

The Future of Sustainability

Strategy, Trends & Regulations

July 2022

International Conferences for
Building Materials - Chemicals - Forest Products, Paper and
Packaging - Mining and Metal



John Martin

National Practice Lead, Sustainability
Solution Advisory



Juliana Bruwer

Solution Expert, Industry Business Unit,
Mining and Mill Products

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CBAM vs Green Products

01

Sustainability Strategy Overview



Industries and
Customer Advisory

Sustainability is more relevant than ever

Customers

79%

of buyers are changing preferences based on sustainability

Investors

50%

of all professionally managed assets will be ESG-mandated by 2024

Employees

90%

of employees indicated that a company's ESG efforts enhance job satisfaction

Companies

70%

of EBITDA could be at stake from sustainability challenges

Industry Context | Drivers for End-to-End Value Chain Transparency



Ethical Sourcing, Reporting & Sanctions

Demand for commodities are increasing due to the Energy Transition, while geopolitics, sanctions & Regulations require more transparency

UK expands import sanctions against Russia and Belarus

Latest £1.7bn sanctions include UK import tariffs on metals and chemicals

Joanna Partridge
Mon 9 May 2022 07:30 AEST

The new package of restrictions includes £1.4bn of UK import tariffs - border taxes paid by buyers on goods shipped from **Russia** - that will affect imports of platinum, palladium and other products including chemicals from Russia.

New sanctions on precious metals were announced ahead of Russian Victory Day, when Putin is expected to repackage war on Ukraine. Photograph: Bloomberg/Getty Images

The UK government has expanded its sanctions against Russia to include punitive import tariffs on Russian precious metals, as well as export bans on certain UK products, to increase economic pressure on Moscow over the invasion of **Ukraine**.

The third wave of sanctions was announced by the Department for International Trade just hours ahead of Russia's **9 May Victory Day celebrations**, when the country celebrates the end of the second world war with military parades and when President Vladimir Putin is **expected to repackage details of the war** in Ukraine to citizens.

The latest £1.7bn sanctions on Russia and neighbouring **Belarus** - which has **joined in the invasion** of Ukraine and been used as a base for Russian soldiers - are aimed at knocking Putin's ability to fund his war.

The announcement came shortly after G7 leaders, including Boris Johnson

Source: The Guardian



Impact of Import Regulations

Global impact of Carbon Border Adjustment Mechanisms, as the first regulation to tax emissions embedded in products

CBAM: MEPs push for higher ambition in new carbon leakage instrument

Press Releases | Yesterday

- Phasing in CBAM earlier and ending free allowances in EU ETS by 2030
- Scope should be extended to include organic chemicals, plastics, hydrogen and ammonia as well as indirect emissions
- EU budget should support least developed countries through amounts equivalent to sums collected through CBAM
- Need for a centralised EU CBAM authority

MEPs call for a broader scope and faster implementation of the EU Carbon Border Adjustment Mechanism (CBAM) to raise global climate ambition.

On Tuesday, the Committee on Environment, Public Health and Food Safety adopted

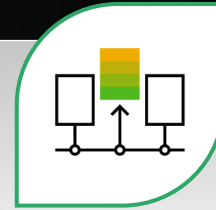
Broadening the scope of CBAM

MEPs want CBAM to cover aluminium, hydrogen, polymers and organic chemicals in addition to the products proposed by the Commission (iron and steel, refineries, cement, organic basic chemicals and fertilisers).

To better reflect CO2 costs for European industry, MEPs also want to extend CBAM to include indirect emissions, i.e. emissions deriving from the electricity used by manufacturers

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Source: EU Parliament News



Emerging Standards for 'Product' Emissions

New standard is emerging for 'Product' emissions, based on primary data exchange between entities. This will also improve Scope 3 emissions methods

Partnership for Carbon Transparency (PACT) leads first exchange of emissions data across different tech solutions

A major milestone has been reached for cross-industry transparency on Greenhouse Gas emissions, accelerating corporate climate accountability

"SAP is very pleased to be one of the first companies to exchange emissions data across technology systems. The success of this pilot represents a big step forward to achieving cross-industry transparency and will enable businesses to make informed decisions for sustainable business outcomes. Sharing sustainable business data across networks is fundamental to our collective success." - **Daniel Schmid, Chief Sustainability Officer of SAP**

Published: 14 Apr 2022
Type: News

Geneva, 14 April 2022: The World Business Council for Sustainable Development (WBCSD), supported by McKinsey & Company as its knowledge partner, is moving towards enabling confidential and secure exchange of granular, primary and verified product emissions data across organizations. A first exchange of standardized data was realized using several interoperable technology solutions, marking a key milestone in the development of the Pathfinder Network - which will provide an open, decentralized network infrastructure allowing different technology solutions to connect and support peer-to-peer sharing of data across value chains and industries. The development of this network is being driven by the reality that a plethora of technology solutions and platforms for carbon data exchange are emerging, all of which need to be interoperable if true transparency is to be created.

Source: wbcscd



Consumer Demand for Green Products

There is consumer demand for 'green' products, requiring full transparency from start of the chain

Nippon Steel reveals plans to deliver 'carbon neutral' steel

2 minute read

TOKYO, May 10 (Reuters) - Japan's biggest steelmaker Nippon Steel Corp (**5401.T**) plans to supply carbon neutral steel from the fiscal year starting 2024, it said on Tuesday.

