# Sustainability + Security

Vilde Arnesen & Abhishek Dewangan

**Microsoft**

# Agenda

- Market Trend

- Why we are talking = Better Together

- Industry need – e.g.

- Mandates - Across Organization

- Microsoft Solutions

- Research – TerraPower
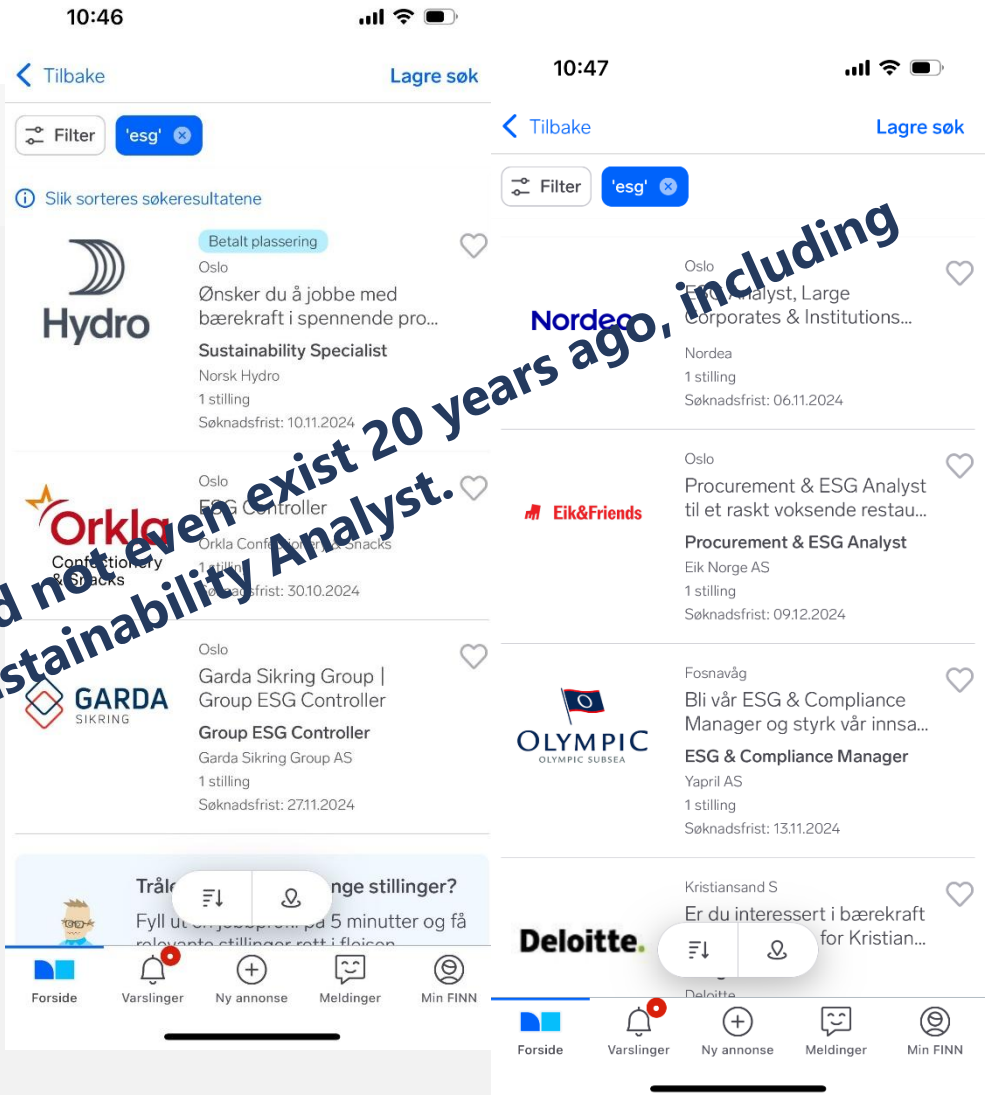
# Market Trend



## Fastest growing

### Top 10 fastest growing jobs

1. AI and Machine Learning Specialists
2. Sustainability Specialists
3. Business Intelligence Analysts
4. Information Security Analysts
5. Fintech Engineers
6. Data Analysts and Scientists
7. Robotics Engineers
8. Electrotechnology Engineers
9. Agricultural Equipment Operators
10. Digital Transformation Specialists

Source
World Economic Forum, Future of Jobs Report 2023

Incredibly, some 68% of the roles on the list did not even exist 20 years ago, including Environmental Health Safety Manager and Sustainability Analyst.

