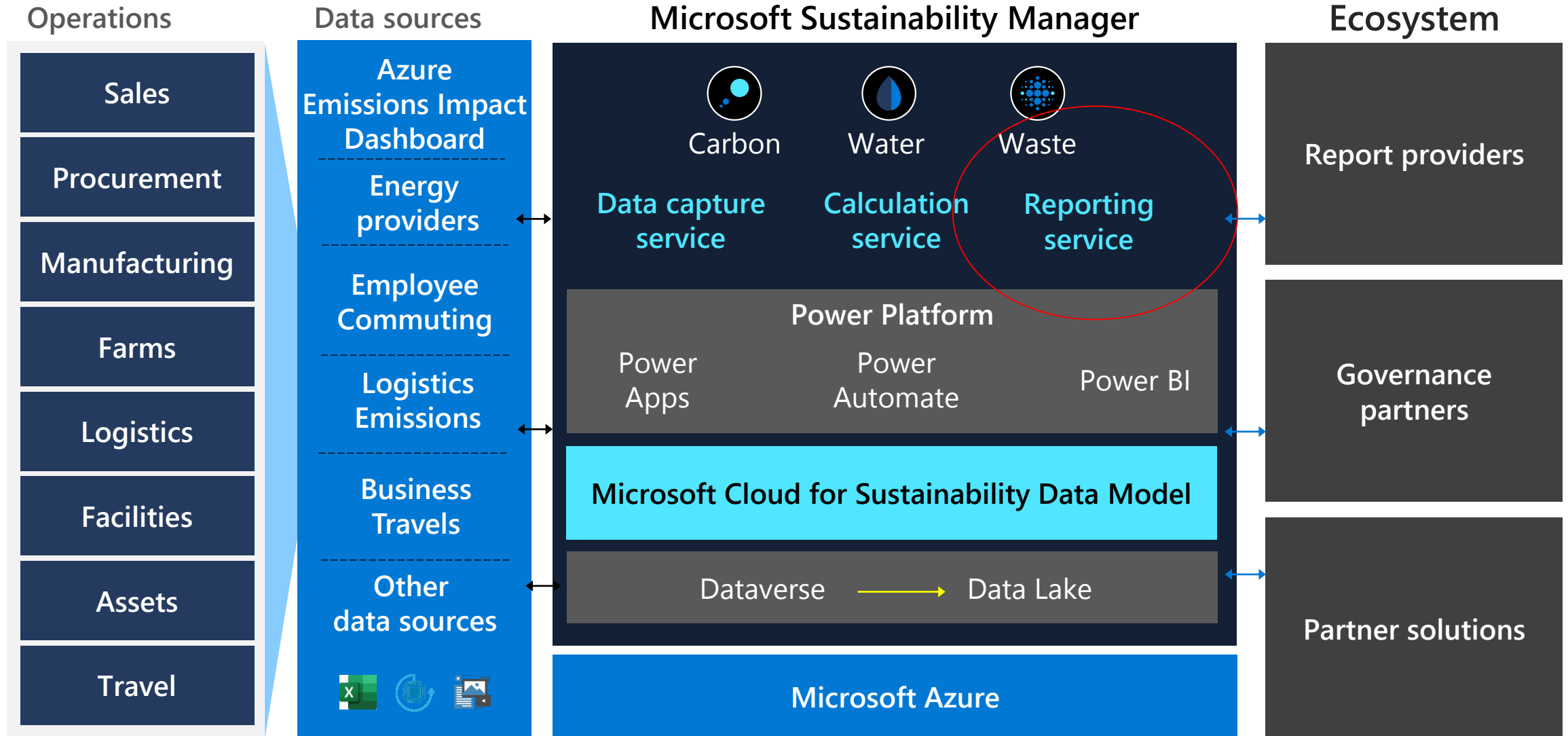
High Level Solution Overview



High Level Solution Overview



High Level Solution Overview



Sustainability Manager – Report & Reduce

Microsoft Sustainability Manager

Overview Sustainability dashboard
Reporting period : January 1, 2021 - December 31, 2021
Last updated 6/14/2022 11:35 AM (UTC)

