IPC CEMAC 2023

Accelerating ESG Transformation and Sustainability in Action

科技与生态协同，助力企业ESG转型

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Committee Member of EFMAC ESG Branch

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提纲Outline

1. 微软对可持续发展的承诺和影响
2. 助力我们的客户及社会实现可持续发展目标
3. Go China / Go Global 客户解决方案

1 微软对可持续发展的承诺和影响

Microsoft’s commitments and impact on sustainability

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微软对可持续发展的承诺和影响
Commitment and Impact

设立远大目标，采取大胆行动，并帮助全世界这样做。

全球排放量的0.03%　　全球排放量的99.97%

世界
全球可持续发展

客户/合作伙伴
客户可持续发展

我们的业务
微软的可持续发展

微软2030年可持续发展承诺

负碳
正水
零废
生态系统保护

可持续发展技术

碳汇计量（MC4S）
行星计算机（PC）
分享最佳实践
MSR卓越中心
创造商业机遇
与客户共同创新

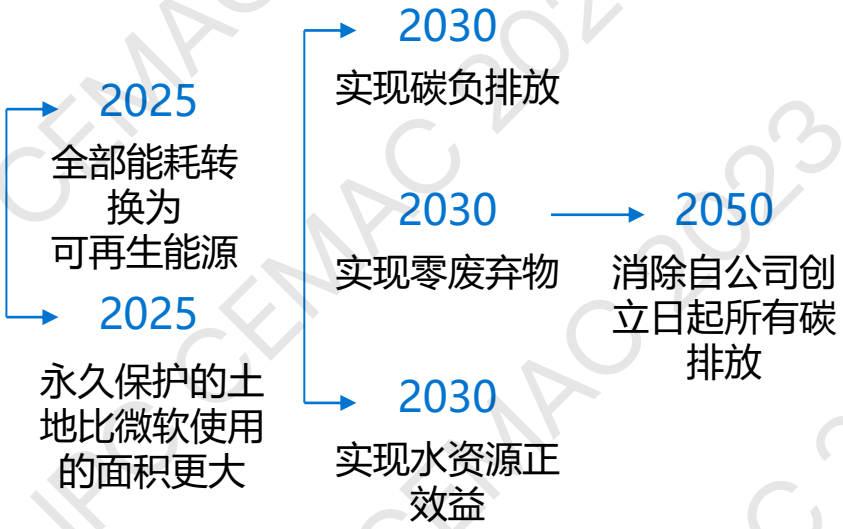
市场，政策，公平

加速气候市场
影响全球政策
培养劳动技能
倡导公平过渡

微软的可持续发展历程
Decades of Action

我们的历史 2009 – 2019

我们的承诺 2020 – 2050



Sustainability in the Supplier Code of Conduct*

‘Suppliers must disclose complete, consistent, and **accurate scope 1, 2 and 3 greenhouse gas (GHG) emissions data** and/or components required to calculate GHG emissions data, **via CDP** or an alternative method identified by Microsoft.

Suppliers may also be required to provide **independent or third-party assurance over such disclosed emissions data**.

Suppliers must also provide and achieve plans to **reduce absolute GHG emissions by a minimum of 55% by 2030** or an alternative reduction target pursuant to the baseline established in their supplier contract or in other written communication with Microsoft. ‘

https://aka.ms/scoc

*for select suppliers

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Simplifying the supplier experience “SupplierWeb”

CHALLENGE

Historically, the Microsoft supplier experience was disconnected and inefficient, involving 12+ processes, 9+ programs, and 6+ required tool logins. With a decentralized data system, suppliers had no visibility to required status of or actions taken for support tickets. Microsoft lacked the capabilities necessary to track supplier support tickets through 140+ email inboxes. Due to its highly disconnected architecture, the supplier data system was also challenging to govern.

SOLUTION

Microsoft created SupplierWeb, an Azure cloud-based supplier procurement portal for managing data and access across multiple services. Azure Identity enables single sign-on to a single-entry point. Azure Machine Learning provides evolving self-serve help experiences through an intelligent digital assistant. SharePoint Lists and Power Automate store and translate user communications for a global audience. Power BI dashboard provides visibility into user adoptions and trends.

RESULTS

- Replaced 5 disconnected tools with one tool
- 5x decrease in user-created support tickets while user adoption increased 17x
- +20 higher Net Promoter Score (NPS) ratings on average
- Consistent experience manages every interaction with user centric design and compliance embedded throughout the portal

TECHNOLOGY

Azure AI, Azure Databases, Azure Developer Tools, Azure DevOps, Azure Active Directory, Azure Machine Learning, Azure Storage, Azure Web, O365, Power BI

TIME TAKEN

12 months (development to deployment)

2 助力我们的客户实现可持续发展目标

Sustainability in action: from pledge to progress

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Helping Our Customers Meet Their Sustainability Goals

Green by default

All customers receive benefits inherent in all our products and services

Accelerate customer progress

New tools, solutions to accelerate progress on sustainability commitments

Sustainable Transformation

Co-innovating with customers to create new sustainability-related products and business models

