

Approaches to moving towards a 'Green future'

Chanda Saikia
Senior Sustainability Specialist, IBM

Tamás Kubicsek
Sustainability Evangelist, IBM



IBM's longstanding commitment to environmental stewardship



<p>1965 CEO Thomas Watson Jr. Commits IBM to responsible corporate citizenship</p>	<p>1988 – First goal for Nonhazardous waste recycling – Goal for PFC emissions reductions</p>	<p>1990 Begins annual corporate environmental reporting</p>	<p>1995 Goal for use of recycled plastic resins in products</p>	<p>2001 First purchase of contracted renewable energy for use in operations</p>	<p>2007 Published position on climate change, calling it a “serious concern that warrants meaningful action on a global basis”</p>	<p>2019 Founding member of the <i>Climate Leadership Council</i> supporting bipartisan plan for carbon tax and dividend</p>	<p>Jan. 2022 IBM introduces Sustainability Software and Consulting; acquires Envizi to help clients operationalize sustainability goals</p>	
<p>1971 IBM issues first Corporate environmental policy</p>	<p>1975 First goal for energy conservation</p>	<p>1989 Goal for CFC elimination</p>	<p>1994 IBM advances voluntary reporting through the Public Environmental Reporting Initiative (PERI)</p>	<p>2000 First goals for – CO₂ reduction – Water conservation – Reuse & recycle end-of-life products</p>	<p>2003 IBM becomes the first company to recover and recycle one billion pounds of IT and e-waste</p>	<p>2010 Require suppliers to implement an environmental management system, set goals and publicly disclose performance</p>	<p>2021 IBM Commits To Net Zero Greenhouse Gas Emissions By 2030</p>	<p>Feb. 2022 IBM launches Sustainability Accelerator to scale organizations supporting communities vulnerable to climate change</p>

The rise of Sustainability and ESG



The ESG Framework



Environmental

How do I reduce the **carbon footprint** and **environmental impact** of my company's operations and products?

How do I prepare for and mitigate the **impact of climate change** on my company and / or stakeholders?



Social

How do I create a **safe, positive, equitable workplace** for employees?

How do I ensure my **supply chain aligns with my ethical values**?

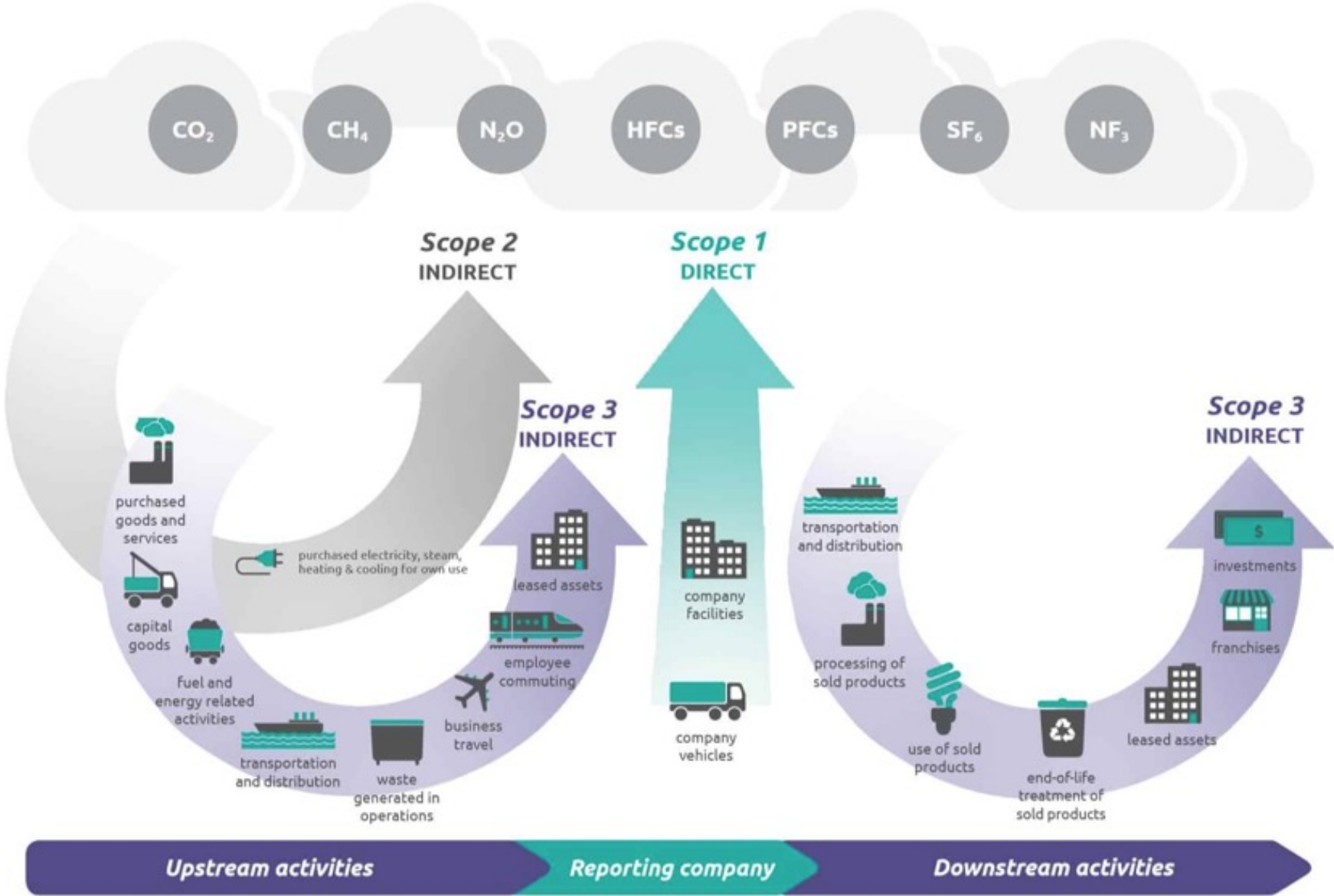
How do I ensure my company delivers **inclusive and positive impact** in our broader ecosystem?