# Sustainability & Security Better Together

Microsoft

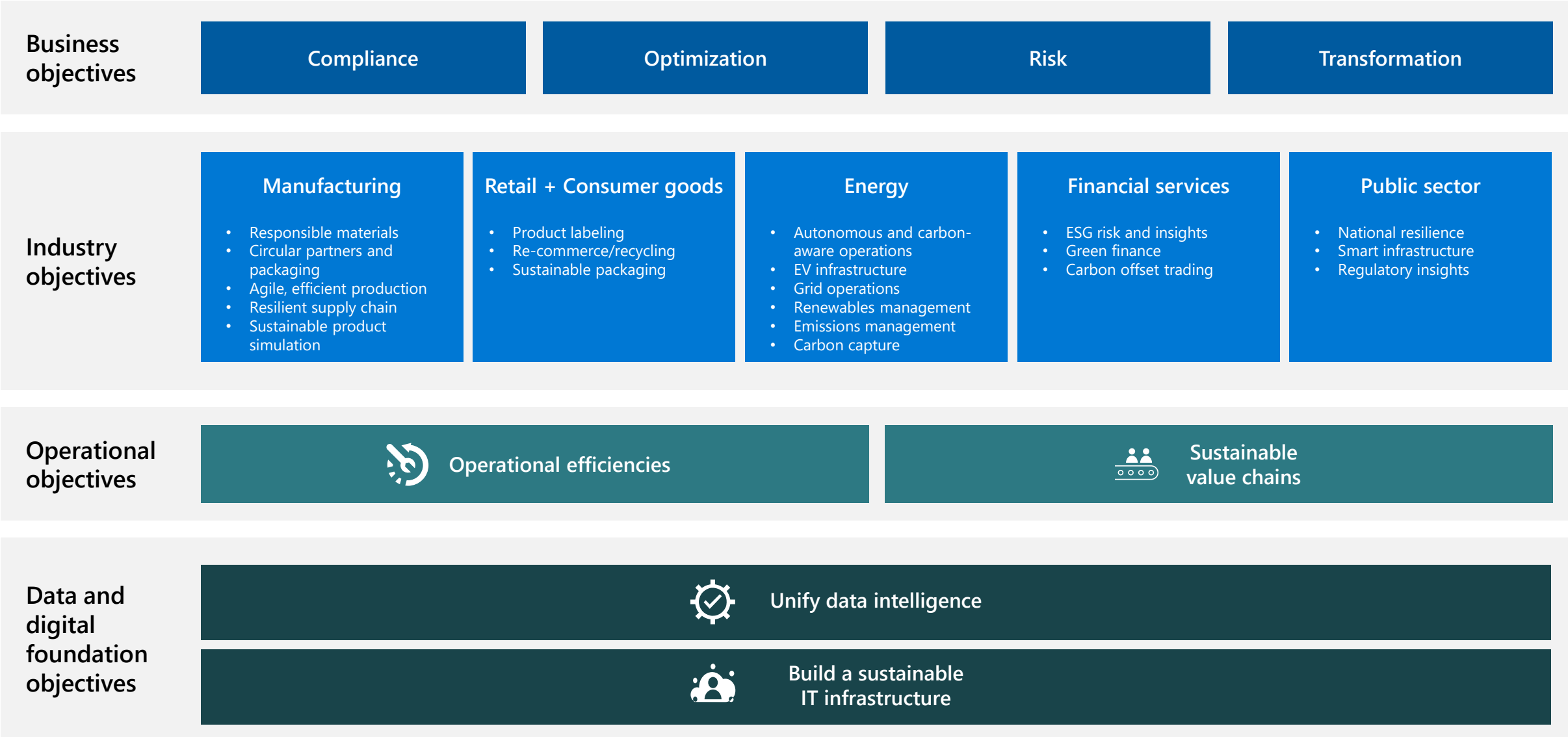# Sustainability & Security Better Together

# Industry Needs



FSI



Power & Utility



Oil & Gas



Tech & Inno

# Complex sustainability and industry objectives

**Business objectives**

| Compliance | Optimization | Risk | Transformation |
|---|---|---|---|

**Industry objectives**

| Manufacturing | Retail + Consumer goods | Energy | Financial services | Public sector |
|---|---|---|---|---|
| • Responsible materials<br>• Circular partners and packaging<br>• Agile, efficient production<br>• Resilient supply chain<br>• Sustainable product simulation | • Product labeling<br>• Re-commerce/recycling<br>• Sustainable packaging | • Autonomous and carbon-aware operations<br>• EV infrastructure<br>• Grid operations<br>• Renewables management<br>• Emissions management<br>• Carbon capture | • ESG risk and insights<br>• Green finance<br>• Carbon offset trading | • National resilience<br>• Smart infrastructure<br>• Regulatory insights |