A chimney of Nippon Steel's Sumitomo Metal Corp.'s Kimitsu steel plant is pictured in Kimitsu, Chiba Prefecture, Japan, May

Source: Reuters



Our purpose

Help the world run better
and improve peoples' lives

Our approach to drive Sustainability Impact

SAP's portfolio spans across all business areas to provide holistic Sustainability steering and reporting with actionable insights. A broad ecosystem provides flexibility with industry-specific innovation options.



Holistic Steering and Reporting

go from Averages to Actuals

Zero Emissions
with Climate Action



Zero Waste
with Circular Economy



Zero Inequality
with Social Responsibility

Industry Innovation

Industry-specific solutions from across our Partner Ecosystem and Industry Cloud

We know your challenges across the **Three Zeros**



Complexity of voluntary & regulatory frameworks

Holistic Steering and Reporting go from Averages to Actuals

Zero Emissions with Climate Action

Scope 1,2,3 transparency on **company and product level**

Harmonized, granular & regulatory **compliant calculation logic**



Zero Waste with Circular Economy

Data & insights on **material flow and traceability**

Data & insights on **material recovery and reuse**



Zero Inequality with Social Responsibility

Transparency on **supply chain risks**

Workers safety data tracking & insights

Industry Innovation

Extend and expand the access and visibility into sustainability metrics and underlying data beyond your own four walls with BTP, the SAP Partner Ecosystem and Industry solutions.

Our offering – SAP Cloud for Sustainable Enterprises

Business Network
for carbon data sharing

Industry Capabilities
to solve your specific challenges

Partner Ecosystem
geared towards sustainability

HOLISTIC STEERING AND REPORTING

Go from averages to actuals and record data on transactional level

Zero Emissions with Climate Action

Decarbonize your entire value chain (scope1-3)
based on actual business transactions

Zero Waste with Circular Economy

Incorporate **circularity** into your supply chain &
create sustainable business models

Zero Inequality with Social Responsibility

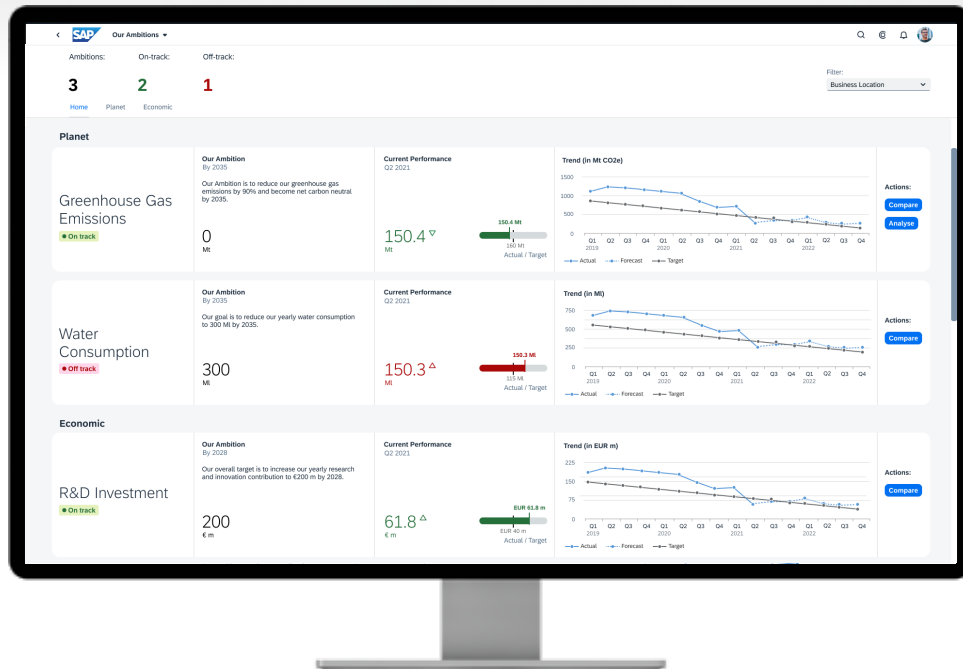
Understand the **impact of your business** on
people and the society

S/4HANA, CX, HXM, ISBN

Business Technology Platform

Holistic Steering & Reporting

Integrate ESG performance for strategic decision-making and comply with obligations & reporting



Standard semantic frameworks supported



EU Taxonomy



Record: Actuals instead of averages

Measure ESG factors with out-of-the-box integration with SAP systems for faster time to value & granular data visibility based on actual data, not averages