Filters

Reporting period

- Current reporting period
- 2020
- 2019
- 2018

Scope 2 accounting method

- Location Based
- Market Based

Emissions (mtCO₂e)

1,310
Previous period: 1,183 (+10.7248%)

Scope 1: 291
Scope 2: 102
Scope 3: 918

Revenue intensity (mtCO₂e/M\$)

3.75
Previous period: 2.70 (+38.8099%)

Scope 1: 6.10
Scope 2: 1.61
Scope 3: 8.72

Renewable energy (%)

9.77%
Previous period: 9.93% (-1.6194%)

Solar:
Wind: 9.77%
Nuclear:
Water:
Other:

By country / region | By organizational unit | By facility |

Country	Total emissions (mtCO ₂ e)	Revenue intensity (mtCO ₂ e/M\$)	Renewable energy (MWh)
USA	568.84	1.63	
KEN	237.03	0.68	
GBR	143.20	0.41	
AUS	106.16	0.30	
CRI	79.50	0.23	
JPN	63.29	0.18	10.79
SGP	56.42	0.16	
ETH	47.80	0.14	
CHE	7.75	0.02	10.62
BRA	0.20	0.00	
Total	1,310.18	3.75	21.41

Emissions | Revenue intensity | Renewable energy

Show emissions breakdown by scope On

Scope 1 | Scope 2 | Scope 3

Emissions (mtCO₂e)