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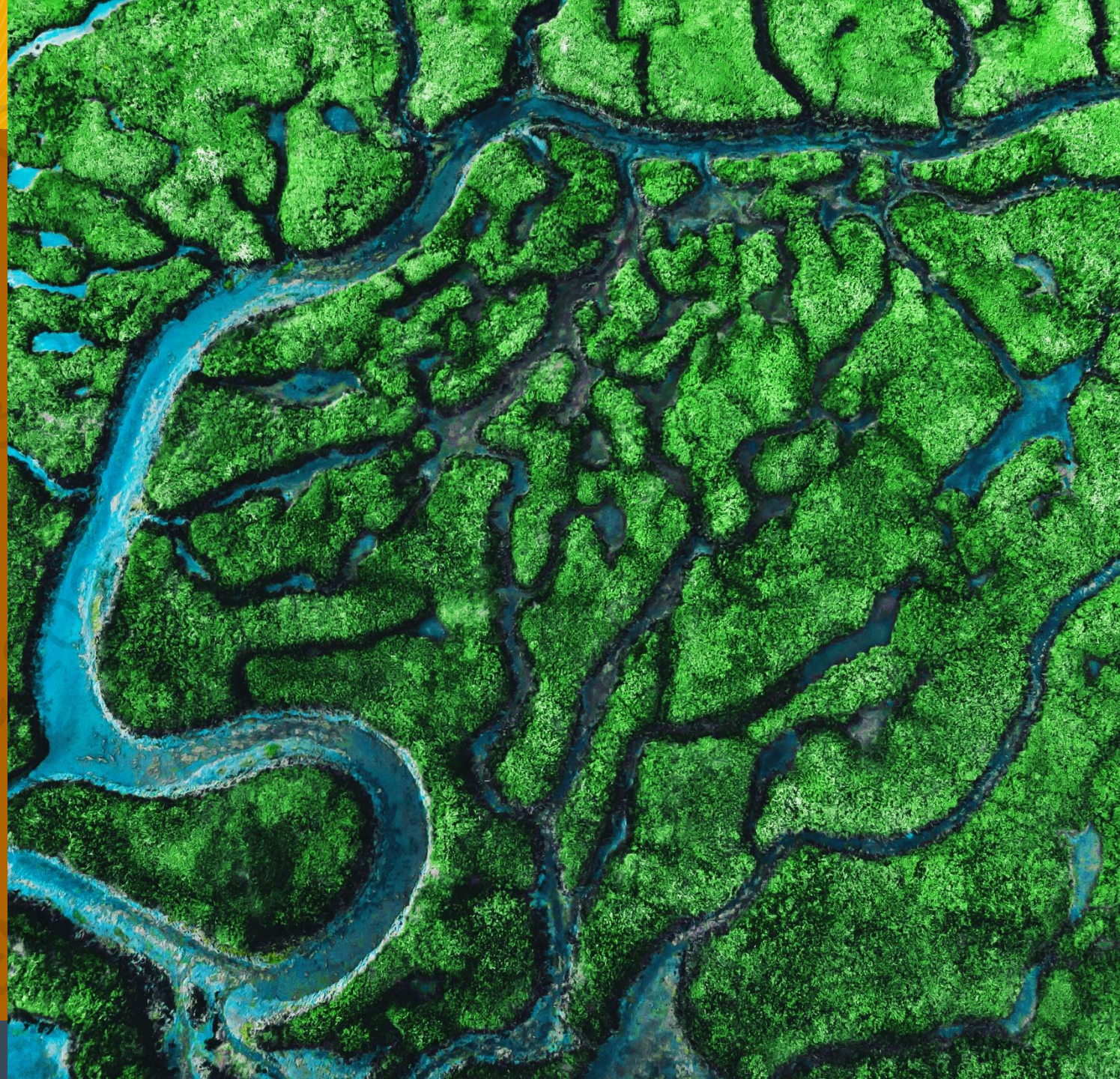
Green by default

All customers receive benefits inherent in all our products and services



云迁移减少碳足迹
Cloud Migration to Reduce Carbon Footprint

微软将 2000 多个应用程序
从地端迁移到云端

将地端数据中心迁移到 Microsoft 云端*

可以减少碳足迹

98%

*碳足迹的减少将取决于您的服务器使用情况、您所购买的可再生能源以及其他因素。详情请参考《云计算的碳效益》白皮书，于2020年更新。

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Get started with Microsoft's Emissions Impact Dashboard (Generally Available)

Emissions Impact Dashboard

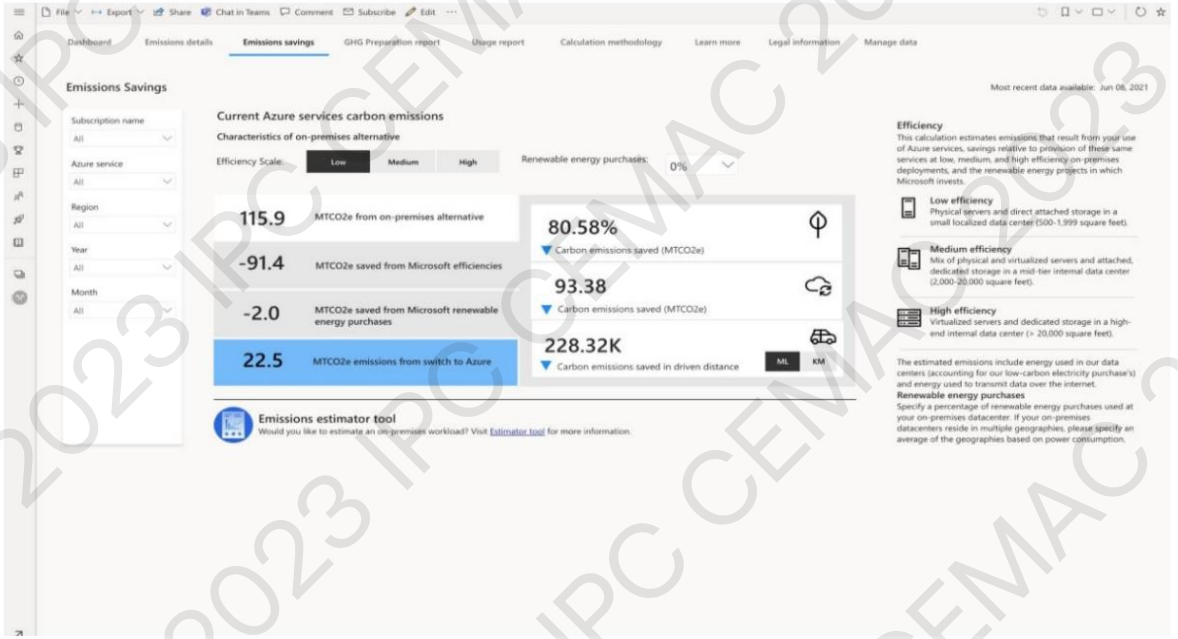
Microsoft Corporation

Power BI apps

Pricing Free | Get it now | Save to my list

Calculate your carbon emissions from cloud-based computing

The Emissions Impact Dashboard provides our cloud customers with transparency into their greenhouse gas emissions associated with cloud usage for **Azure & Microsoft 365**.