Report: Audit-ready ESG metrics

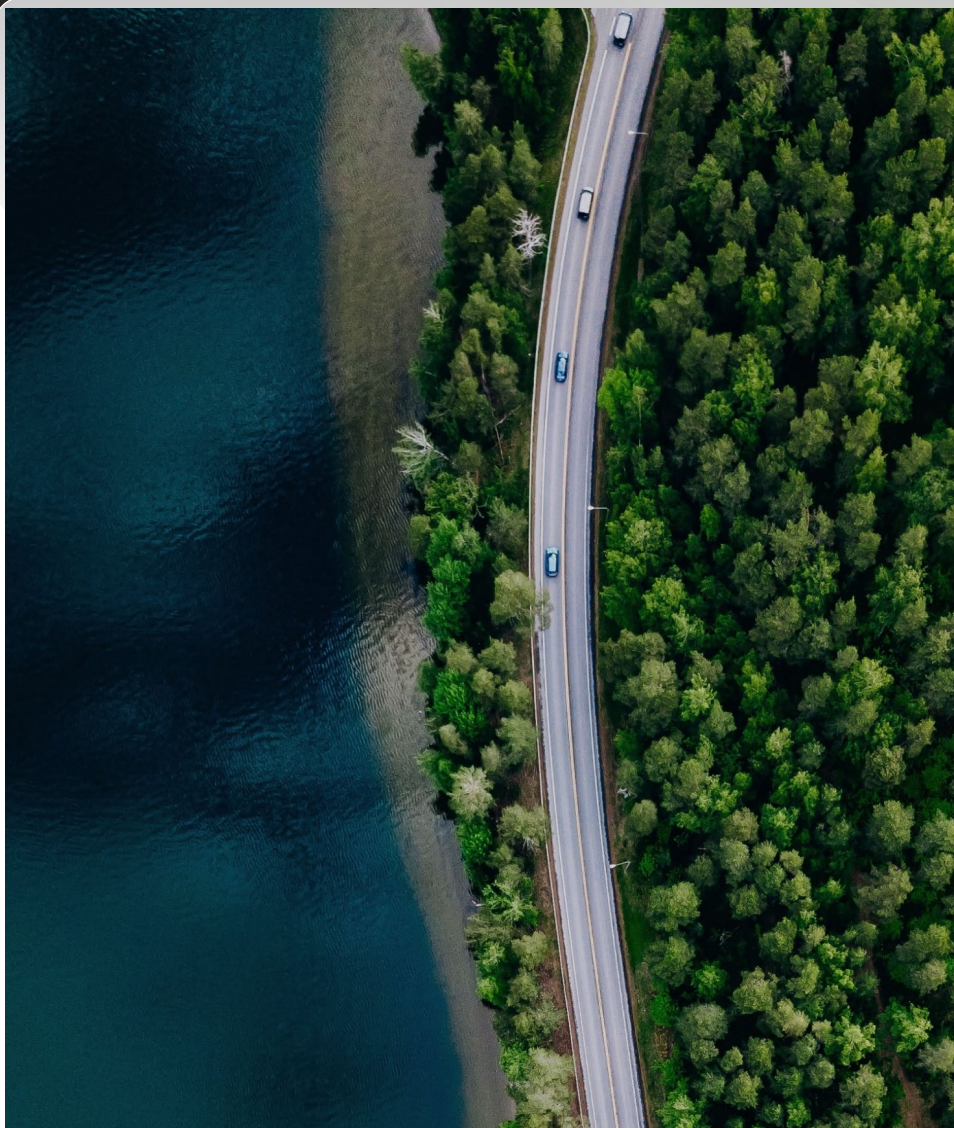
Report regulatory compliant ESG metrics covering common frameworks (e.g., GRI) based on an open & extensible solution with the largest ESG ecosystem



Act: ESG embedded business processes

Act by planning your future with actionable insights, forecasts and setting targets as well as tracking initiatives & changing business processes

We are the right partner for your Sustainability Journey



SAP Cloud for Sustainable Enterprises

- **Most comprehensive portfolio with holistic vision**
Embed sustainability into your business DNA with our **extensive range of solutions** while **evolving** towards a **Green Ledger**¹
- **Seamless E2E integration into business processes**
Leverage SAP systems² with embedded ESG solutions to **gather the required data** (scope 1-3) in good quality **along your supply chain**
- **Industry specific solutions & networks**
Knowing your **industry specific challenges** we provide the right solution & **connect you with the largest network**

Our Approach: Embed Sustainability into your DNA



SAP's approach is to **embed sustainability** into all aspects of the business. Insights into end-to-end processes and throughout business networks can provide efficiency gains, social responsibility and compliance, while mitigating risk. A holistic approach to sustainability can open up new business models and new markets





The goal is clear. We are aiming for zero emissions, zero waste, and zero inequality to help the **world** run better and **improve peoples lives.**

02

Industry Trends Drivers and Challenges



Sustainability & Climate Action - Industry Drivers and Challenges

Corporate View



Emissions

Drivers: Regulations and corporate targets

Challenges: Emissions calculations for scope 1,2 and 3 corporate carbon accounting; keeping track of current position vs carbon certificates, with full auditability and reporting to authorities



ESG

Drivers: Access to capital, investor or public demand

Challenges: Manual data collection for own corporate reporting and steering. Alignment with various ESG reporting frameworks. Managing risks for inbound suppliers. Managing relationships with stakeholders.

Supply Chain View



Product footprint

Drivers: Customer demand for sustainability footprint of a product

Challenges: Corporate emissions for a site versus the product-centric emissions intensity (or product footprint) that can be provided to a customer, or used for own benchmarking



Value chain transparency

Drivers: Consumer demand for 'green' products; Emerging regulations such as EU-CBAM, proof of origin for inbound supplies, German supply chain law

Challenges: No global standard or regulated framework to exchange data with business partners through value chain; technologies such as blockchain and consortia



Circularity

Drivers: Reduce waste and natural resource use, achieve decarbonization goals

Challenges: Tracking and verifying quantities and qualities of recycled or blended materials. Responsible design and production of products with circularity as goal. Supply and demand planning for scrap procurement & logistics

