

# Sustainability Value Chain Solution

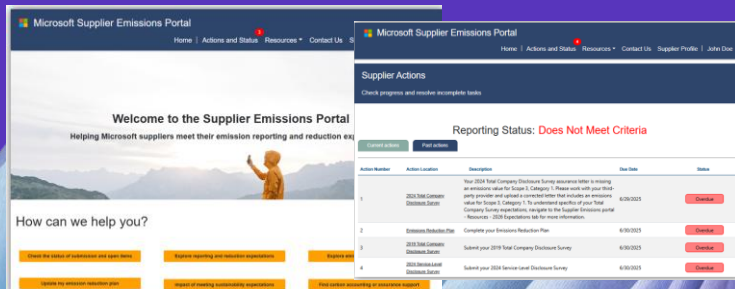
## Solution Overview

The Procurement Sustainability team manages a program for ~1,200 suppliers to accelerate supply chain decarbonization. They needed a solution that would support:

- The collection of specific, customized data points
- Faster and less manual processing of supplier data
- End-to-end supplier engagement

The team leveraged Microsoft Sustainability Manager and AI stack to enable

- Collection of custom emissions data and decarbonization plans
- Automated data review, ingestion, and gap remediation
- Automated testing of new platform customizations



## Business Use Case

Microsoft is committed to operate carbon negative and to reduce its greenhouse gas emissions by more than half by 2030. The vast majority of Microsoft's emissions footprint come from its supply chain, including purchased services. The Procurement Sustainability team was established in 2020 to accelerate carbon reporting and decarbonization efforts with service providers. As the program matured, the team encountered several challenges:

- Common reporting platforms did not allow for the collection of customized data
- Processing supplier data and remediating data gaps was highly manual and time-intensive
- Suppliers engaged multiple platforms to meet program expectations, creating a poor user experience

## Benefits

**Automated Emissions Forecasting:** Each new data point runs through an automated validation process and, if it meets quality standards, is ingested into the long-range carbon forecast. Business rules dynamically adjust the underlying models, significantly reducing manual effort.

**AI-Powered Testing for Supplier Portal:** Implemented an AI-driven testing solution that converts simple use-cases into comprehensive test cases and scripts. Scripts are then fed into Microsoft Playwright that simulates real user interactions and eliminates manual testing.

## Key Results

10K

Annual time savings

94%

Annual reduction in manual review time

54%

Supplier Data Submissions reviewed without human intervention

## Technology

- Azure AI Foundry
- Microsoft Sustainability Manager
- Microsoft Playwright
- Microsoft Fabric
- Azure functions

## Time taken

Launched in 10 months