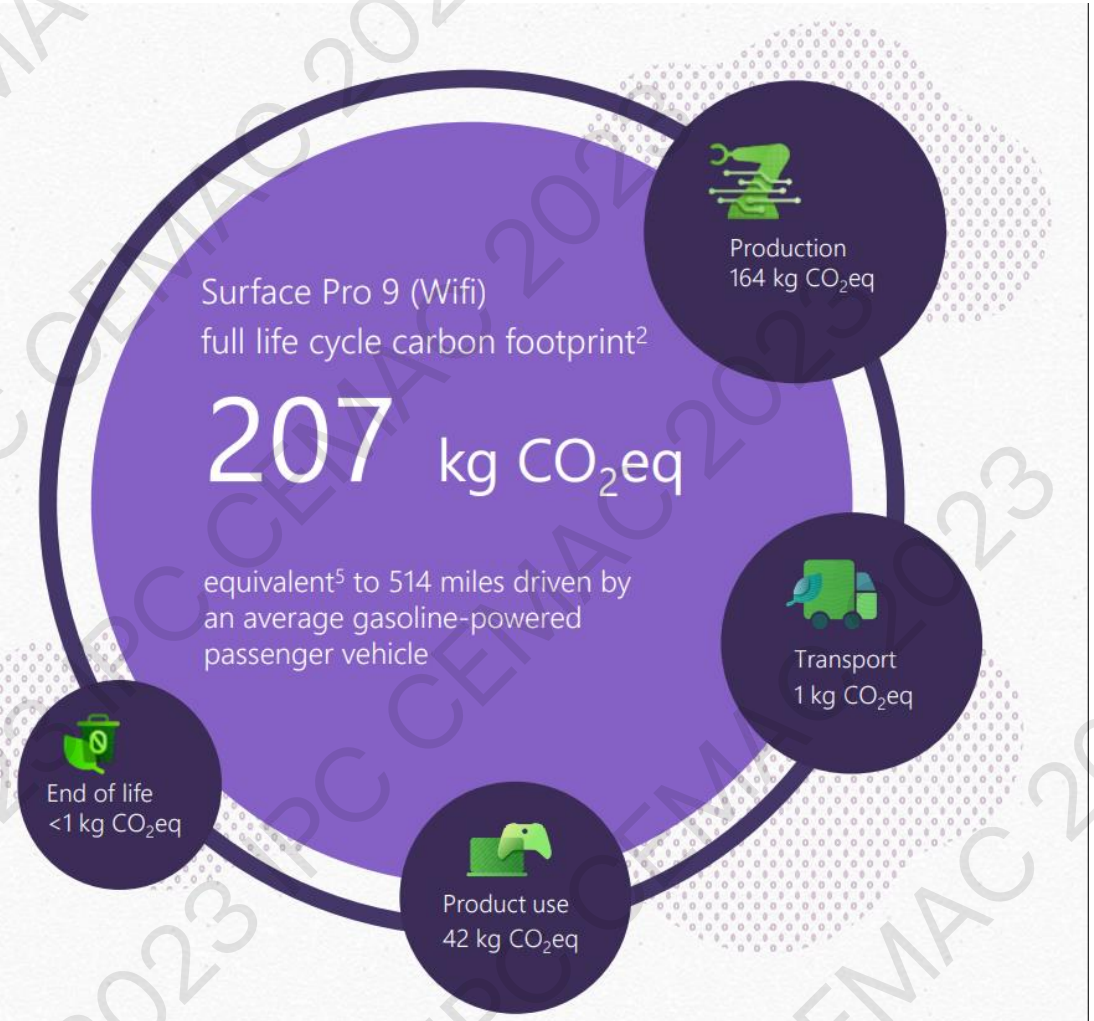


[Microsoft Emissions Impact Dashboard >]

Transparency to impact

We have made significant investments to improve our life cycle assessment (LCA) approach. That's because quantifying the environmental impacts of our products is critical to make and track progress toward our carbon reduction goal. We use LCA to identify and prioritize opportunities to minimize the carbon footprint across the full life cycle of our devices. We'll continue to learn from this work and apply new insights to each product we design, make, and ship to customers.

The life cycle assessment[2] of Surface Pro 9 includes production of one device, distribution to customer, 4.5 years of product use[3], and end-of-life management. The estimated annual electricity consumption[4] associated with product use is 16.6 kWh per year.



The Production life cycle stage includes extraction of raw materials, upstream materials preparation, electronic component manufacturing, subassembly manufacturing and assembly, and final assembly.

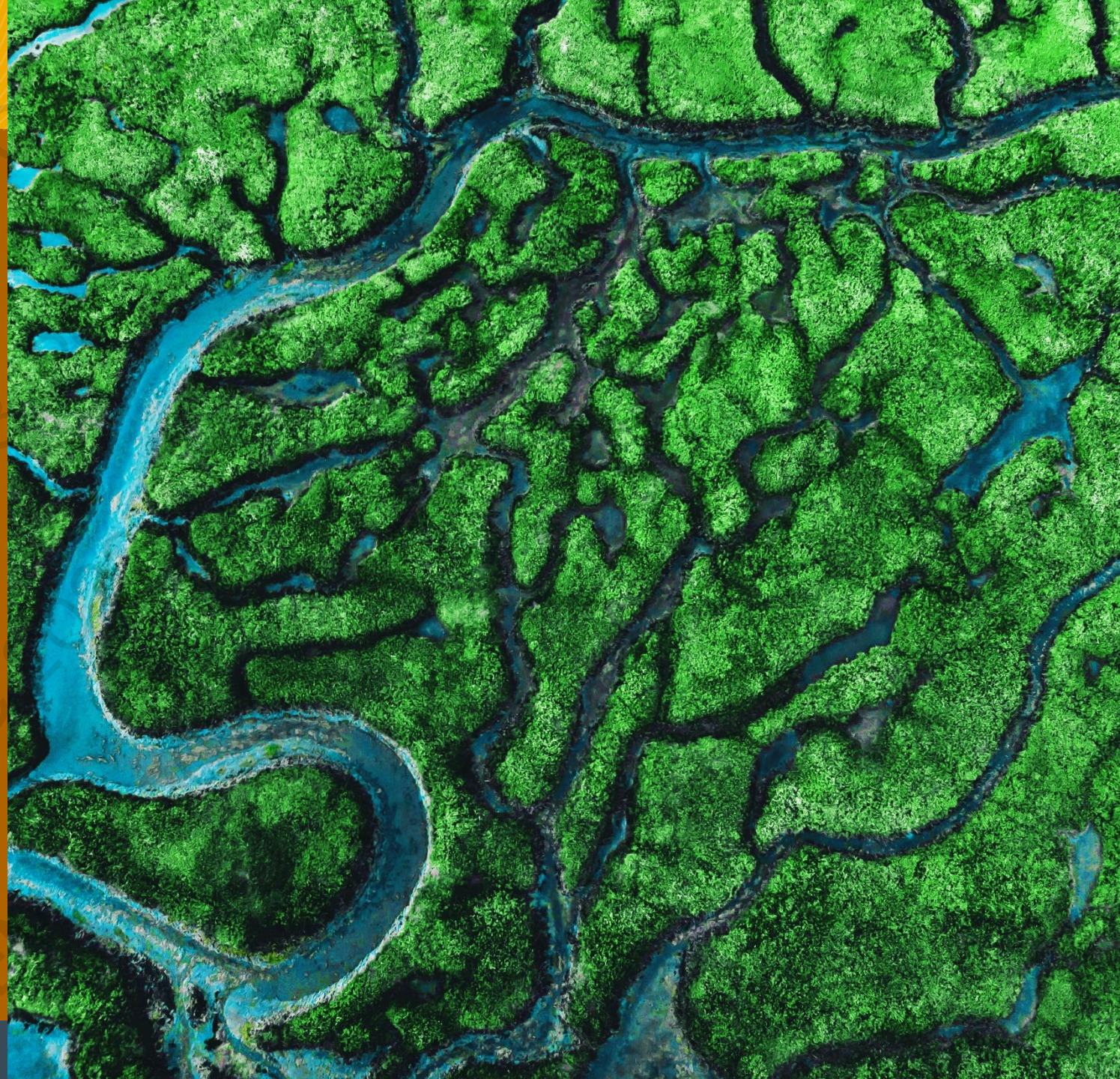
Calculations are based on the US configuration of Surface Pro 9 12th Gen Intel® Core™ i5, WiFi, 8GB RAM, 256GB SSD. Included in the assessment are the device, power supply unit, and packaging. Other accessories are not included.