Profitability

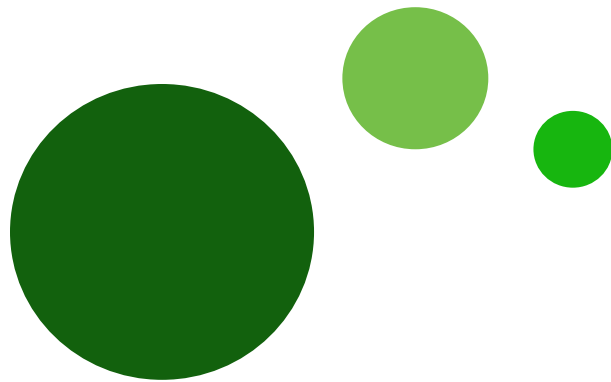


Costs, Value drivers

Drivers: How to get valuable and sustainable outcomes for all stakeholders, reduce costs/fees for energy, carbon pricing, border tax, transportation

Challenges: What is the impact of sustainability on business planning, what is the cost of producing sustainable products and what price is a customer willing to pay for it?

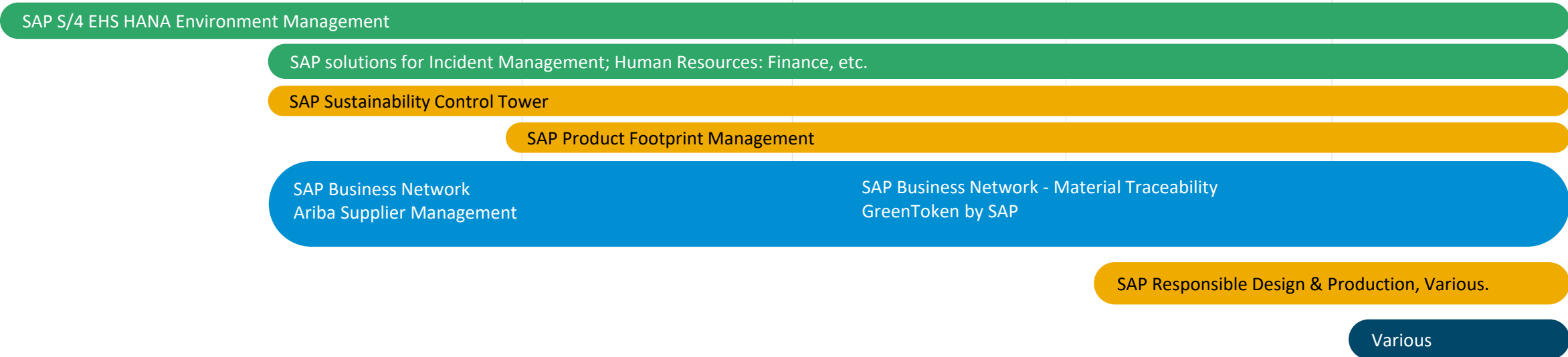
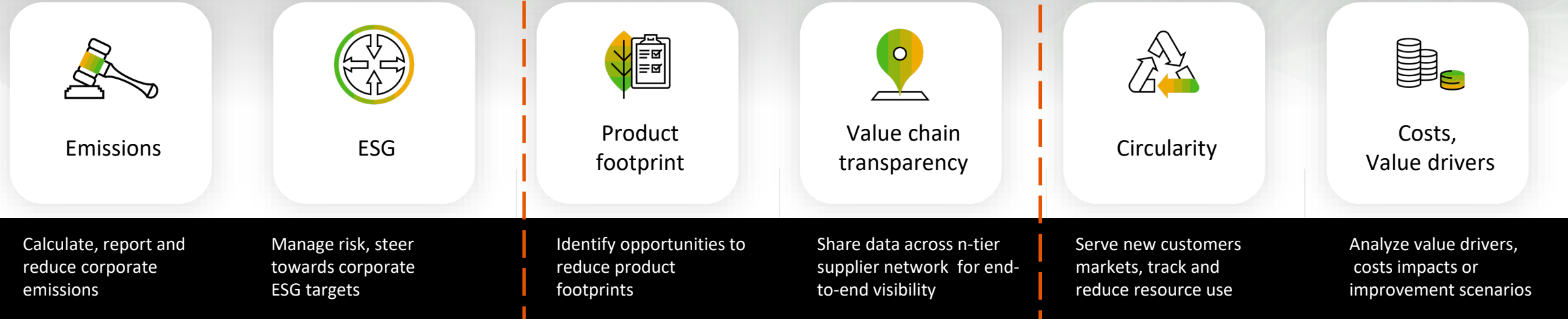
**What is your current focus?
What are your long-term goals?**



