Microsoft

SUS04M

# Introduction to Sustainability Data Solutions in Fabric

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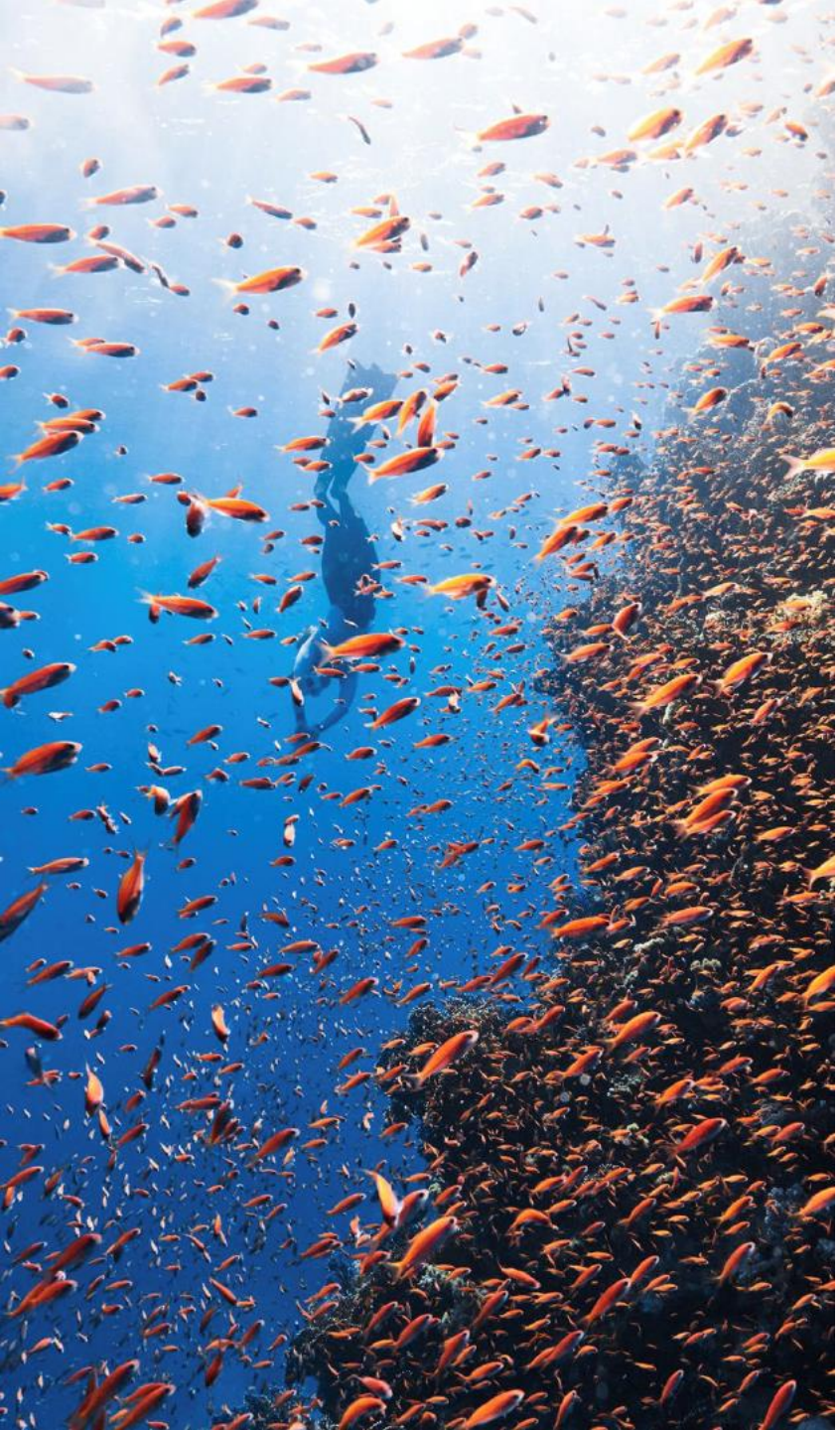
***Ask me about...***

- ***Industry Cloud Solutions***
- ***Enterprise Strategy***
- ***Design Thinking***
- ***Indian Cuisine History***



# Agenda

Welcome!