Governance

How can I build a **governance structure that is auditable, compliant,** and can help me achieve my ESG goals?

Complexity rises with Scope 3 – technology can only manage it



Where Software technology can help in Sustainability and the IBM mapping

IBM Consulting and Ecosystem Partners

Strategy, experience, technology, managed services capabilities

Sustainability Strategy and Roadmap

Garage for Sustainability (co-creation)
Sustainability strategic advisory services

ESG Data, Reporting and Climate Risk Management

Envizi
Environmental Intelligence Suite



Intelligent assets, facilities and infrastructure

Maximo
TRIRIGA



Responsible computing and green IT

Turbonomic



Sustainable supply chains and circularity

Sterling Order Management
Supply Chain Intelligence Suite

IBM Technology and Ecosystem Partners

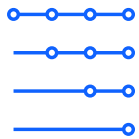
Infused with AI and hybrid cloud technologies

Sustainability Challenge



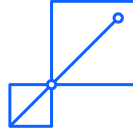
Regulatory

Rising pressure to meet environmental, social & governance (ESG) goals.



Yet invisible, high emissions in Supply Chain

Up to 80% of emissions are coming from the supply chain.



Decarbonization Targets

Record commitments by companies. But most lack a roadmap to get there



Environmental challenges

Create business risks across the enterprise.



IBM's sustainability solutions

IBM Consulting and Ecosystem Partners
Strategy, experience, technology, managed services capabilities

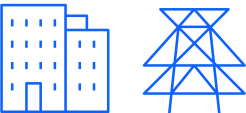
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Common way to track ESG data today

Audit
readiness?

Reliable,
trusted data?

Data health,
completeness
?

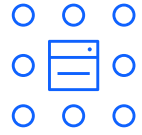


Do we start it
from scratch
next year?

Just reporting
annually or
reaching net
zero?

Image source
[https://www.consider.biz/
excelheavenandhell/](https://www.consider.biz/excelheavenandhell/)

What are requirements to succeed establishing foundation towards Sustainability?