Sustainability & Decarbonisation - SAP Solutions as Foundation

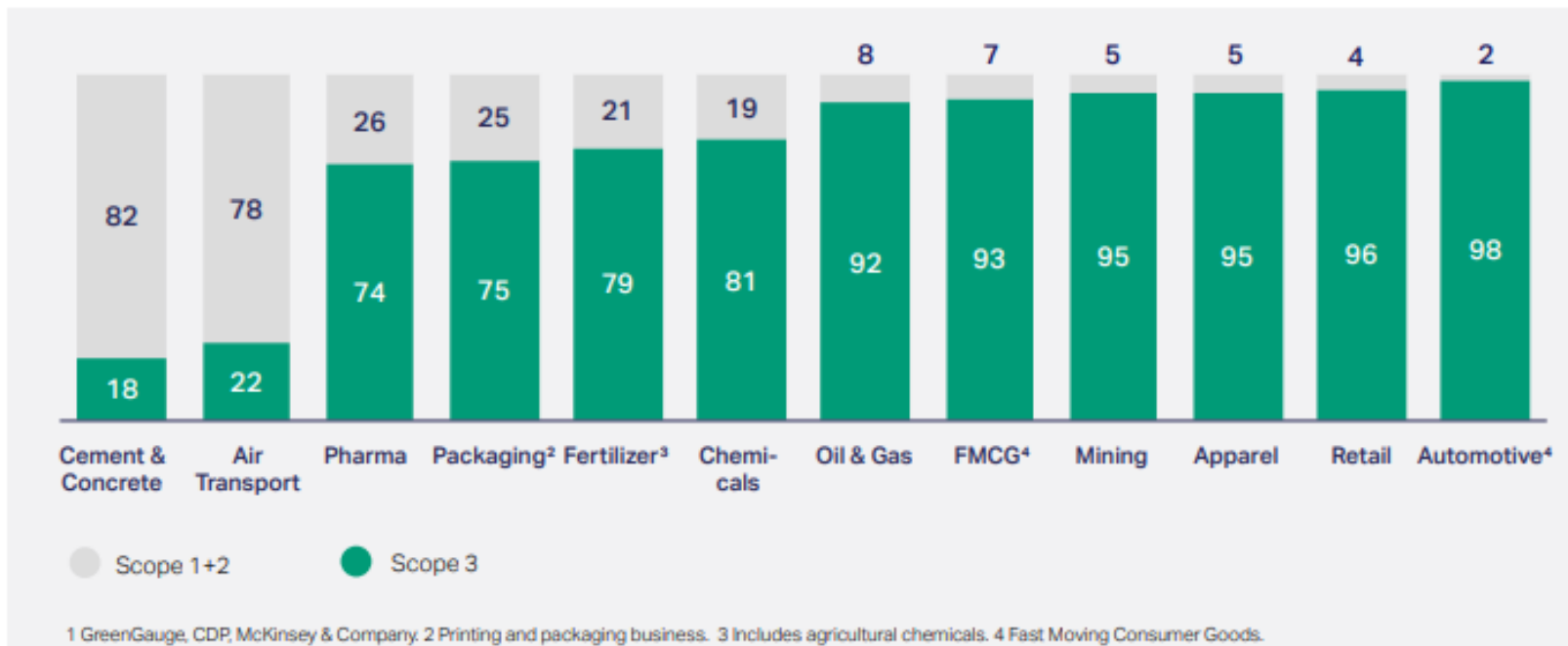
Building blocks toward a corporate roadmap for sustainability

Examples



Industries with highest scope 3 | Highly motivated to influence value chains

Figure 1: Percent of total Scope 1 to 3 emissions, 2019, based on self-reported CDP data⁶



- A significant % of the total comes from scope 3 emissions
- Industries are highly motivated to get greater transparency in their value chains
- Actuals rather than estimates are needed to drive change

03

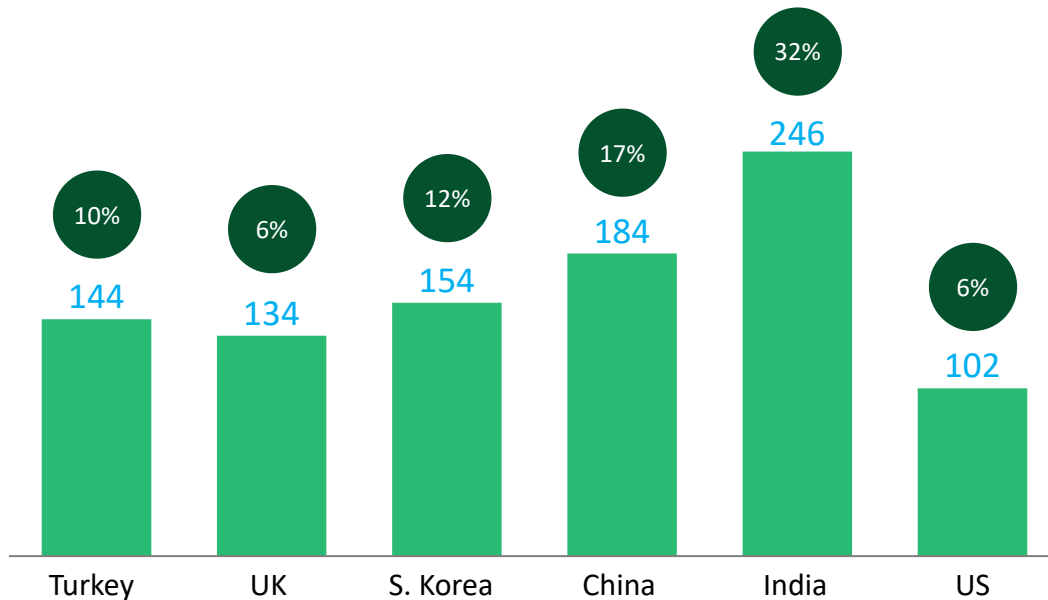
Regulatory vs Voluntary CBAM vs Green Products



Industries and
Customer Advisory

CBAM threatens margins and adds considerable business risks...