Sustainability data solutions in Fabric overview

Deployment considerations & best practices

Getting started

Q&A

# ESG challenges and how Microsoft can help solve them

## The Data Problem

- Huge amounts of data
- Too many data silos
- Data gaps and quality issues
- Heterogenous data types and calculation factors
- Multiple sources (Cloud, OnPrem, 1st and 3rd Party), multiple contributors, multiple operating area multiple physical locations
- Regulatory Reporting requires specific data

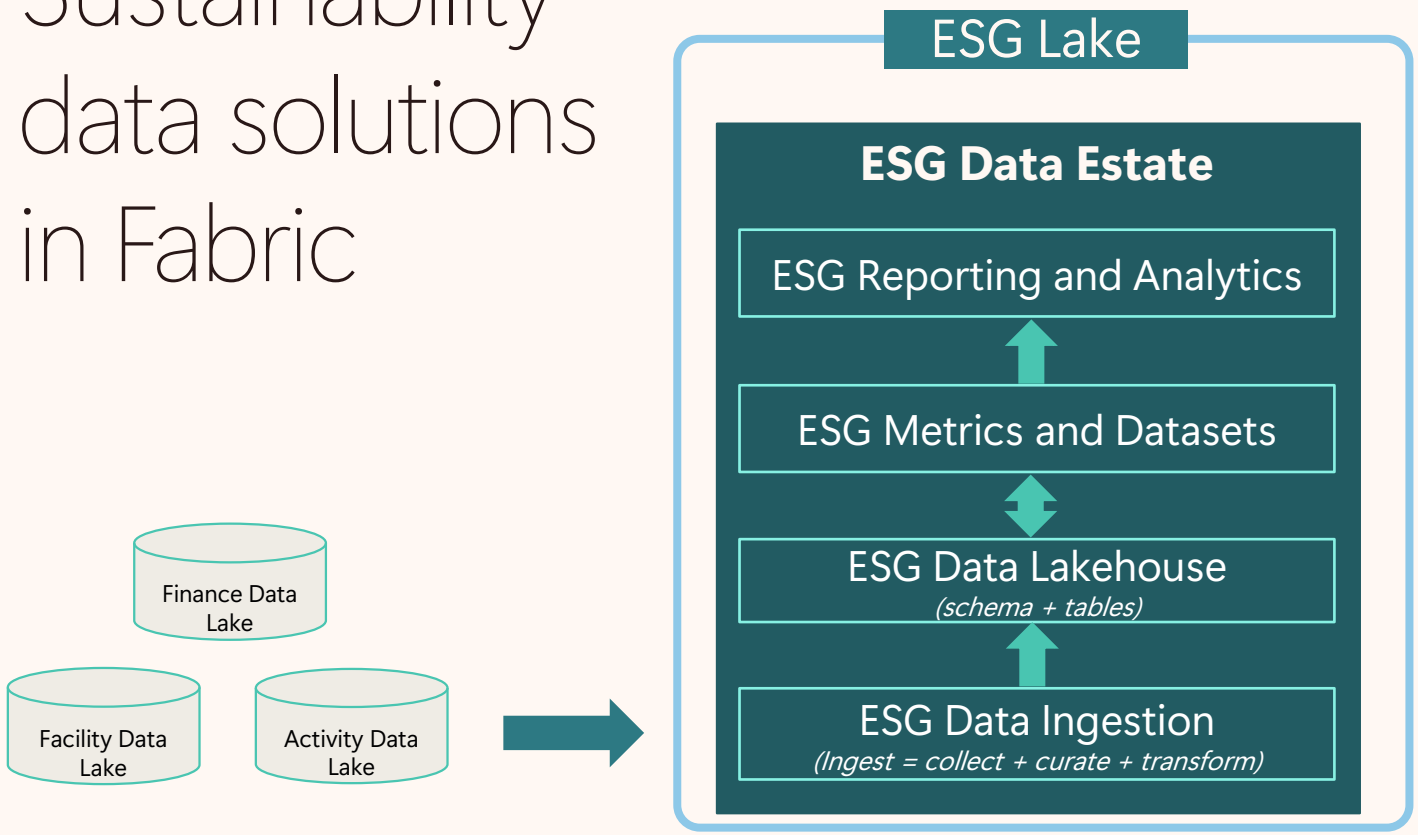
## The Process Gap

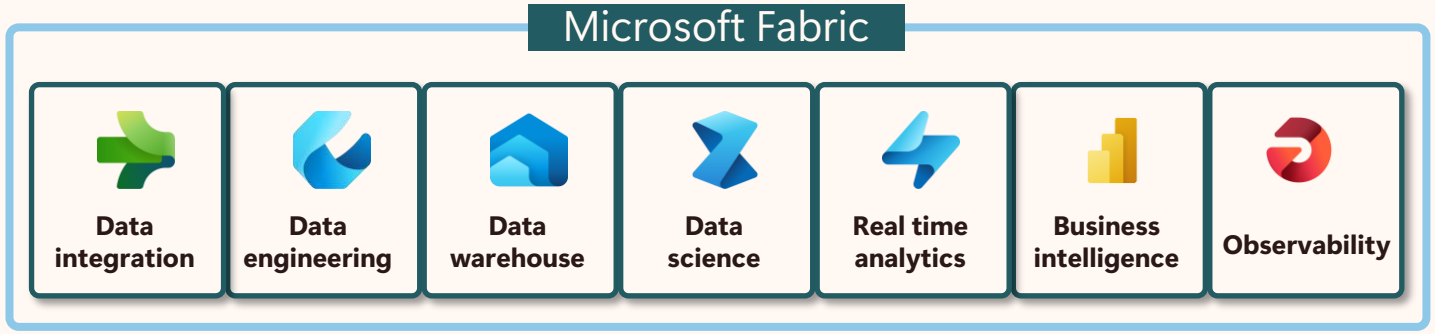
- Need for change management, governance and role-based access for data security.
- Data accessibility, retrieval, archival
- Data sharing requirements – suppliers and customers
- Tool limitations: limitations of tools like Excel for large data volumes and lack of control

