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giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

AHK Delegation der Deutschen Wirtschaft in Bosnien und Herzegowina
Predstavništvo njemačke privrede u Bosni i Hercegovini

Fit for Sustainable Supply Chain in Europe

A holistic and practical approach to how purchasing can systematically integrate sustainability into its strategies and practices

IPG Masterclass

INNOVATE · PERFORM · GROW

Sustainable Procurement

G6 – NH Tool Guide

IPG PARTNERS GROUP

Tuesday, February 10th
Day 1 – Morning: Module 5

09:00 – 12:00

1 — 09:00 – 09:15

Fit for Sustainable Supply Chain in Europe

– welcome & introduction

2 — 09:15 – 10:45

Module 5 - introduction

SUS supply chain analysis –
5-phase methodology

10:45 - 11:00

3 — 11:00 – 12:00

M5 - Sprint

SUS supply chain analysis –
Team SaraCook & Team BosnaCool

Tuesday, February 10th
Day 1 – Afternoon: Module 6

13:00 – 17:00

4 — 13:00 – 13:45

Module 5 - Sprint review

Team Presentations –
Team SaraCook & Team BosnaCool

5 — 13:45 – 14:45

M6 - introduction

ToolMap Taxonomy and Tool introduction

14:45 –15:00

6 — 15:00 – 16:00

M6 - Sprint

Tool prioritization & selection –
Team SaraCook & Team BosnaCool

7 — 16:00 – 17:00

M6 – Sprint review

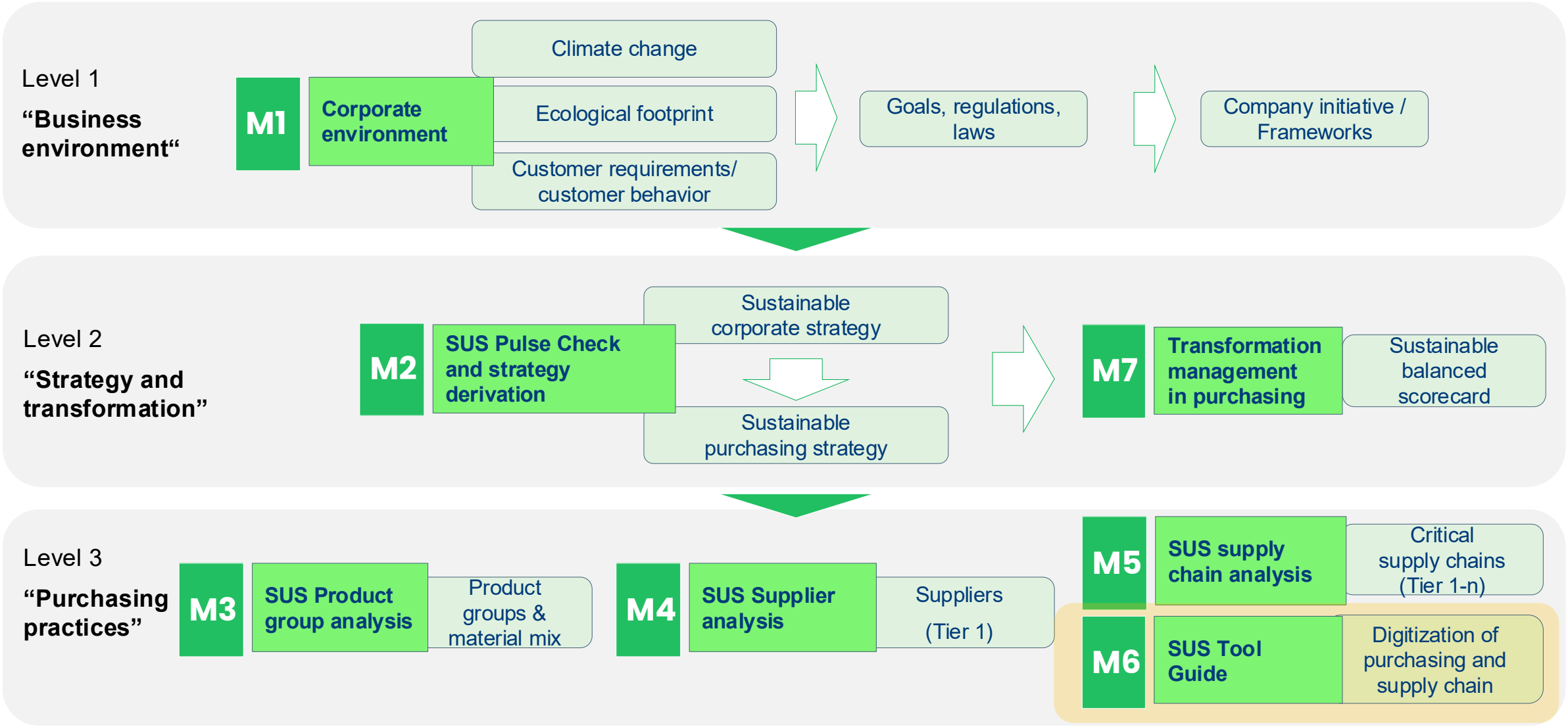
Team Presentations –
Team SaraCook & Team BosnaCool