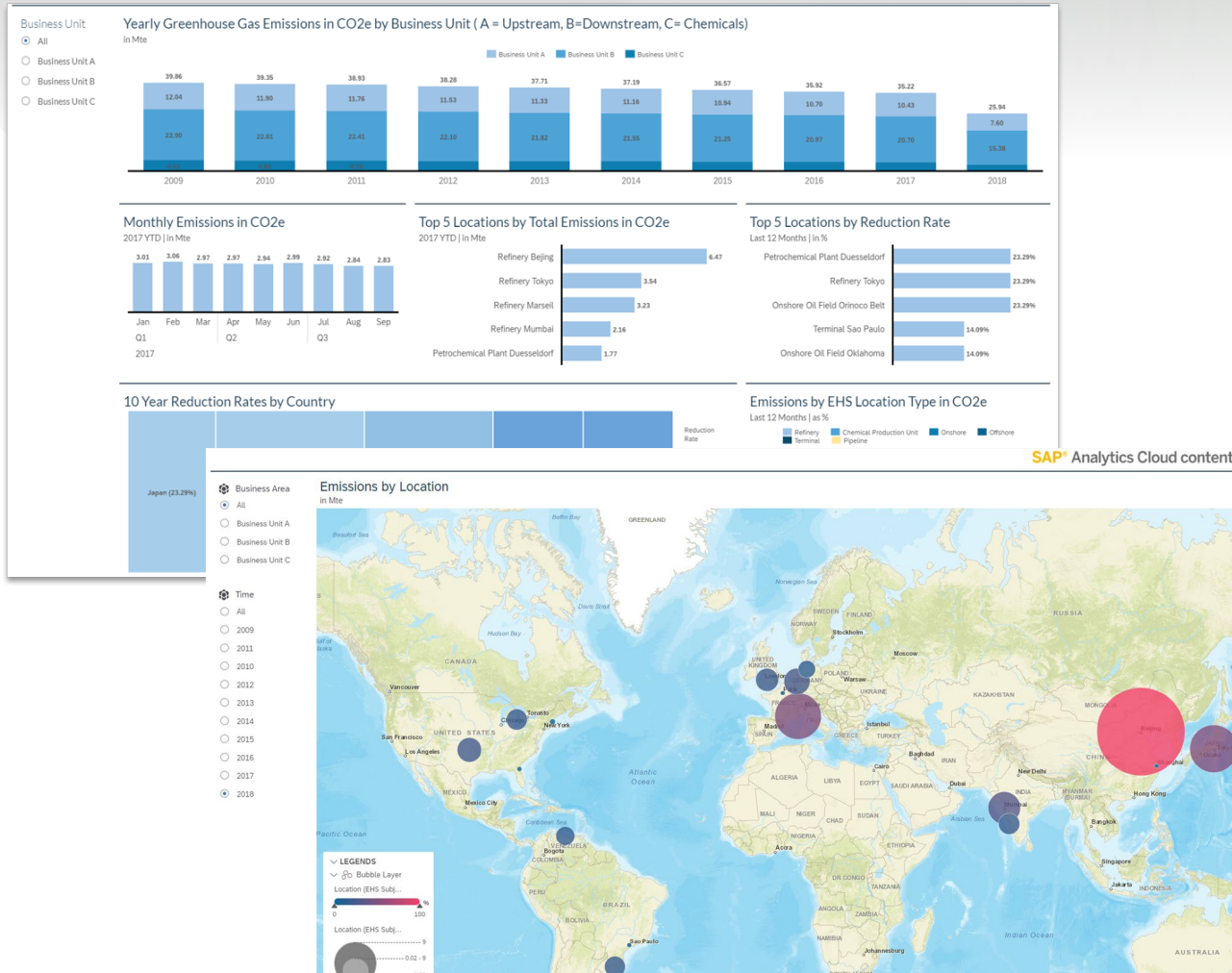
CBAM cost increase¹ for steel imports (€/ton)



1. Based on 100€/metric ton of CO₂ and 2019 steel trade values
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- ✘ **Reduced margin** | E.g., poor tariff engineering adds duty cost to customer, reduces EBIT
- ✘ **Reduced market share** | E.g., import tariff costs make exported product less competitive
- ✘ **Lost Sales** | E.g., inability to deliver at previously agreed time/price leads customer to competitor
- ✘ **Failed M&A** | E.g., DD reveals export controls liability, makes Target transaction non-viable
- ✘ **Higher SG&A** | E.g., drawn-out legal advisory and customs compliance costs
- ✘ **Higher working capital** | E.g., failure to mitigate tariffs results in excess inventory

... but could offer a **lasting competitive advantage** for early adopters



Quantify emissions and **determine problem areas early**



Simulate scenarios for supply chain emission improvements



Gain a cost advantage by implementing changes before 2026



Differentiate from the competition as a **sustainability leader**



Ensure reporting compliance at product level to avoid border delays



What is the Future for Emissions in the Value Chain?