## A Need for Outcomes

- Well-informed decision-making relies on insights, trends, forecasts, visualization, and collaboration
- Reporting isn't enough; business transformation depends on actions that drive real change
- AI and automation are key

# Sustainability data solutions in Fabric




## Sustainability data platform to harmonize disparate enterprise data into ESG datasets and metrics

Purpose-built data estates for ESG scenarios
Pre-built lakehouses, notebooks and dashboards

Fabric based deployment and operations
Leverage Fabric resources to build ESG data estates

More reporting capabilities coming soon!

Fabric Overview

# Sustainability data solutions in Microsoft Fabric (preview)

## Highly integrated, easy-to-use suite of services

# ESG data estate (preview)

## Ingest

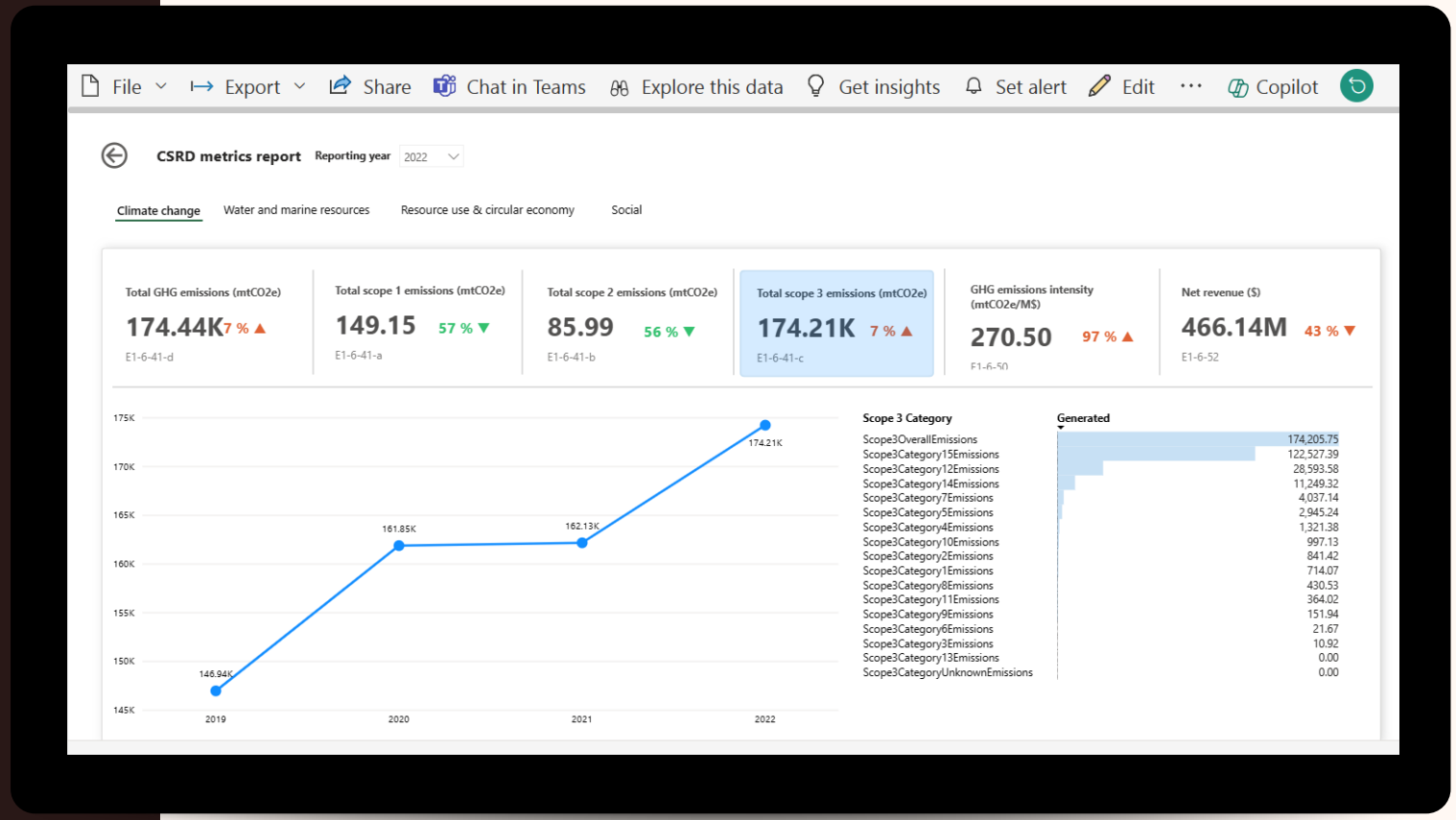
Ingest and standardize data from multiple source systems with the ESG data schema and lakehouses