Wrap-up Day 1 & Outlook Day 2

Questions & comments | Coffee break | All times given are indicative and may vary.

CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

Module interfaces | IPG´s sustainable procurement excellence training systematically addresses important interfaces between corporate level and purchasing practices



Source: IPG

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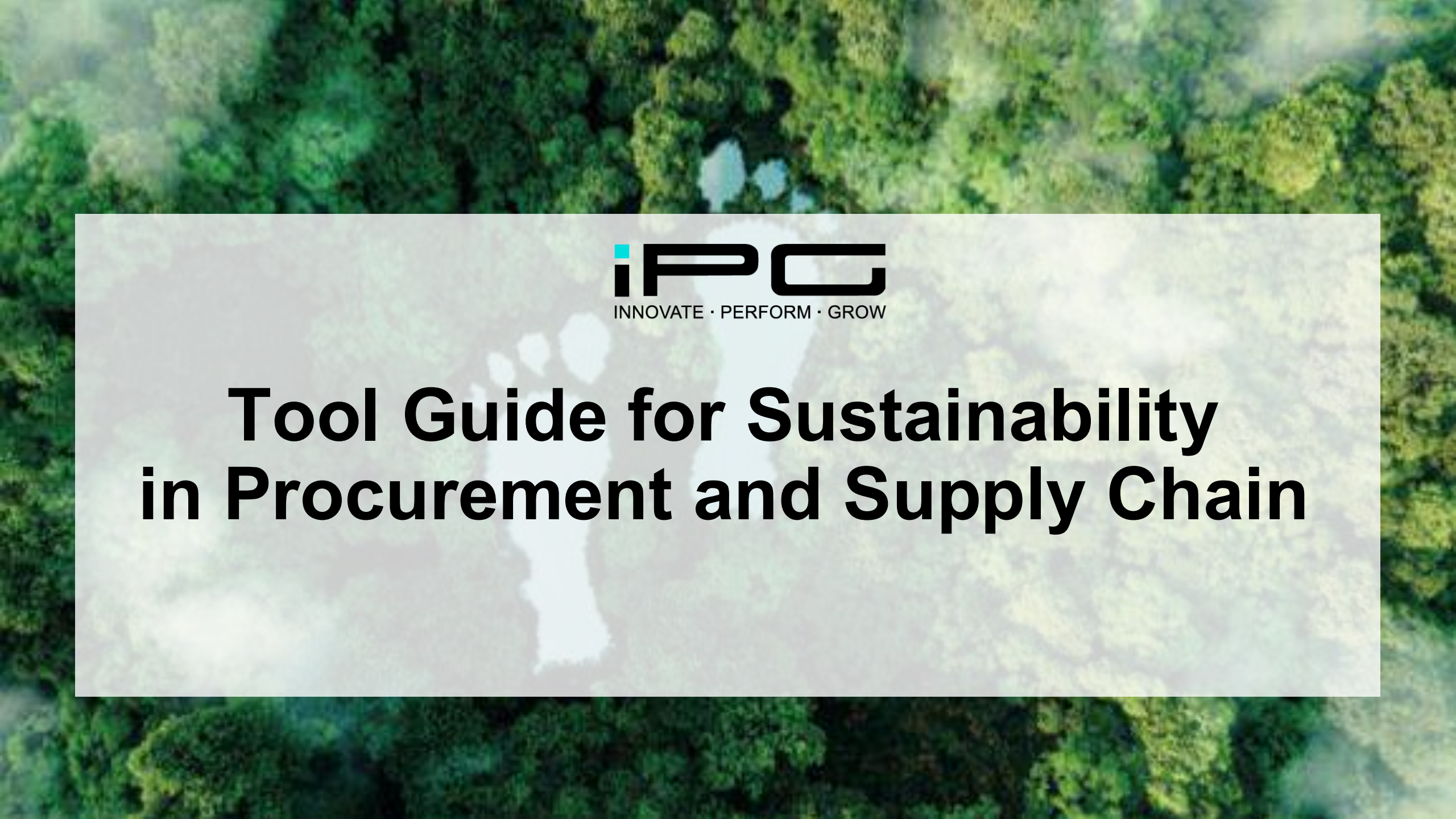