**Operational objectives**

Operational efficiencies

Sustainable value chains

**Data and digital foundation objectives**

Unify data intelligence

Build a sustainable IT infrastructure

# Mandates



CSRD



ESRD



EU Taxonomy



Carbon Credits

" Opportunity – Performance Efficiency and Other Business Opportunities

# Microsoft Solutions

Microsoft Purview Compliance Manager

Defender for XDR

Sentinel

Network Security



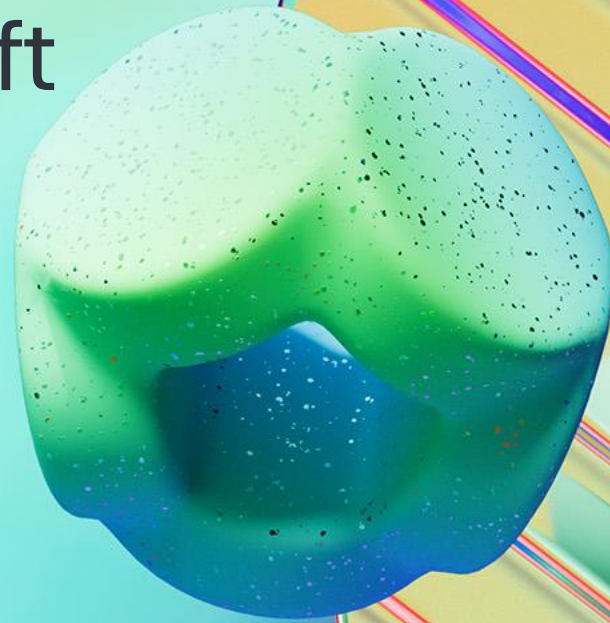Cloud for Sustainability API (preview)