## Compute

Use pre-built or build custom data processing artifacts for consumption scenarios

## Visualize

Visualize data analytics and insights with built-in and custom dashboards

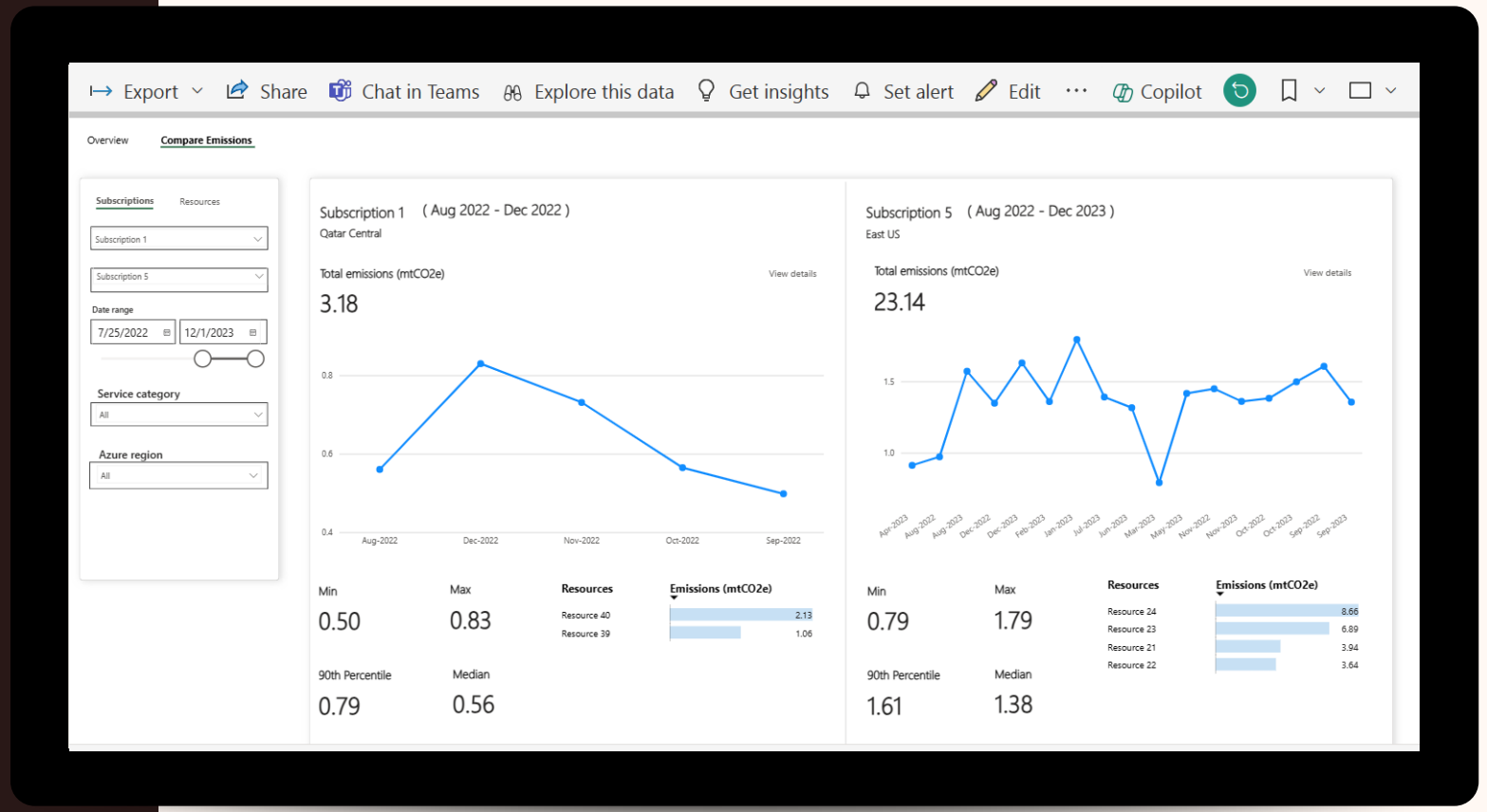


# Microsoft Azure emissions insights (preview)

## Unify
Unify Microsoft emissions data in one actionable and query-able data lake

## Enrich
Enrich Microsoft emissions data to support custom reporting and analytics

## Analyze
Analyze and report Microsoft emissions – tenants, workloads, emission scopes, etc.