- Automated collection and consolidation of all Sustainability data
- Calculate GHG emissions out of the box – know-how
- Score or help in data quality and completeness
- Embedded analytics and audit readiness
- Up to date (managed) ESG disclosure frameworks and workflow capability – know how
- Decarbonization – programs; target setting & tracking
- Energy efficiency – benchmarking, alerting



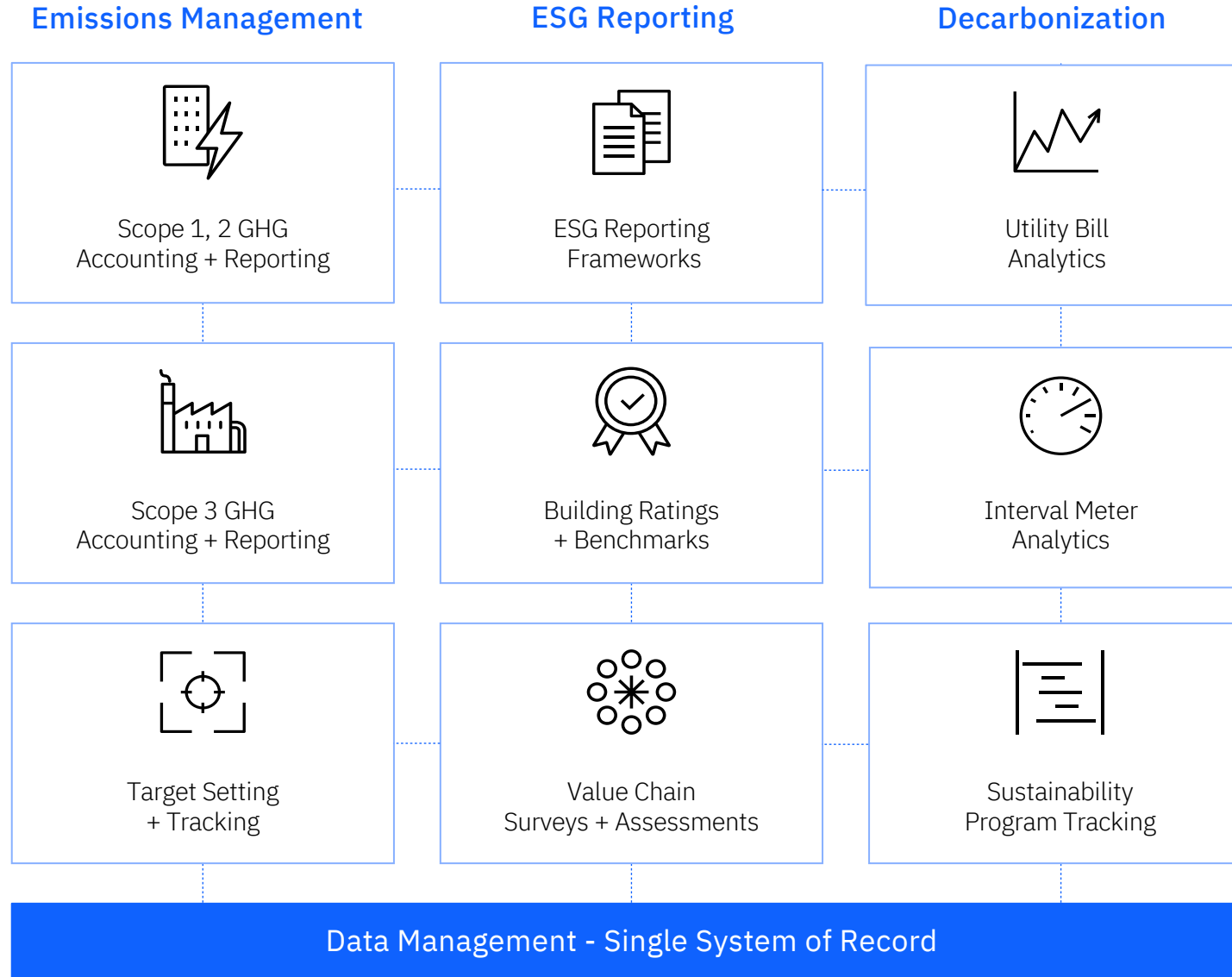
Envizi helps organizations harness the power of data and analytics to achieve their sustainability goals.