INNOVATE · PERFORM · GROW

Tool Guide for Sustainability in Procurement and Supply Chain

Role models in digital procurement | Six roles shape the future of procurement

BUSINESS INNOVATION INTEGRATING THE RIGHT PARTNERS	EFFICIENCY DOING THINGS RIGHT	EFFECTIVENESS DOING THE RIGHT THINGS
"Agile"	*Lean*	*"Connected"*

Procurement as a service-oriented business model

- Central hub for **insights and forecasts**
- Sees itself as **an internal service provider** that offers its customers its customers **efficient, digital new services**
- **Prediction**
- **Process tracking**
- **Training courses**
- **Plug & Play** upon purchase
- **Services for third parties**

Category efficiency leader

- **Cross-functional expense management** on a digital platform
- **Collaboration** with relevant departments
- Consideration of procurement aspects in **early development phases**
- Develop **flexible models** for **cost-conscious design** in real time
- **business scenarios for ad hoc minimization of component** and **material complexity**

Lifecycle sustainability manager

- Combines future **environmental and regulatory requirements** with its **knowledge of the supply network**
- Integrates **sustainability into category strategies** and **procurement processes**
- Takes responsibility for **assessing the sustainability risks** of suppliers and supply chains
- Develops **cost-benefit analyses** for sustainable alternatives

Innovation partner manager

- Identification and evaluation of **external trends, ideas, and innovations**
- Develops product and **service innovations in cross-functional teams**
- Establishment of a **cross-innovation ecosystem** and bringing together **innovative start-ups** with relevant investors
- Promotes the **development of new partnerships** with selected strategic suppliers/partners

Transactional champion

- **Focus on P2P as** a **fully automated** process through digital technology and **replacement of human labor** (order processing, requesting goods and DL, validating material receipts, paying invoices, etc.)
- Use of AI for **data generation and analysis in transactions**
- Establishing AI tools as **digital assistants** to **transfer human interaction into routines** with minimal time expenditure

Supplier & supply chain tower

- Establish **stable and efficient supplier relationships**
- Has a coherent and integrated understanding of **vertical and horizontal value chains**
- Creates transparency **across Tier 1 suppliers along the supply chain**
- Development of an early warning system through **resilient network design** and **proactive risk management.**
- Brings together partners in a value chain on **a digital platform**
- Uses AI for **advanced supply chain analytics**

Source: IPG Research

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Effectiveness
Lifecycle Sustainability Manager