Looking to the Future

How Industry is impacted by new Regulations and Standards

Current Trends:

- ❑ Consumer demand for 'Green Products'
- ❑ Investor pressure on scope 3 emissions



The reality:

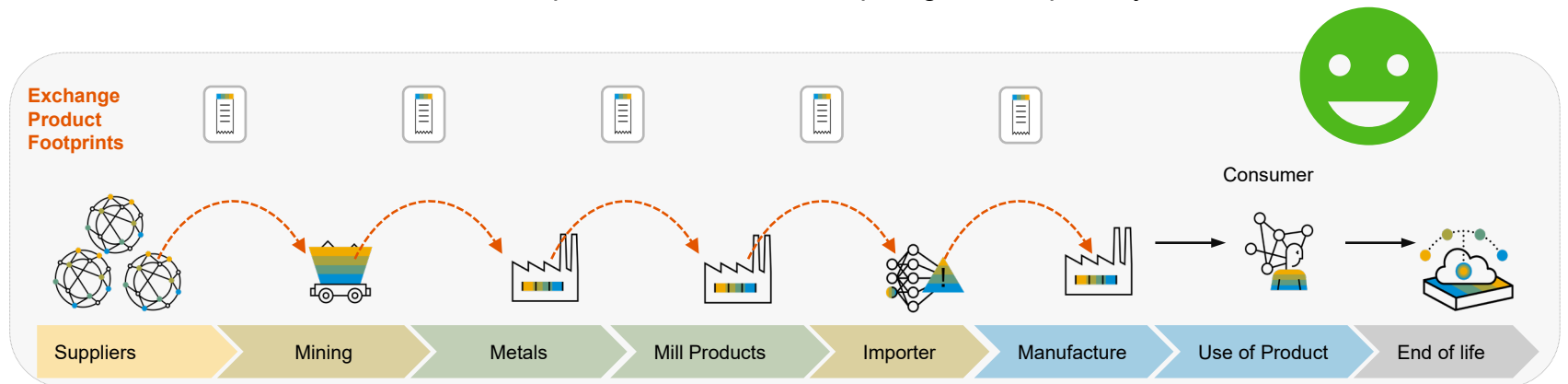
- ❑ Scope 3 is inaccurate, based on estimates
- ❑ Methods for Products are inconsistent

There is a major shift underway

To solve these challenges, we need a completely new way of thinking about emissions

Looking to the Future:

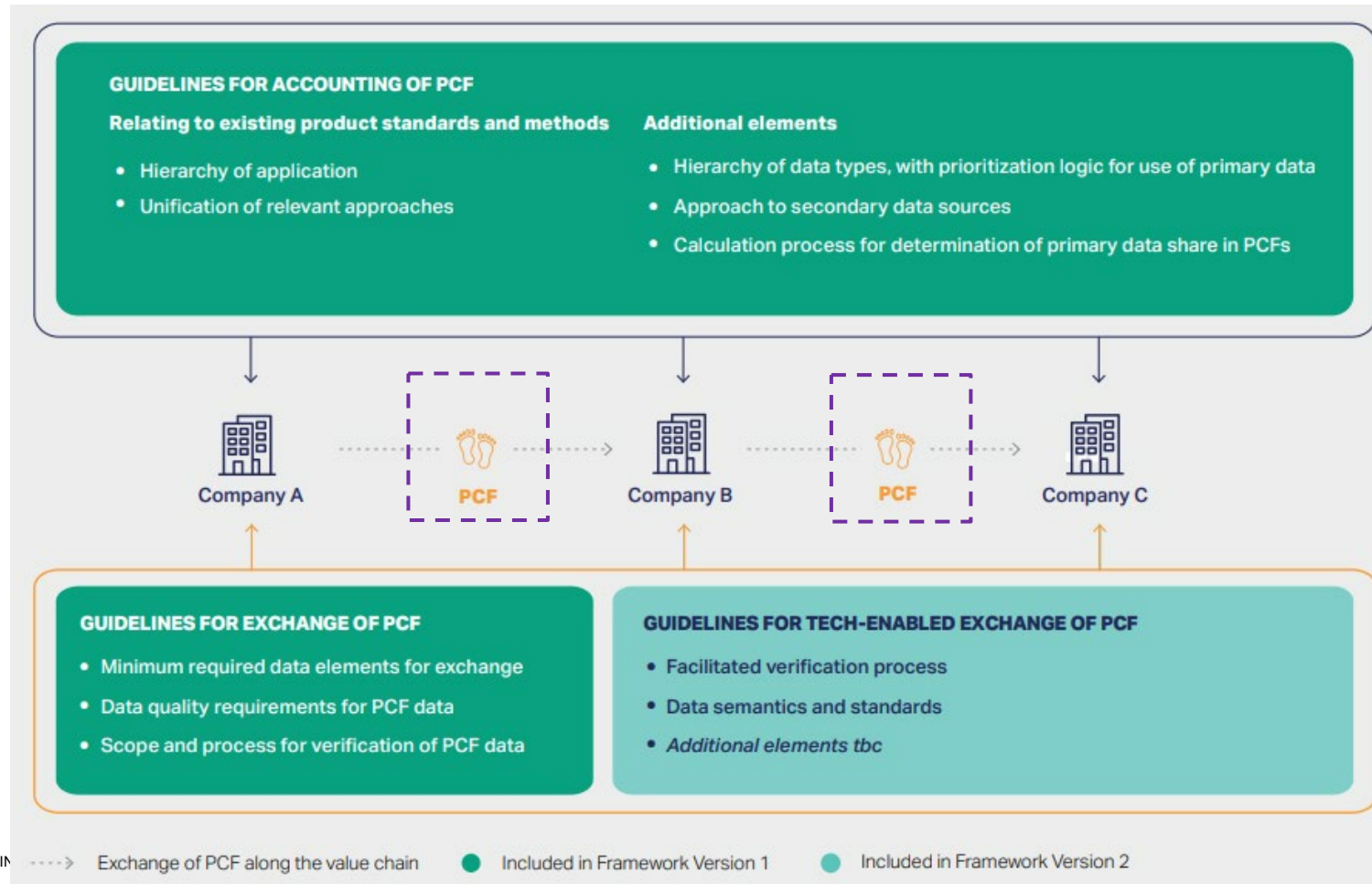
- ❑ EU-CBAM regulation will have a financial impact and affect buyer decisions
- ❑ A new GHG Protocol standard is expected for Products, requiring verified primary data