Envizi - Purpose built and out of the box



IBM Envizi – a modular and complete solution



Envizi microsite and trial

Key takeaways

Technology can help to establish a data foundation

Data foundation creates a baseline for truthful understanding of AS-IS situation

Automated capture provides no mistakes, trusted data

IBM's sustainability solutions

IBM Consulting and Ecosystem Partners

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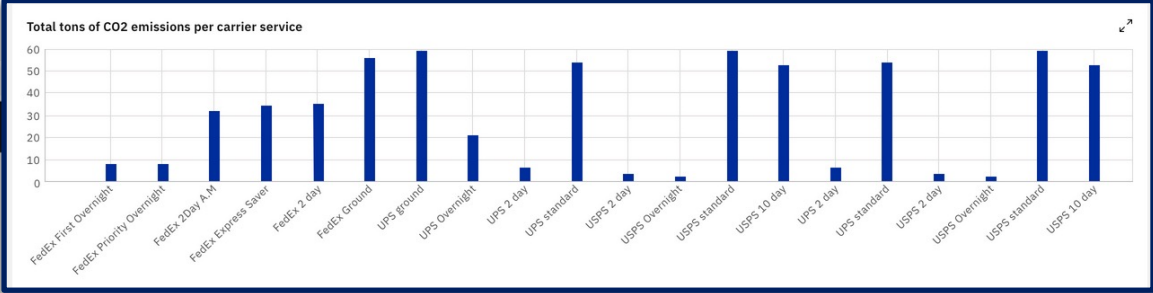
Infused with AI and hybrid cloud technologies

Fulfillment Optimization

Benefits Reporting with Carbon Emissions

What's next

Measure, monitor & report on carbon emissions produced. Streamline supply chain sustainability. Future, set levers to optimize fulfillment based on sustainability initiatives, minimizing carbon emissions, and packaging waste.



The screenshot shows the IBM Sterling Order Management interface for a 'Benefits report'. The report covers the period from 15-04-2019 to 31-05-2019. It displays 'Net benefits (April 15, 2019 - May 31, 2019)' with tabs for 'Monetary' and 'Sustainability'. Under 'Sustainability', it shows 'Total tons of CO2 saved' with a bar chart comparing 'Air Transport' (positive) and 'Ground Transport' (negative). 'Environmental Savings' are listed as 121.64 Tons of CO2 reduced, 730 Trees saved, and 182 NYC to Paris air trips reduced. A 'Total CO2 Emissions' chart compares 'After optimization' (lower) and 'No optimization' (higher) over time. The interface also includes a sidebar with navigation options like 'My products', 'Top pages', 'Order Hub', and 'Fulfillment'.

Responsible Sourcing Scoring

Monitoring Product & Supplier Sustainability Performance

What's next

- Ensure that the ingredients sourced are sustainable and certified according to industry/commodity-specific sustainability standards.
- Define responsible sourcing requirements for a Specific Product or Commodity Group
- Weight sustainability scores according to organizational priorities such as....
 - Product Carbon Footprint data
 - Fair-trade
 - *RSPO certified*
 - Rainforest alliance certified
 - Child-labor free

The screenshot displays the 'Sustainability settings' interface for 'Inbound cocoa products'. The left sidebar shows navigation options like 'My products', 'Control Tower', and 'Sustainability settings'. The main content area is divided into 'Product settings' and 'Sustainability criteria'. Under 'Product settings', a list of commodity groups is shown, with 'Inbound cocoa products (36)' selected and highlighted by a green box. A green arrow points from this box to the detailed settings for 'Inbound cocoa products' on the right. The detailed settings include:

- Setting name:** Inbound cocoa products
- Last updated:** November 16, 2020
- Updated by:** John Smitten
- Product carbon footprint:**
 - Required criteria: Product carbon footprint shared, Product carbon footprint audited and verified
 - Target carbon footprint: 1.6 CO2 kg/ ton
- Sustainability attributes and score weights:**

Criterion	Weight
Fair Trade	5
Sustainable palm oil	7
Rainforest alliance	5
Child labor free	5
- Applicable products (15):** Category: Cocoa products (20 products), Category: Cacao bean products (16 products)

Key takeaways

Carbon emission in the distribution process

Importance of sourcing and carbon neutrality