- Combines future **environmental and regulatory requirements** with his **knowledge of the supply network**
- Integrates **sustainability into category strategies** and **procurement processes**
- Takes responsibility for **assessing the sustainability risks** of suppliers and supply chains
- Develops **cost-benefit analyses** for sustainable alternatives

Digital tools

Practical examples

Digital purchasing tools | Digitalization enables the implementation of completely different digital (AI) use cases and tools for every purchasing role

BUSINESS INNOVATION
INTEGRATING THE RIGHT PARTNERS

"Agile"

Purchasing as a service-oriented business model
- Procurement Business Model Innovation

Innovation partner manager
1. Design-to-Source (D2S) Automation
2. Target Costing
3. Product Lifecycle Management (PLM)
4. Technology / Trend Radar
5. Innovation Management Platform
6. Supplier Innovation Platform
7. Agile Project Management
8. Online Workshop Tools

EFFICIENCY
DOING THINGS RIGHT

"Lean"

Category efficiency leader
1. Market Data Intelligence
2. Automatic trend analysis
3. Spend & Data Analytics
4. Purchasing Data Categorizer
5. Category Strategy & Scenario Development
6. Intelligent Spend & Category Management
7. Collaboration
8. Interactive Learning
9. Vendor Management System (VMS)
10. …

Transactional champion
1. Multidomain MDM/iPaaS
2. Digital Assistant / Procurement ChatBot
3. Supplier Discovery Management
4. Autonomous Sourcing
5. AI Analysis of Technical Drawings
6. B2B Marketplaces
7. Multi-Catalog Search & Comparison
8. On-demand parts sourcing
9. AI-supported negotiation preparation
10. Autonomous Negotiations
11. Contract Analysis
12. Source-to-Pay (S2P) Automation
13. Source-to-Contract (S2C) Automation
14. Intake Management
15. Delivery Date Estimation (DDE)
16. Automated Invoice Lifecycle Management
17. Invoice Coding, Routing & Approval
18. Procure-to-Pay (P2P) Process Automation
19. Automated PO verification
20. Automated OC processing
21. Process Mining

EFFECTIVENESS
DOING THE RIGHT THINGS

"Networked"

Sustainability manager
1. **Sustainable Supplier Evaluation**
2. **Sustainable Supplier Risk Management**
3. **Inventory Management**
4. **On-demand/On-location Parts Manufacturing**
5. **Sustainable Supply Chain Evaluation**
6. **Sustainable Supply Chain Risk Management**
7. **Blockchain-based Supply Chain Visibility**
8. **Circular Economy Management/ Waste Reduction**
9. **Sustainability Enterprise Management**
10. **Enterprise ESG Analytics**
11. **Scope 3 Carbon Management/Product Carbon Footprint Calculation**
12. **Carbon Compensation & Offsetting**
13. **…**

Supplier and SC tower
1. Supplier Relationship Management (SRM)
2. Third Party Risk Management (TPRM)
3. One GRC Platform incl. TPRM
4. Contract Lifecycle Management (CLM)
5. Demand Forecasting
6. Continuous Supply Chain Planning
7. Supplier Information Management (SIM)
8. Supplier Performance Management (SPM)
9. Supplier Qualification Management
10. Supplier Quality Management (SQM)
11. Digital Supply Chain Twin
12. Inventory Management/Optimization
13. Working Capital Optimization
14. Supplier Development & Controlling
15. …