Microsoft Sustainability Manager

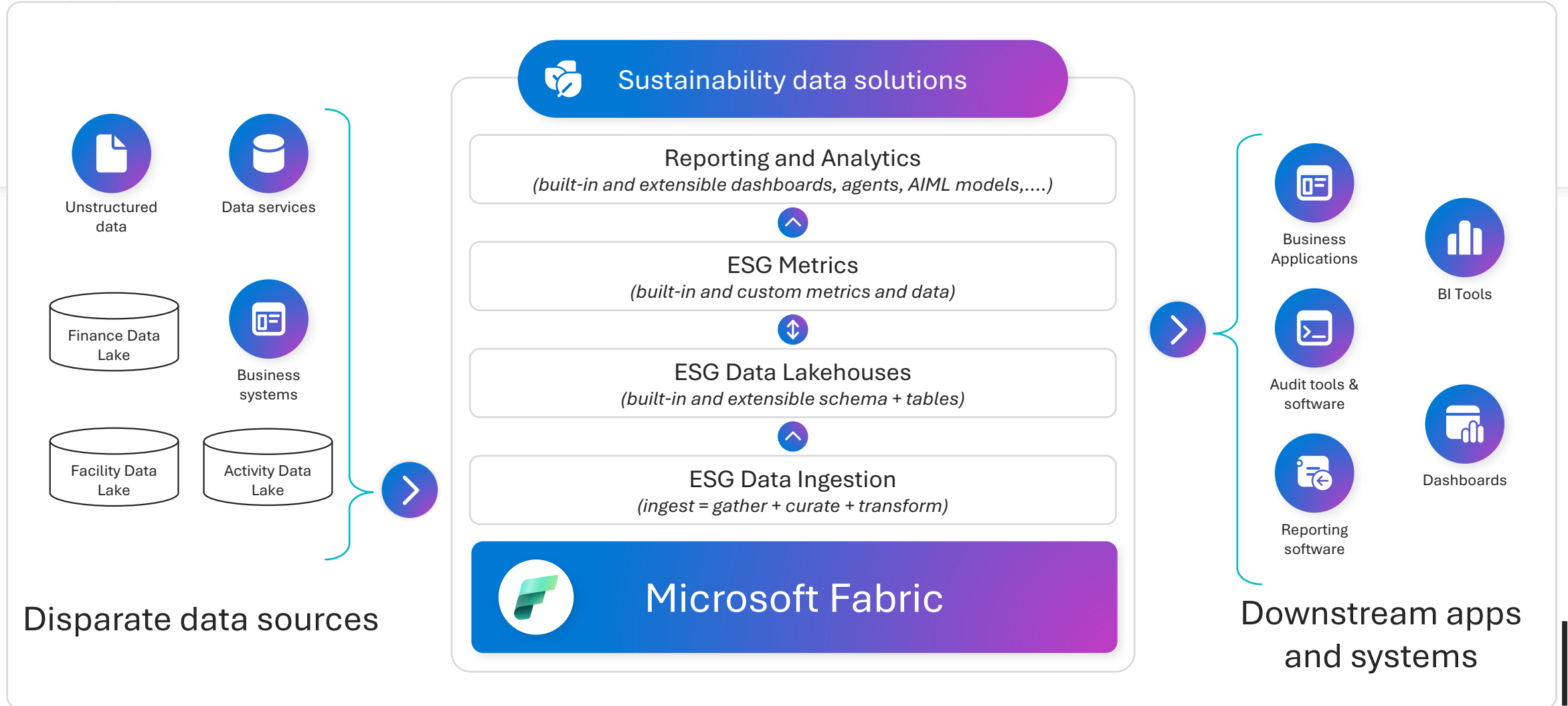Sustainability Data Solution in Fabric

Microsoft Circular Centers

CSRD template in Microsoft Purview Compliance Manager (Preview)

Emissions Impact Dashboard

# Introducing Sustainability data solutions in Microsoft Fabric

# Introducing Sustainability data solutions in MS Fabric

**Sustainability data solutions**

**Reporting and Analytics**
*(built-in and extensible dashboards, agents, AIML models,....)*

**ESG Metrics**
*(built-in and custom metrics and data)*

**ESG Data Lakehouses**
*(built-in and extensible schema + tables)*

**ESG Data Ingestion**
*(ingest = gather + curate + transform)*

**Microsoft Fabric**

Unstructured data

Data services

Finance Data Lake

Business systems

Facility Data Lake

Activity Data Lake

Disparate data sources

Business Applications

BI Tools

Audit tools & software

Dashboards

Reporting software

Downstream apps and systems

# Enables close collaboration

## For user personas across data and sustainability
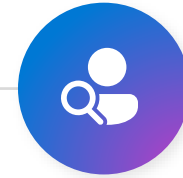
### Data engineers

Sustainability data lake with standardized and unified sustainability data.

### Sustainability practitioners

Sustainability metrics for regulatory compliance, reduce emissions, and many more.

### Data scientists

Actionable custom insights for introspection and predictive/ forecasting needs.

# Sustainability data solutions

## in Microsoft Fabric

### Environmental data and insights

Build environmental footprint for carbon, water, waste, etc. from data of 3P/1P systems like MSM.
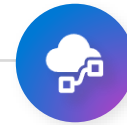
### Social and governance insights

Build social and governance insights from data of business systems like HRM, training, etc.