# Social & governance metrics and reports (preview)

## Centralize
Combine social & governance data with environmental data

## Calculate
Compute, analyze, and disclose social and governance metrics

## Explore
View trendlines and explore through interactive dashboards

# Environmental metrics and analytics (preview)

## Centralize

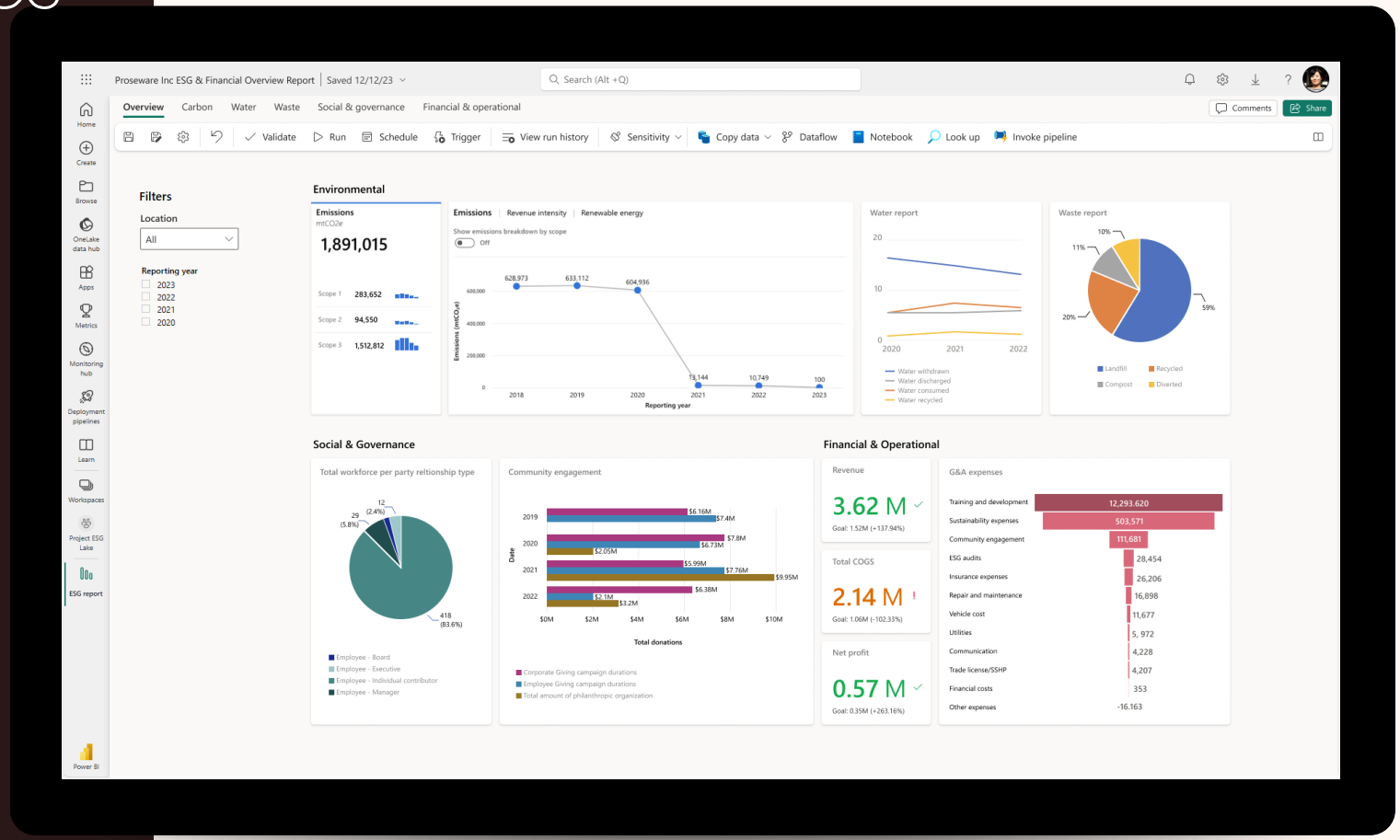
Combine environmental data from Microsoft Sustainability Manager or a different system/application