Year

2018 2020

2018 2020

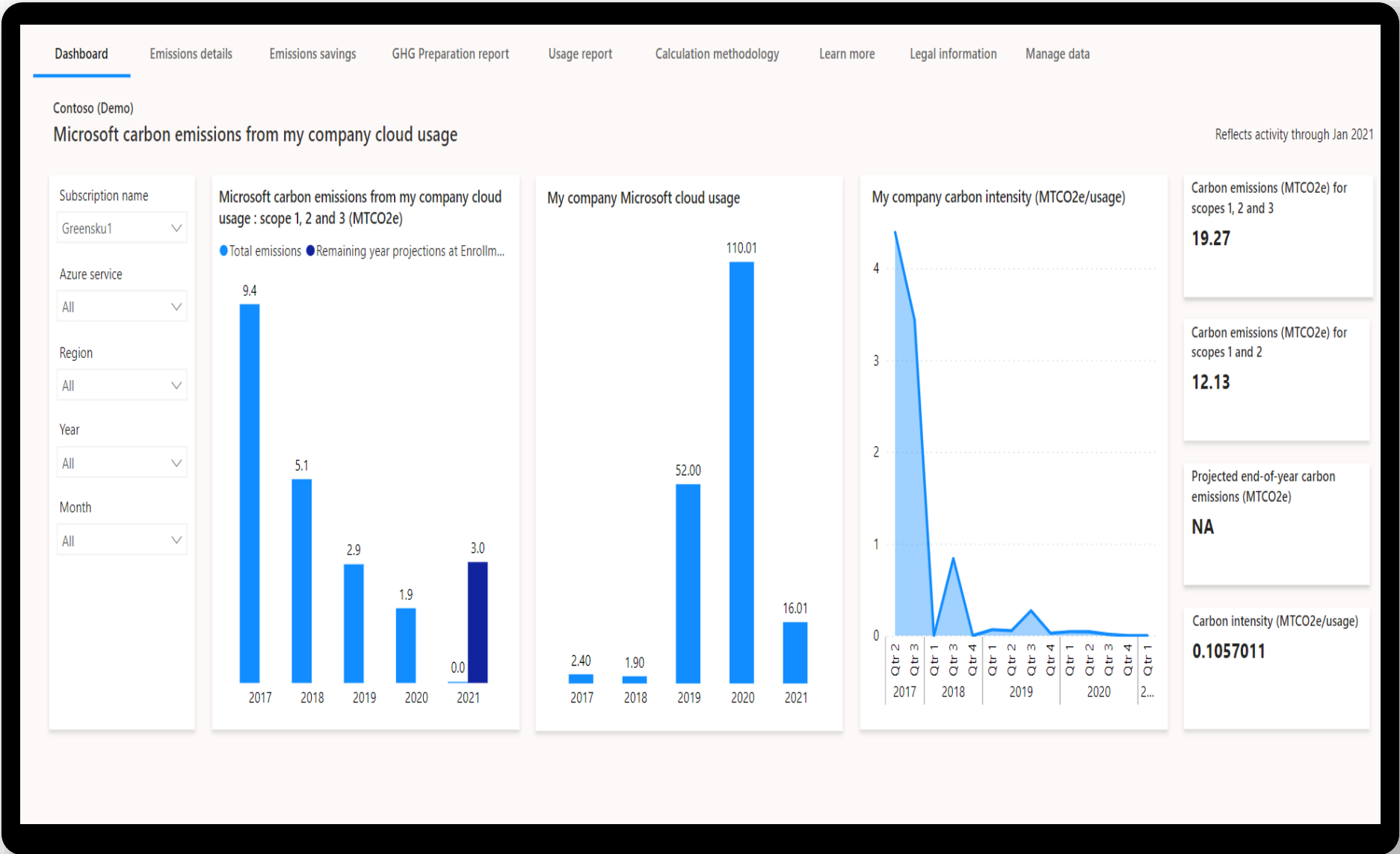
2018 2020

Take a tour

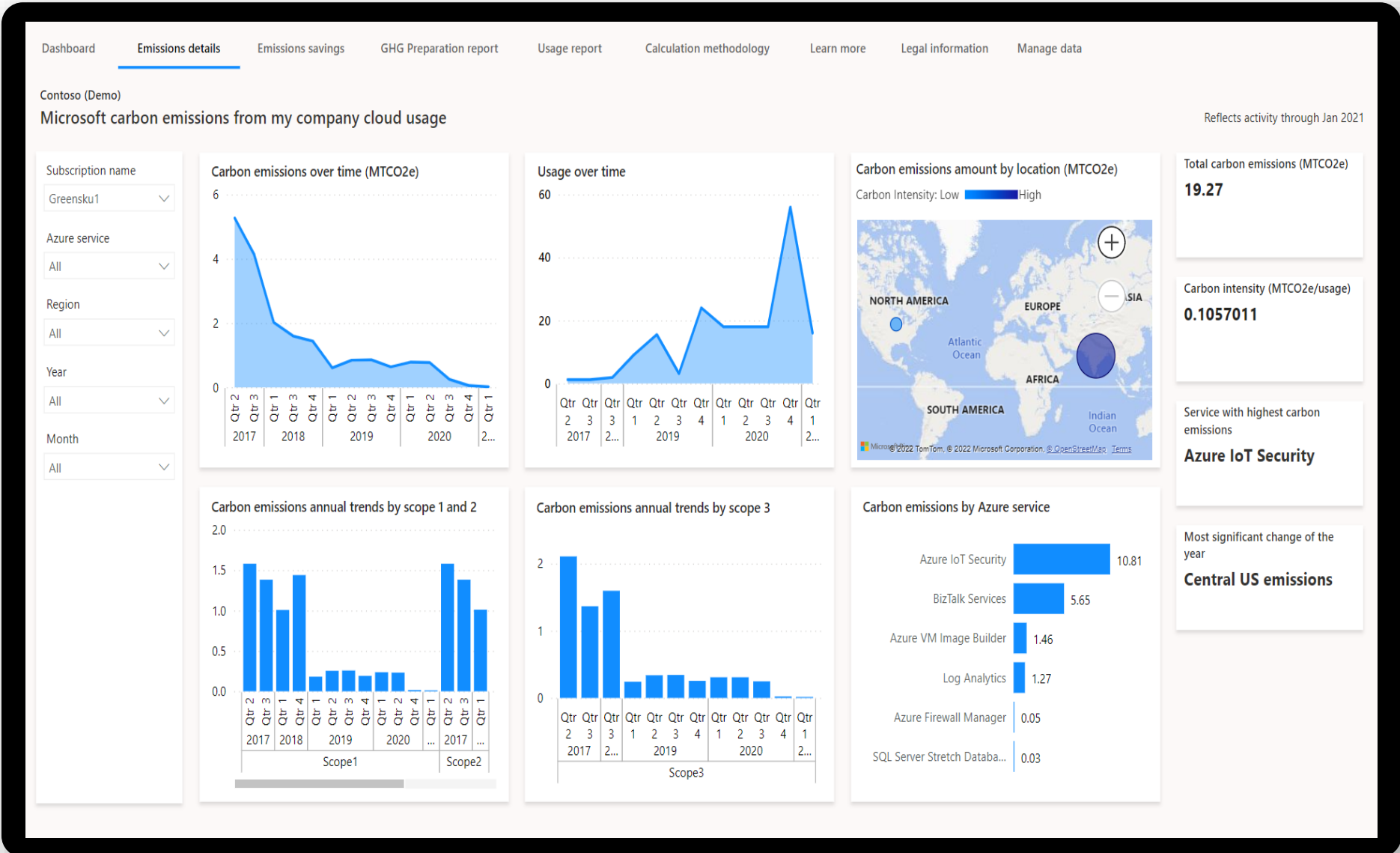
Emissions Impact Dashboards



Carbon Emission from my company's cloud usage



Carbon Emission from my company's cloud usage



Carbon Emission from my company's cloud usage

The screenshot shows the 'Emissions savings' page of the Microsoft Cloud Emissions Savings Estimator. The interface includes a navigation bar with options like 'Dashboard', 'Emissions details', 'Emissions savings', 'GHG Preparation report', 'Usage report', 'Calculation methodology', 'Learn more', 'Legal information', and 'Manage data'. The user is logged in as 'Contoso (Demo)'. The page title is 'Emissions Savings' and it notes 'Reflects activity through Jan 2021'. On the left, there are filters for 'Subscription name' (Greensku1), 'Azure service' (All), 'Region' (All), 'Year' (All), and 'Month' (All). The main content area is titled 'Current Azure services carbon emissions' and 'Characteristics of on-premises alternative'. It features an 'Efficiency Scale' with 'Low', 'Medium', and 'High' options, and 'Renewable energy purchases' set to '0%'. A central dashboard displays four key metrics: 68.84 MTCO2e from on-premises alternative, 82.38% Carbon emissions saved (MTCO2e), -53.20 MTCO2e saved from Microsoft efficiencies, and 56.71 Carbon emissions saved (MTCO2e). Below these are -3.51 MTCO2e saved from Microsoft renewable energy purchases and 12.13 MTCO2e emissions from switch to Azure, with 138.65K