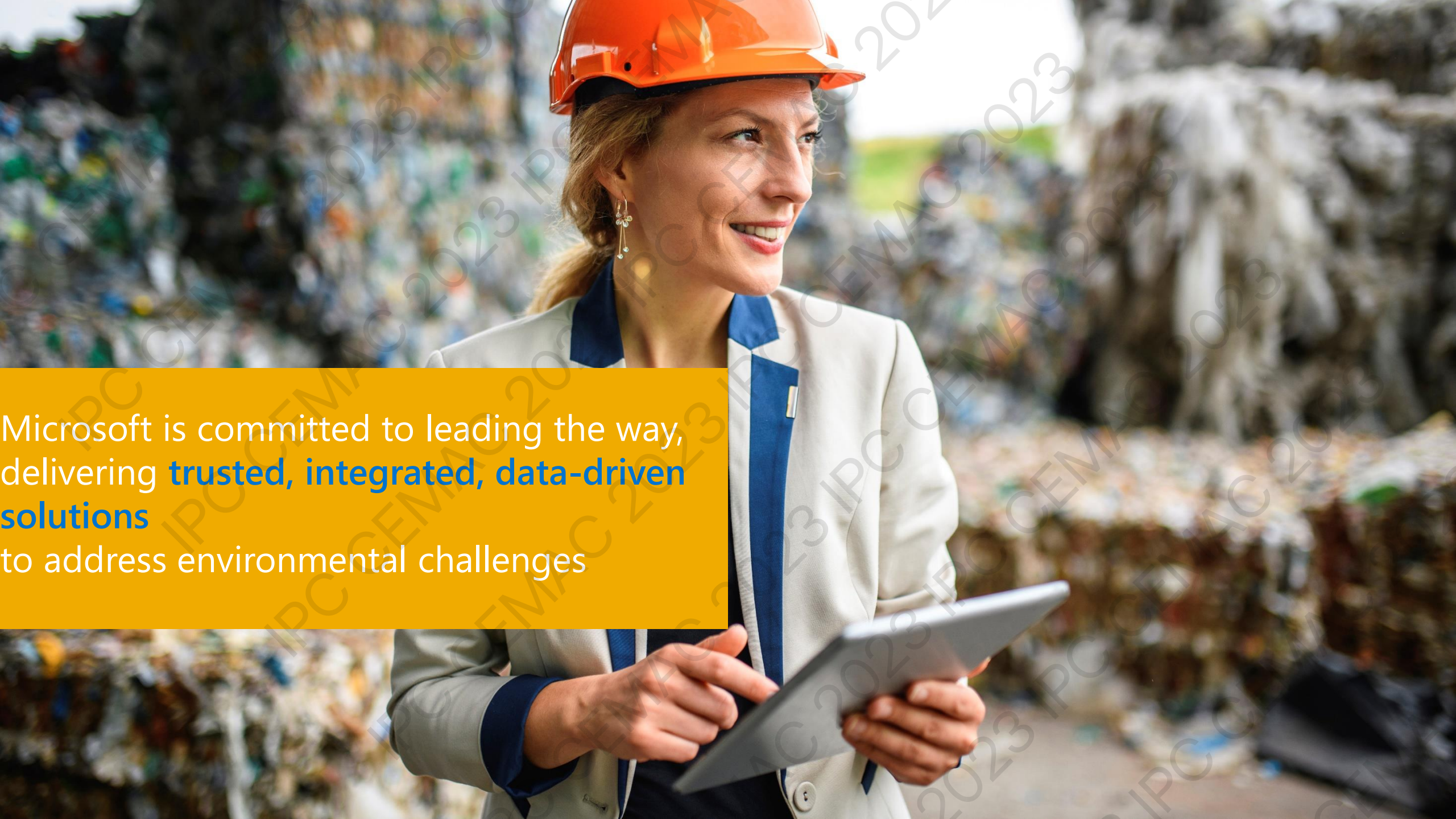
LCA methodology details are included in the Resources and notes page of this document.