### Environmental, Social, and Governance Metrics

Compute, visualize, and analyze ESG metrics for regulatory standards like EU CSRD.
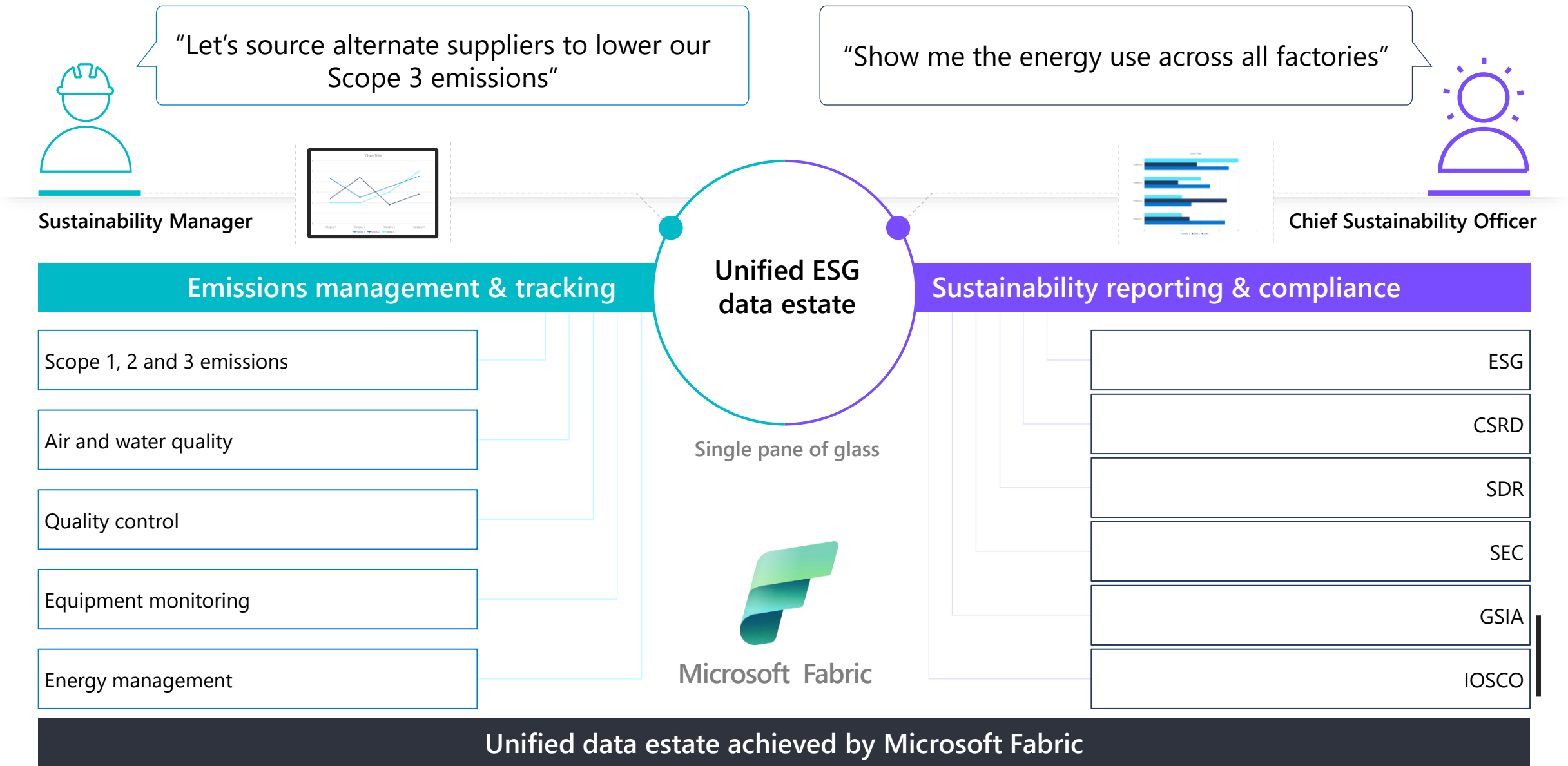
### Microsoft Azure emissions insights

Report and analyze Azure emissions by collecting and processing the emissions data.

### ESG Data Estate

One sustainability data lake with standardized and unified sustainability data.

# A unified digital foundation for accelerated ESG performance

"Let's source alternate suppliers to lower our Scope 3 emissions"

"Show me the energy use across all factories"

Sustainability Manager

Chief Sustainability Officer

**Unified ESG data estate**

Single pane of glass

## Emissions management & tracking

Scope 1, 2 and 3 emissions

Air and water quality

Quality control

Equipment monitoring

Energy management

## Sustainability reporting & compliance

ESG

CSRD

SDR

SEC

GSIA

IOSCO

Microsoft Fabric

**Unified data estate achieved by Microsoft Fabric**

# Sustainable IT in Action: Case Studies



**Microsoft lays foundation for green building materials of tomorrow**



**How Microsoft's new datacenter region in Sweden incorporates the company's sustainability commitments**



**Surplus datacenter heat will be repurposed to heat homes in country**



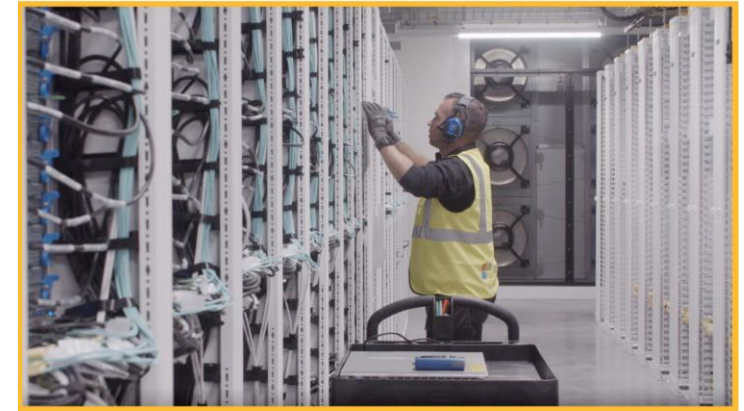**In Ireland, Smarter Wind Turbines for a Cleaner Energy Future**

# How Microsoft's new datacenter region in Sweden incorporates the company's sustainability commitments



Free cooling



Rainwater harvesting



Circular Centers

TerraPower Research

## Summary

Know your industry mandates

We are better together

Secure first and then build

Microsoft studied

Business opportunity for Customer

Case studies

# Microsoft

# Thank you!

# Club