Carbon emissions saved in driven distance. A right-hand panel titled 'Efficiency' explains the calculation and lists three efficiency levels: Low efficiency (physical servers in small data centers), Medium efficiency (mix of physical and virtualized servers in mid-tier data centers), and High efficiency (virtualized servers in high-end data centers). At the bottom, there is a section for 'Emissions Savings Estimator for Microsoft Cloud' with a link to the estimator.

Dashboard Emissions details **Emissions savings** GHG Preparation report Usage report Calculation methodology Learn more Legal information Manage data

Contoso (Demo)

Emissions Savings

Reflects activity through Jan 2021

Subscription name: Greensku1

Azure service: All

Region: All

Year: All

Month: All

Current Azure services carbon emissions

Characteristics of on-premises alternative

Efficiency Scale: **Low** Medium High Renewable energy purchases: 0%

68.84	MTCO2e from on-premises alternative	82.38%	Carbon emissions saved (MTCO2e)
-53.20	MTCO2e saved from Microsoft efficiencies	56.71	Carbon emissions saved (MTCO2e)
-3.51	MTCO2e saved from Microsoft renewable energy purchases	138.65K	Carbon emissions saved in driven distance
12.13	MTCO2e emissions from switch to Azure		

Efficiency

This calculation estimates emissions that result from your use of Azure services, savings relative to provision of these same services at low, medium, and high efficiency on-premises deployments, and the renewable energy projects in which Microsoft invests.