Surface Pro 9 Wifi Ecoprofile © Microsoft Corporation. All rights reserved. Introduced October 2022

Accelerate customer progress

New tools, solutions to accelerate progress on sustainability commitments





Microsoft is committed to leading the way, delivering **trusted, integrated, data-driven solutions**
to address environmental challenges

We're on a common, connected journey

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BUILD ELECTRONICS **BETTER**

Figure 1: IDC Market Scape Worldwide Corporate Environmental, Social, and Governance Reporting Technology Vendor Assessment

Source: IDC, IDC Market Scape: Worldwide Corporate Environmental, Social, and Governance Reporting Technology 2023 Vendor Assessment, #US50427023

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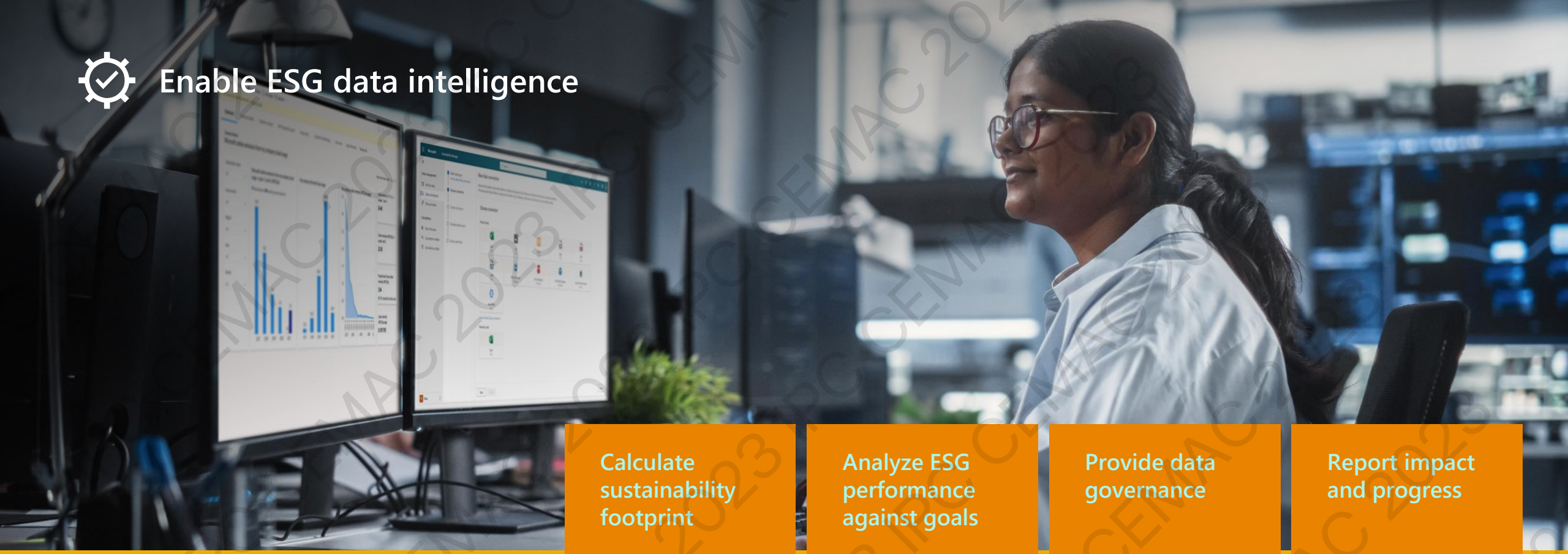
Enable ESG data intelligence



Strengthen your digital foundation and capture the value of data to drive more sustainable outcomes

Calculate sustainability footprint

Streamline data ingestion, integration, and calculations

Analyze ESG performance against goals

Establish an accurate baseline for ESG performance, then track progress against goals

Provide data governance

Operationalize corporate governance practices and performance, supporting greater transparency and accountability

Report impact and progress

Deliver more reliable reports about your sustainability impact and progress

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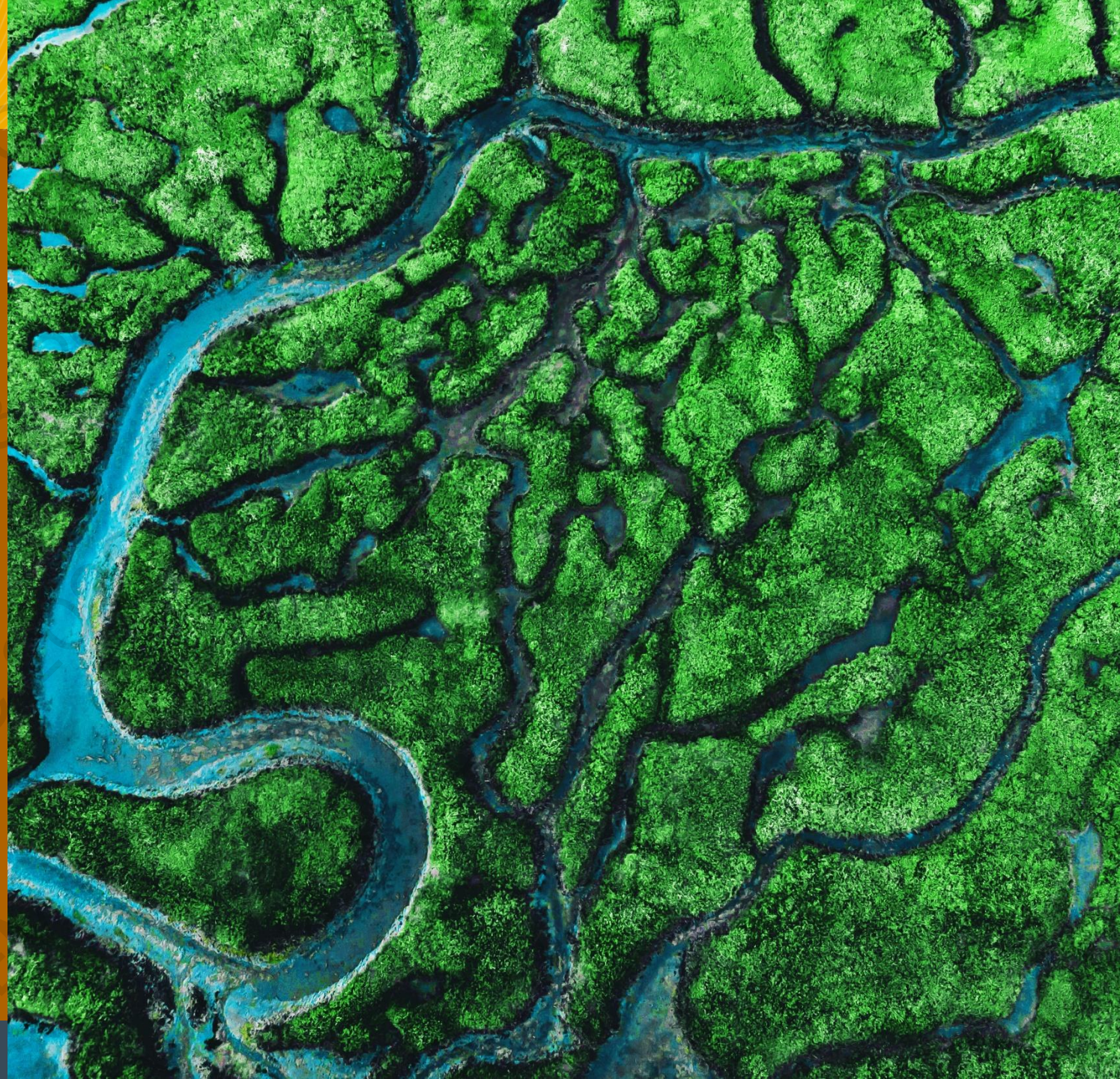
Sustainable Transformation