## Calculate

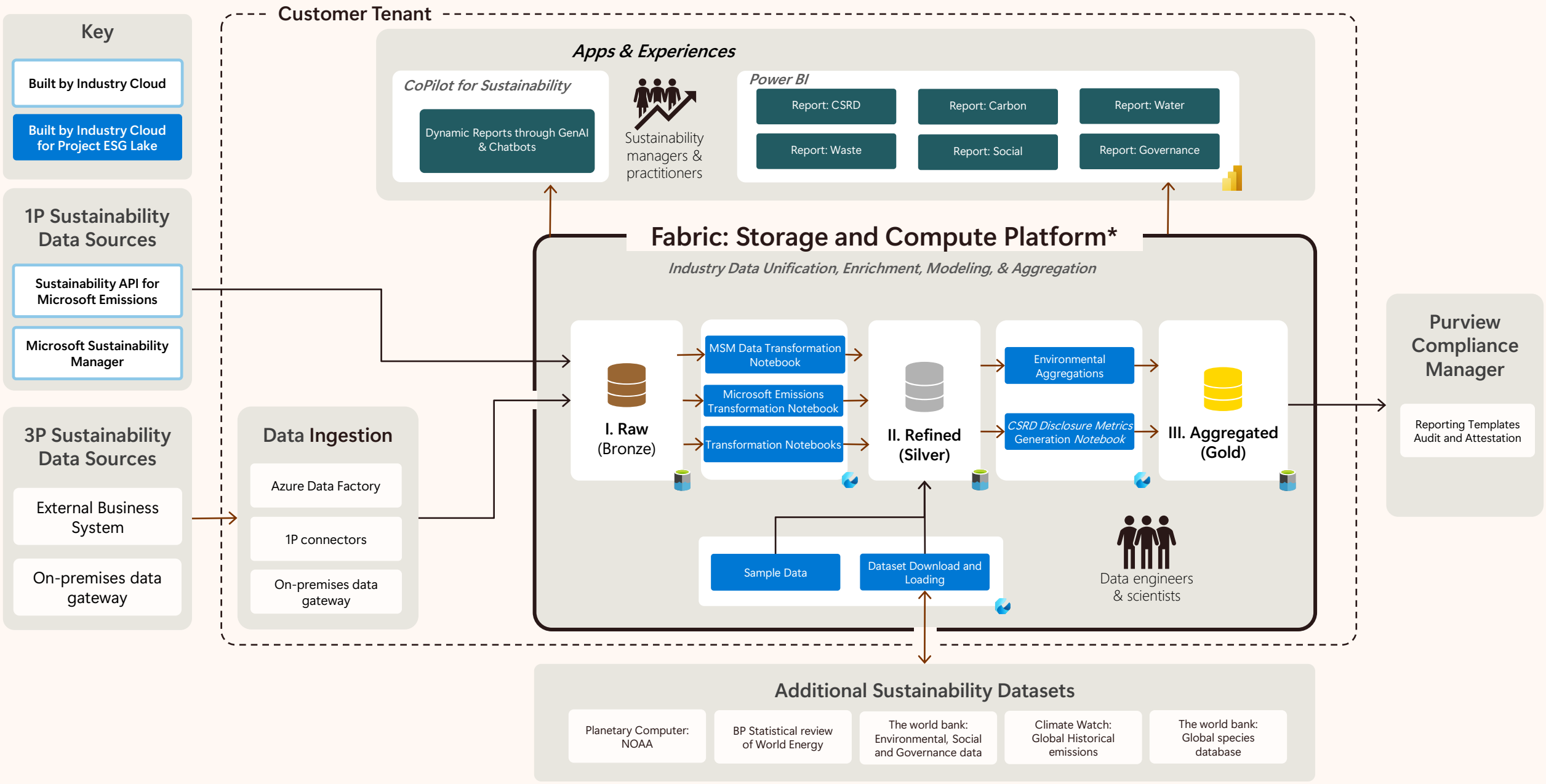
Process the environmental data for custom insights

## Explore

View trendlines and explore through interactive dashboards



# Sustainability data solutions on Fabric - Detailed Architecture



# Key resources

## Sustainability data solutions in Fabric

Overview of Sustainability data solutions in Fabric - Microsoft Cloud for Sustainability | Microsoft Learn