- Low efficiency**
Physical servers and direct attached storage in a small localized data center (500-1,999 square feet).
- Medium efficiency**
Mix of physical and virtualized servers and attached, dedicated storage in a mid-tier internal data center (2,000-20,000 square feet).
- High efficiency**
Virtualized servers and dedicated storage in a high-end internal data center (> 20,000 square feet).

The estimated emissions include energy used in our data centers (accounting for our low-carbon electricity purchase's) and energy used to transmit data over the internet.

Renewable energy purchases

Specify a percentage of renewable energy purchases used at your on-premises datacenter. If your on-premises datacenters reside in multiple geographies, please specify an average of the geographies based on power consumption.

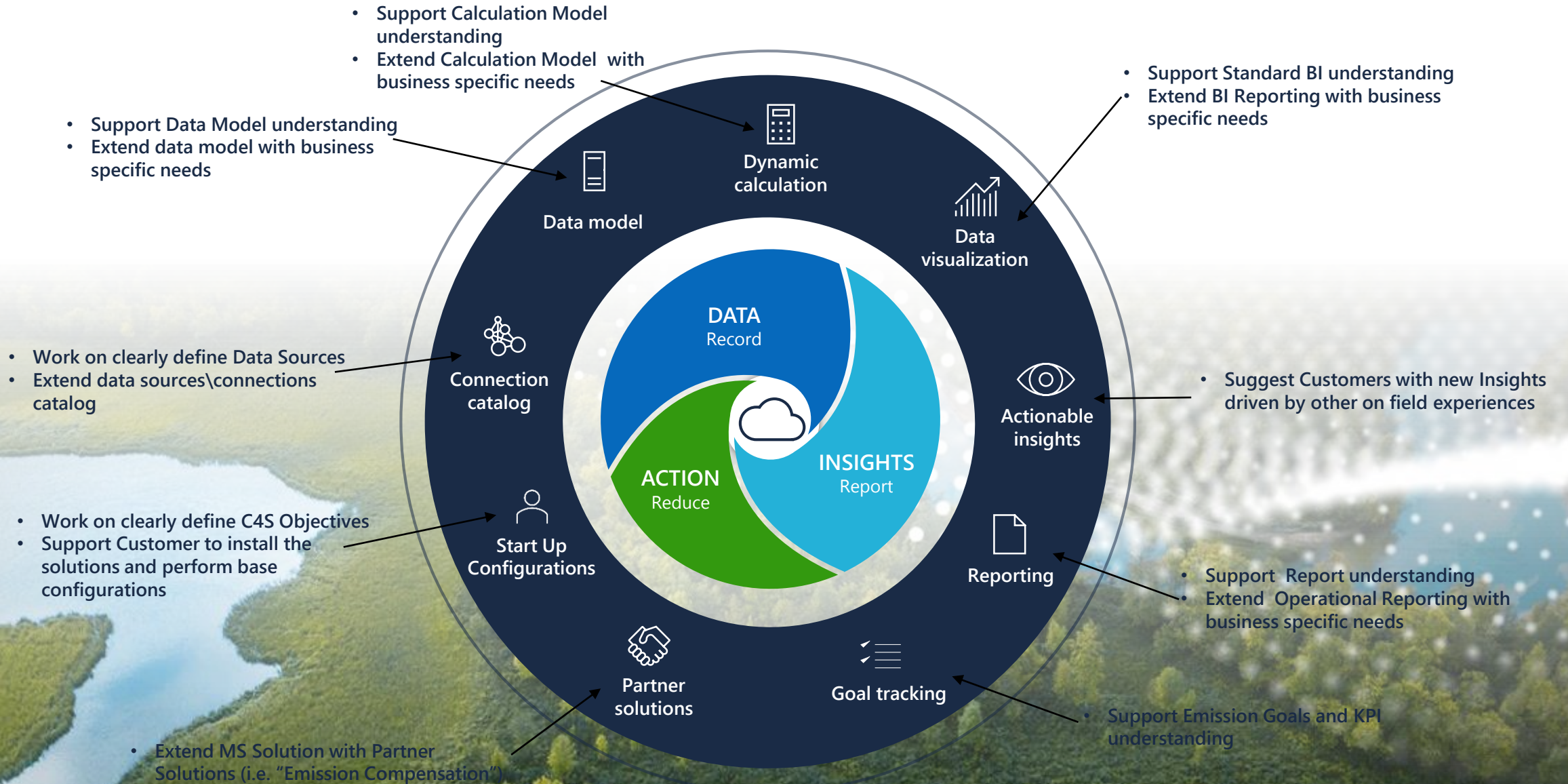
Emissions Savings Estimator for Microsoft Cloud
Would you like to estimate an on-premises workload? Visit [Emissions savings estimator for Microsoft Cloud](#) for more information.