Co-innovating with customers to create new sustainability-related products and business models



联盟介绍 China ESG Alliance Introduction

China ESG Alliance

背景 Background:

- **全球ESG，可持续发展治理进展迅速 Sustainability regulations evolving faster and more clear**
- **科学技术迅猛发展 Disruptive technologies (Generative AI) advances to bring up new opportunities in ESG**

目的 Goal:

- **以科学严谨的方式打造可复制的ESG技术方案 Build replicable ESG technology solutions in a scientific and rigorous manner**
- **共同使命，提升国际正向社会影响力 Unfold the impact of Generative AI into your ESG report**

战略合作 Strategic Partnerships:

SHANGHAI CLIMATE WEEK 上海气候周

- 2023年4月13日，联盟成立
  Apr 13, 2023 - China ESG Alliance established

  创始成员：北京威发新世纪信息技术有限公司、必维集团、德莎胶带(上海)有限公司、鼎力可持续数字科技（深圳）有限公司、GC Insight、歌尔股份有限公司、华测检测认证集团股份有限公司、联想集团有限公司、绿色和平、欧莱雅(中国)有限公司、上海环境能源交易所、上海箱箱智能科技有限公司、微软(中国)有限公司、壹科环塑新材料科技（深圳）有限公司、再鼎医药（上海）有限公司、仲量联行
  Co-founders：Wafer, Bureau Veritas, Tesa, GSG, GC Insight, Goertek, CTI, Lenovo, Greenpeace, L'OREAL, Shanghai EEEX, Shanghai Xiangxiang, Microsoft China,_ Ecolodao, ZaiLab, JLL

- 2023年5月，荣耀终端、腾讯加入
  May, 2023 --Honor and Tencent joined

- 2023年6月，隆基绿能、立讯精密、思爱普SAP加入
  Jun, 2023 --Longi, Luxshare Precision, SAP joined

- 2023年7月，LinkedIn领英加入
  Jul, 2023--LinkedIn joined

- 2023年8月，彩色星球、丹佛斯加入
  Aug, 2023– Colorful Earth, Danfoss joined

- 2023年9月，Akila、欣旺达、艾科森加入
  Sep, 2023– Akila, Sunwoda, AKS Envirotech joined

China ESG Alliance

行业头部企业
Industry leading logos

科技方案
Technology Centric

联合发起
Co-founding model

针对不同行业的ESG解决方案
ESG solutions across focused industries

- 消费电子及供应链 Consumer Electronics and Supply Chain
- 电动汽车及能源 EV and Energies
- 医药大健康 Pharmaceuticals & Public health
- 美妆及奢侈品 Beauties and Luxuries
- 其它 Others

科技赋能
Advanced Technology Enablement across key scenarios

- 物联网 IoT
- 区块链 Block Chain
- 生成式AI Generative AI
- 数据平台 Data Platform
- 其它技术 Other Technologies

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联盟关注重点方向 China ESG Alliance Key Focus

供应链，组织碳和产品碳
Carbon footprint calculation for both organization and product

Lenovo 联想 · LONGi · HONOR · Goertek · BUREAU VERITAS · SUNWODA 欣旺达 · zai Lab 再鼎医药 · GC Insights · GSG 鼎力 · GREENPEACE 绿色和平 · LUXSHARE ICT 立讯精密

循环减排
Emission deduction calculation in circularity

上海环境能源交易所 SHANGHAI ENVIRONMENT AND ENERGY EXCHANGE · 箱箱共用 零碳循环伙伴 · tesa · L'ORÉAL · ecodao 壹科环塑