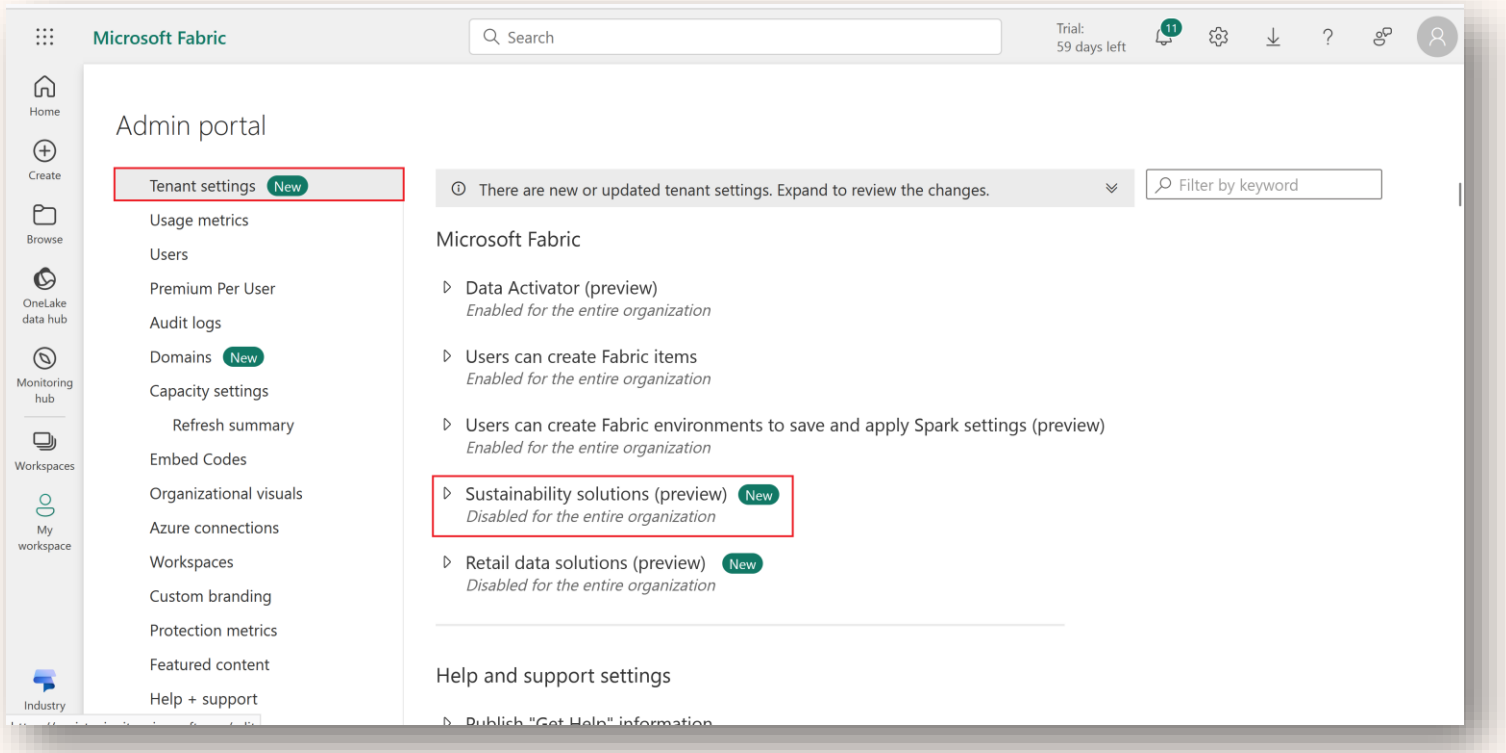
## ESG data model

ESG data model (preview) - Microsoft Cloud for Sustainability | Microsoft Learn

# Deployment best practices

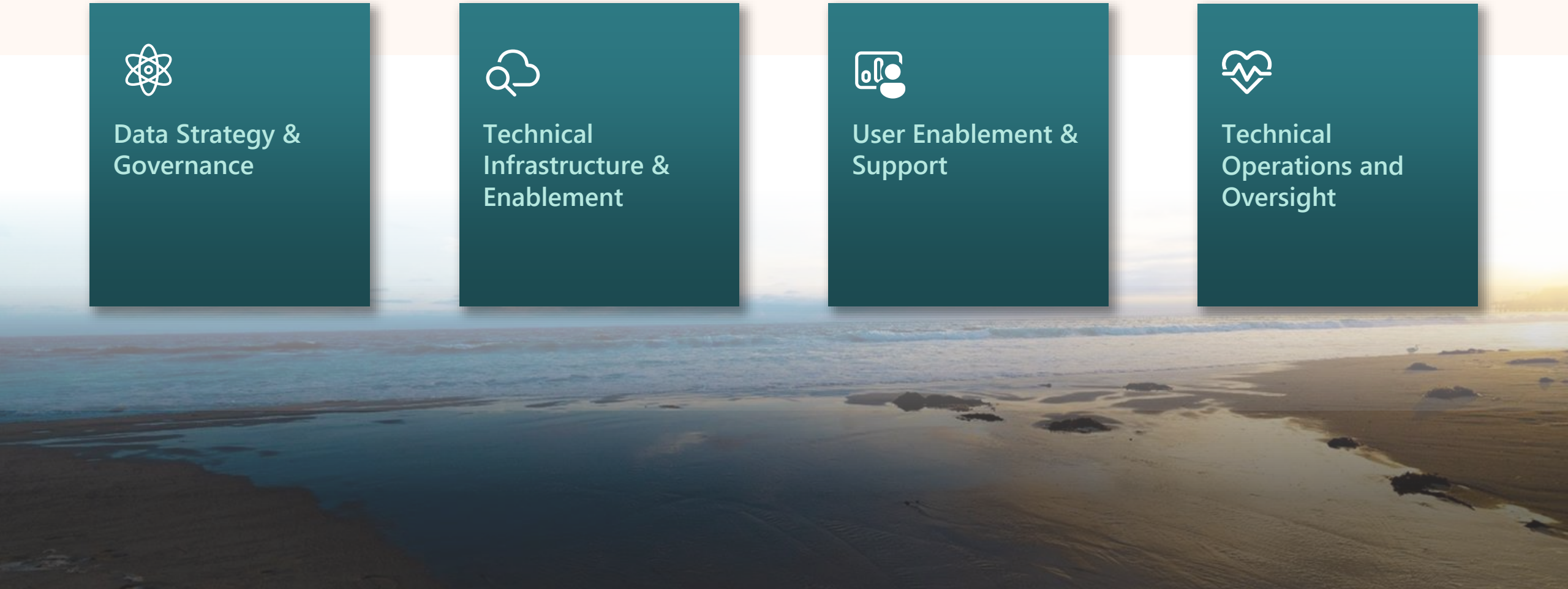
# Deploy the Sustainability solutions

Deploy Sustainability data solutions in Fabric (preview)