Call to Action | Get involved in Emerging Standard for Product Emissions

Emerging Standard

[Why do you need to know about Pathfinder and PACT - Partnership for Carbon Transparency?](#)



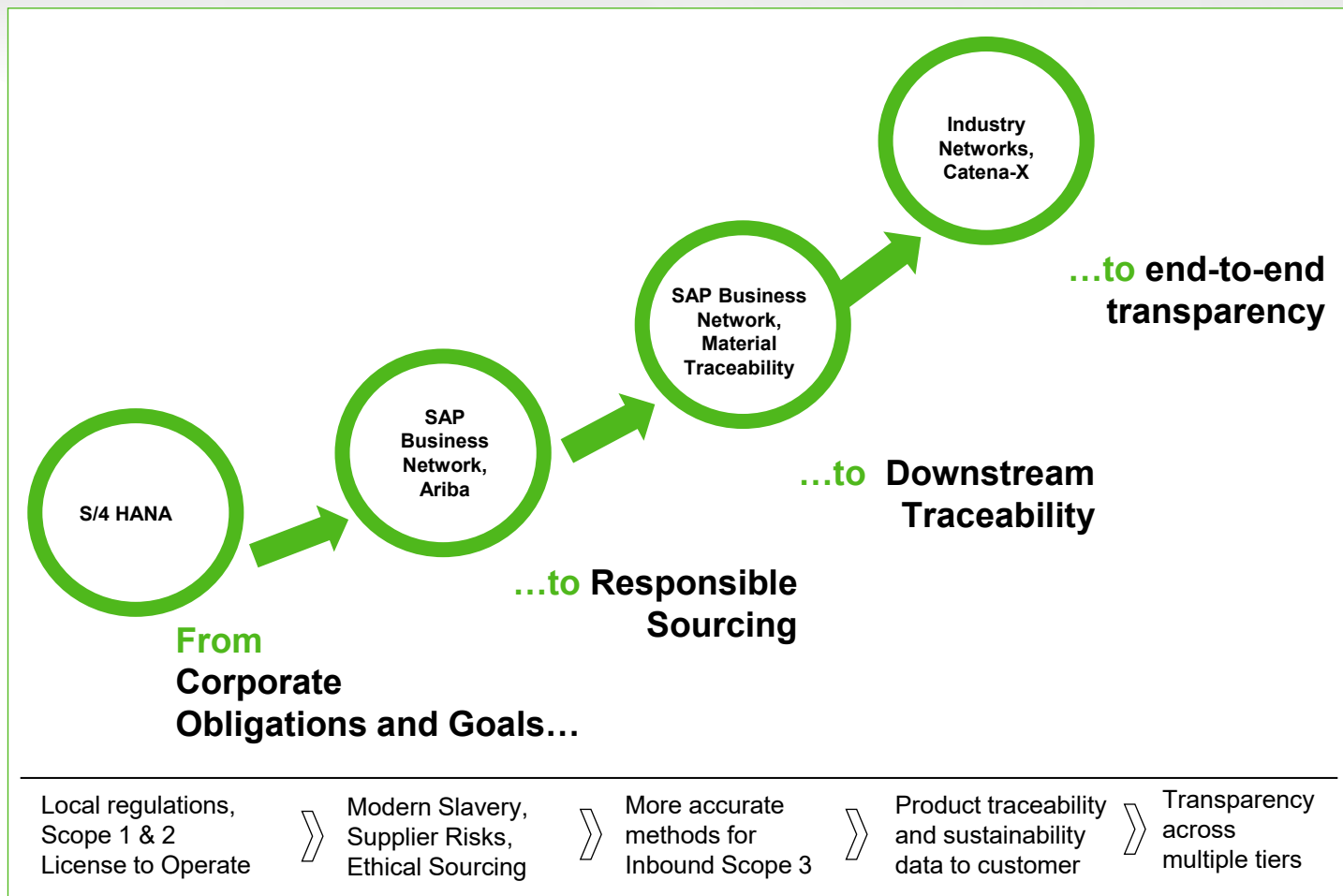
SAP's role is to contribute as a technology partner



Source: WBCSD, Version 1

The Future of Sustainability is Build On Networks

Networks are needed to exchange sustainability data, not only 1:1 but across multiple tiers



Why Networks are Essential:

- There is a clear current need for trusted sustainability data transfer between **Suppliers to Buyers**, with Networks at the core of their businesses
- Emerging **Regulations and Standards** will require verified Product footprint data to be shared via a networked approach
- Industry Business Networks such as Catena-X is the next evolution of collaboration and **multi-tier transparency** that will allow producers to show proof of sustainable products

Our vision



Enable every enterprise to become an intelligent, sustainable enterprise



Bring enterprises together into a global business network



Create a sustainable world together

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