园区及办公楼宇减碳
Campus and Building Carbon Deduction

WAFER SYSTEMS · JLL · CTI 华测认证 CTI CERTIFICATION · Akila · Danfoss

绿色人才、绿色品牌、绿色技能
Green Talent, Green Brands, Green Skills

LinkedIn 领英

生物多样性、多元、平等与包容
Biodiversity, Diversity, Equity and Inclusion

彩色星球 COLORFUL EARTH

法规、合规
Regulatory, Compliance

AKS Envirotech Inc

科技赋能和数字化
Advanced Technology Enablement across key scenarios

Microsoft · Tencent 腾讯 · 思爱普 SAP

Entrepreneurship for Positive Impact

China ESG Alliance

ESG Alliance

BUILD ELECTRONICS BETTER

3 Go China / Go Global 客户解决方案

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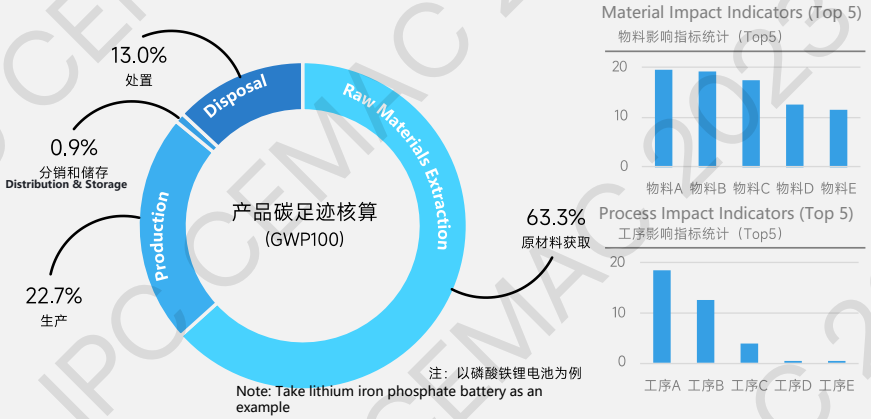
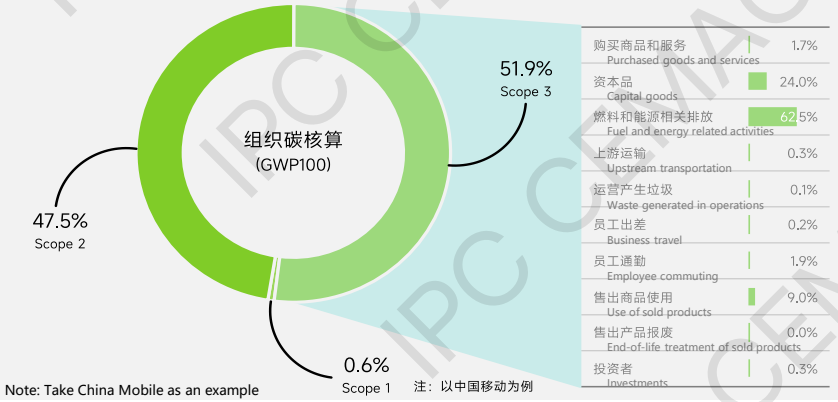
碳管易™：基于Microsoft Azure的科学碳管理工具

Carbon-E ™： Microsoft Azure-based scientific carbon management tool

碳管易™，提供科学高效的碳计算工具，解决组织碳和产品全生命周期（LCA）碳足迹计算难点，进而支持企业实现数字化碳管理。
Carbon-E is a scientific and efficient carbon management tool，providing organization GHG emissions and product LCA carbon footprint accounting, and support enterprises to realize digital carbon management





核心亮点 Highlight

一站式碳管理工具 One-Stop Tool

- 集成组织碳&产品碳；
- 集成碳管理全流程

符合权威标准&可认证 Compliance & Certifiable

- 满足ISO、GHG Protocol等权威标准
- 计算结果可支持便捷认证

高度兼容企业信息系统 Highly compatible

- 可与企业现有信息系统整合，实现运营数据高效对接和抓取

专家级开发团队 Expert team

- 碳和企业SaaS领域专家经验
- Top2高校专业教育背景

LeGreen 乐循

陪伴企业的可持续发展之路

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LeGreen（乐循）助力企业供应链可持续发展

可持续产品

产品全生命周期管理
循环经济
合规与标准制定

净零排放

零碳制造
供应商减排
低碳物流

可持续价值链

联想工厂ESG实践
负责任采购
合规与降低风险

LeGreen（乐循）

集成化数据平台
数字化智能决策

Lenovo 联想 × Microsoft

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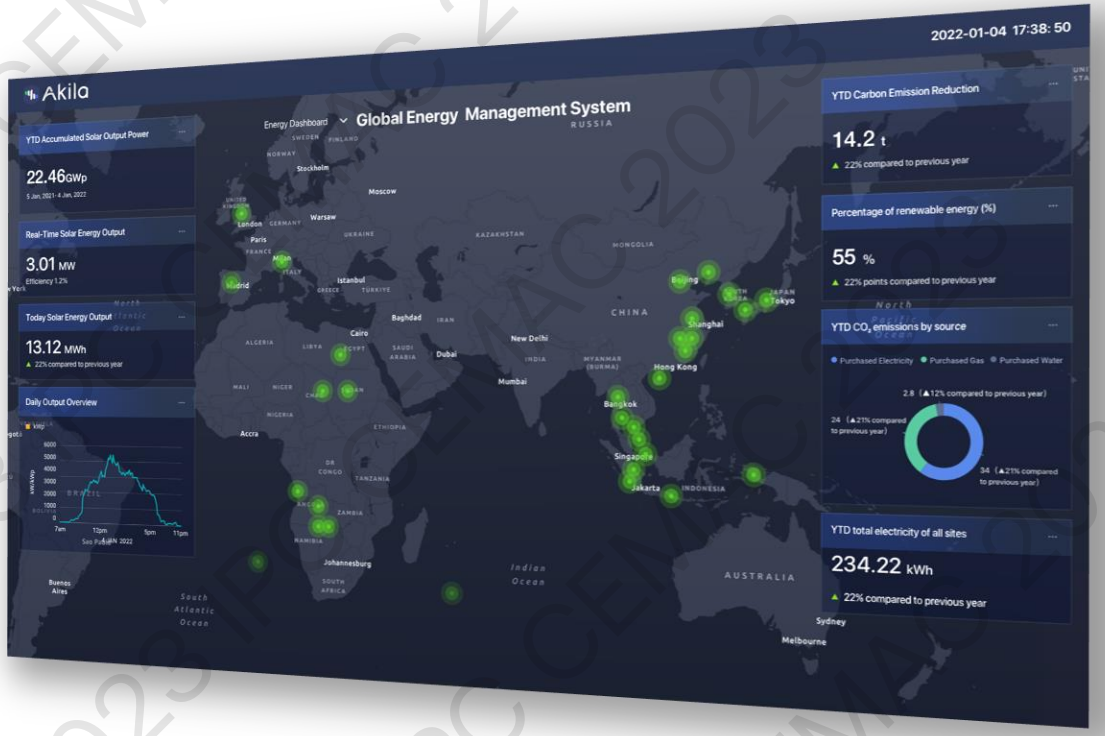
Akila