- ✓ **Acquire** Microsoft Fabric license
  - Microsoft Fabric - Trial | Microsoft Learn
  - Microsoft Fabric - Pricing | Microsoft Azure
- ✓ **Start** the Fabric trial
- ✓ **Allocate** Fabric Capacity to the workspace
- ✓ **Enable** Industry Solutions for user/user groups

# Deployment best practices



Data Strategy & Governance

Technical Infrastructure & Enablement

User Enablement & Support

Technical Operations and Oversight

# Data Strategy & Governance

Establish **strategic framework and governance mechanisms** for effective ESG data management & reporting using SDSF capabilities.

- Design & Integrate ESG considerations for SDSF data workflows, analytics and data pipelines.
- Ensure Business alignment with ESG / SDSF efforts to identify business requirements, analytics models, extensibility design that align with regulatory requirements.
- Establish ownership & governance framework for designing Fabric platform access controls, quality, data lineage and compliance.

# Technical Infrastructure and Enablement

Build the required **SDSF technical infrastructure** and capabilities requirement to support ESG deployment efforts:

- Gain understanding of ESG data schema and the dependencies such as Reference data tables.
- Consider the reporting needs and identify content delivery scope: Personal, Team, Department or Enterprise.
- Use the right tools for the right scenarios – example: using copy activity vs. dataflow vs. Spark.

# User Enablement & Support

**Empower users to effectively engage with SDSF capabilities** by fostering collaboration and knowledge sharing.

- Design training for consuming and leveraging ESG data autonomously and cultivate communities.
- Establish support mechanisms to troubleshoot, debug, and optimize SDSF capabilities.

# Technical Operations & oversight

Set up an **operating model for day-to-day technical and administration activities** to ensure reliability, security and performance of SDSF applications.

- Leverage administrator roles appropriately – Fabric administrator, Capacity administrator, Data gateway administrator and Workspace administrator.
- Ensure management of Capacity and licenses using Fabric best practices.
- Analyze adoption efforts periodically by reviewing Report-level, Data-level, Tenant-level auditing and monitoring.

# Related sessions

## Focus on Sustainability Data Solutions

| Session | Title | Abstract | Speakers | Date |
|---|---|---|---|---|
| SUS05M | Audit compliance for Sustainability regulations | Discover how to adeptly navigate disclosure reporting requirements and utilize Microsoft Cloud for Sustainability to enhance the audit process, ensuring precision and compliance every step of the way. This session will provide an overview of the audit requirements for disclosure reporting and the capabilities provided by Microsoft for streamlining the audit process. | Neha Gupta, Chintan Rajvir | Monday, May 6 |
| SUS04T | Transform your data with the ESG Data Estate | This session will expand on the foundational concepts of Sustainability data solutions in Fabric and explore how to extend the ESG Data Estate capability to meet sustainability reporting and analytical requirements. | Sourav Chakraborty | Tuesday, May 7 |
| SUS05T | Microsoft Azure Emission Insights + Azure Carbon Optimization | Learn how to obtain, visualize, analyze, and optimize emissions data for Azure workloads. Discover the capabilities of Azure Carbon Optimization and Microsoft Emissions Insights offerings, and how they can empower you to make data-driven decisions for a more sustainable cloud environment. | Sourav Chakraborty, Kiran Motwani | Tuesday, May 7 |
| SUS04W | SDSF + Azure OpenAI service + Azure AI Studio = An open platform for Copilot | In this session we will show you examples of leveraging an integration between the ESG data in Fabric and Azure AI services to meet sustainability analytic use-cases. | Sourav Chakraborty, Chintan Rajvir | Wednesday, May 8 |
| SUS04R | Integrating Azure AI's Document Intelligence models with Sustainability Data Solutions in Fabric | Learn how to extract and transform unstructured data from sources like images, documents and forms, into structured data stored within delta lakes. We'll guide you through the process of creating an Azure AI instance, integrating with Azure Key Vault, and using SDSF notebooks to convert images or documents into usable data which can be further used for analysis within Fabric. | Abhinav Premsekhar, Deep Baldha | Thursday, May 9 |

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# Thank you!

- How was the Summit? Share your feedback!
  aka.ms/MCfSTSFeedback
- SDSF Airlift Recording
  aka.ms/SDSFAirliftRecording
- Join the Sustainability Community!
  aka.ms/MCfSCommunity
- Learning Resources
  aka.ms/CloudforSustainabilityLearnCollection

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# Q&A

Please type your questions **in the chat** and we will answer them during the Q&A session.