Next Steps



Microsoft Sustainability Manager : Cluster Reply Offering



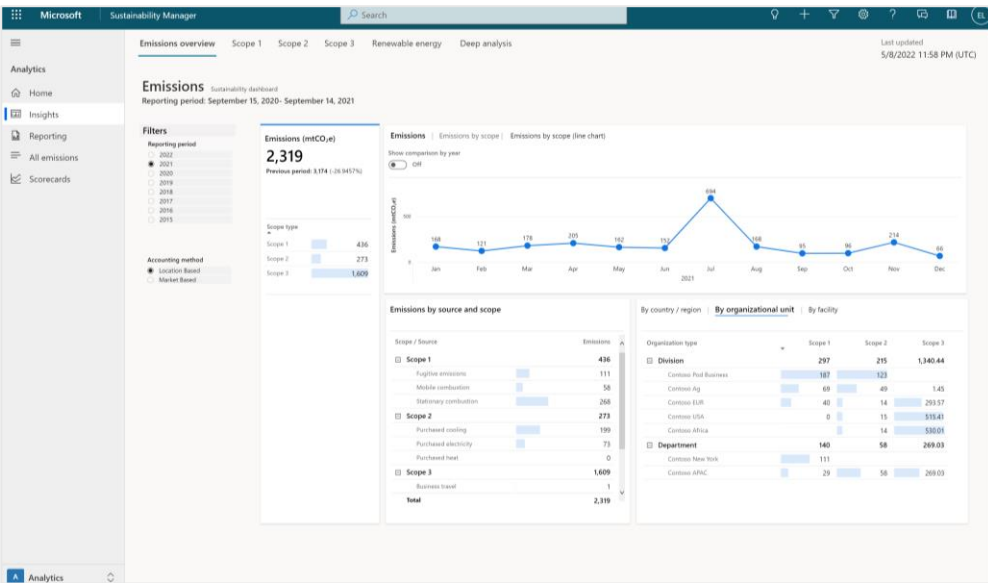
Possible Adoption Path

Steps to adopt Microsoft Sustainability Manager

- POC Approach:
 - Install (with Cluster Reply support if needed) Trial Version
 - Try to envisioning possible data sources and implement someone
 - Work with Cluster Reply to understand better need and capabilities on Record, Report and Reduce areas.
- Receive from Cluster Reply a rough esteem on professional services needed (hopefully analyzed during work shops)
- Acquire MS License & Professional Services
- Starting Adoption

Customer One: Microsoft

Operationalizing our sustainability reporting on Microsoft Sustainability Manager



In the 10+ years of sustainability work at Microsoft, we have learned the importance of setting bold ambitions, driving a culture of success, and measuring progress in a transparent, data driven way.

From our internal carbon tax to our sustainability data infrastructure, we are pioneering **new data collection, calculation, and reporting** across our enterprise and into our supply chain. Now, **these learnings, solutions, and experiences are driving capabilities within Microsoft Sustainability Manager.**



Data governance

Our need for data stewardship, provenance, governance, and accountability is informing our solution roadmap

Data models

Common data models across carbon are tested against Microsoft's reporting data to ensure quality and accuracy

Reliable data foundation

We use Data Lakes and Synapse to collect, cleanse, and connect data across Scope 1 and 2, with plans to include Scope 3



Thank you.

[Microsoft.com/sustainability](https://www.microsoft.com/sustainability)