Akila是一个基于云的数字孪生平台，为资产组合经理提供最强大的数据工具，以实现360度资产全生命周期管理，能源优化以及碳减排。



Aden

25年建筑设施管理经验

DASSAULT SYSTEMES

数字孪生与仿真先锋

Microsoft

支持跨境投资组合和数据管理

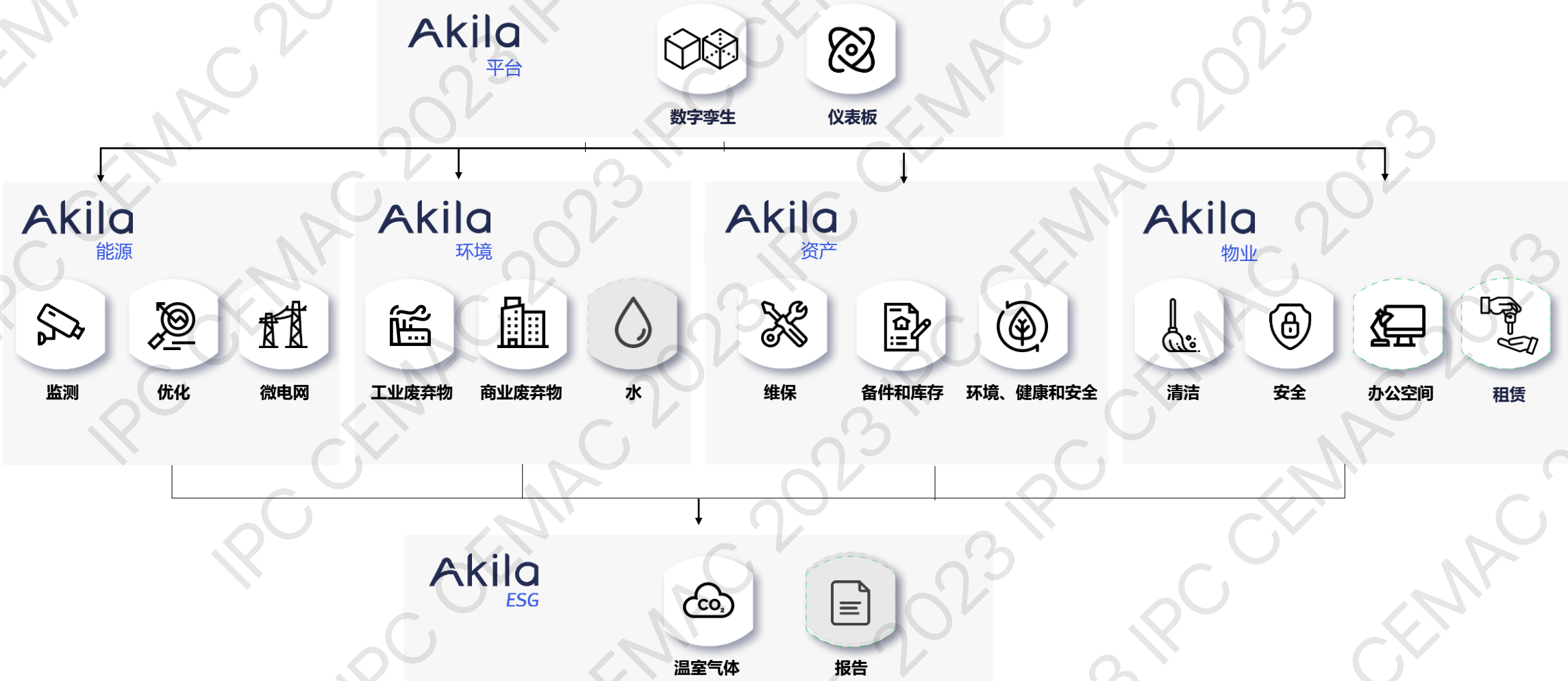
WORLD ECONOMIC FORUM

Technology Pioneers 2022

MEMBER digital twin CONSORTIUM Member since 2020

SOLAR IMPULSE EFFICIENT SOLUTION OCTOBER 2022

Akila基于数字孪生的SaaS解决方案



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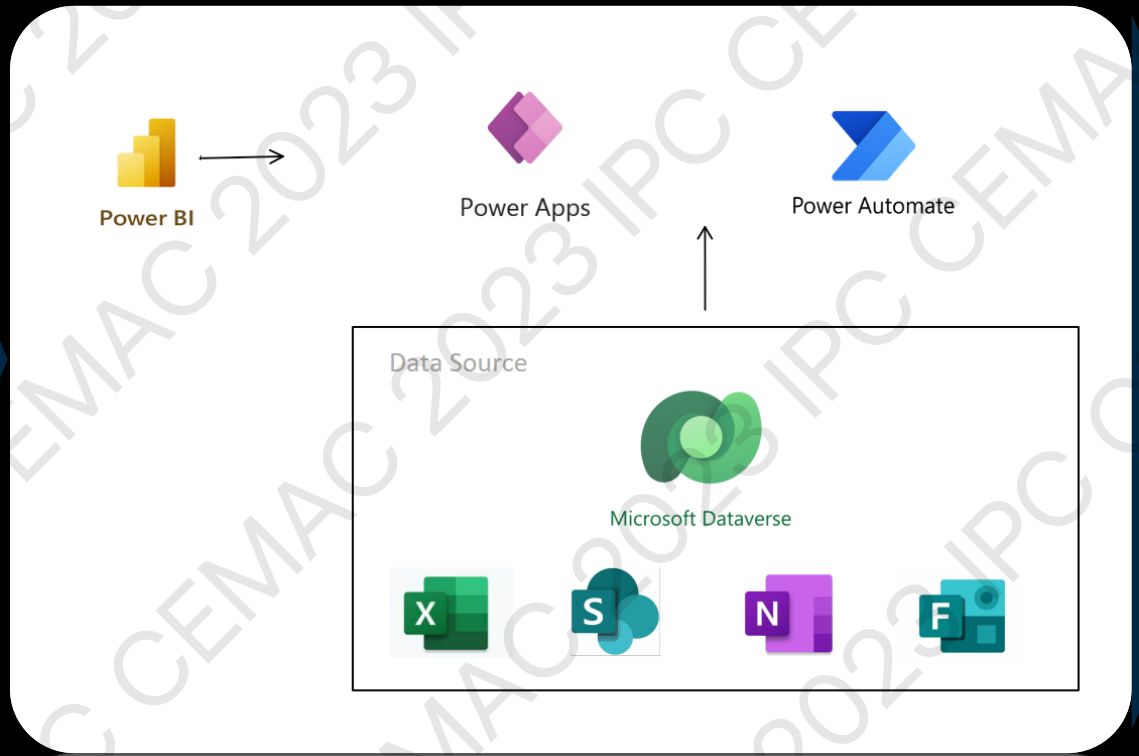
Green Claims

A digital tool for green claims validation

Our Solution

Inputs

- 1# Product BOM (Bill of Materials)
- 2# Supplier /factory List
- 3# Recycled Materials
- 4# Energy /Renewable Energy
- 5# Waste/Water…



Outputs

- 1# Product X% of recycled content
- 2# Supply chain X% and amount of Renewable Energy
- 3# Certifications
- 4# KPIs reporting…

To enable collect/validate supplier's data and 3rd party audit/certification process.

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Thank you!
谢谢!

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