Source: IPG

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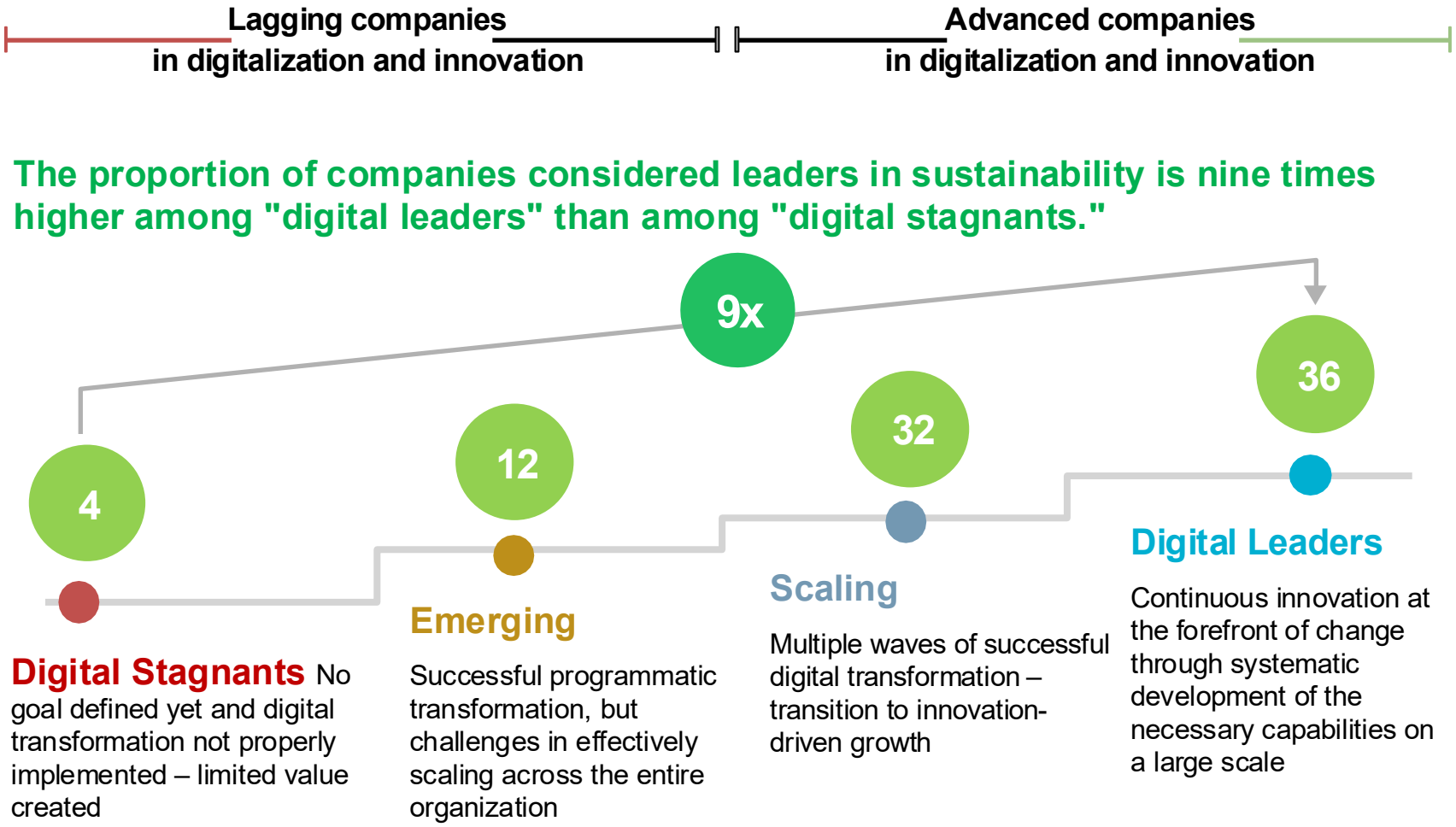
What sets sustainability leaders apart | Sustainability leaders develop clear sustainability advantages through digitalization and innovation

Characteristics of sustainability leaders in purchasing

- **Priority**: Since achieving sustainability goals is very important to these companies, they are also **willing** to **invest more in sustainable procurement** and improving supply chain transparency
- **Holistic:** Executives take a **more holistic** view of sustainability, i.e., as **an integral part** of their supply chain management
- **Tools:** They are able to use a **broader range of tools** for sustainable procurement



% Share of sustainability leaders: Share of companies that can be considered leaders in sustainability

Source: BCG, n = 189, global

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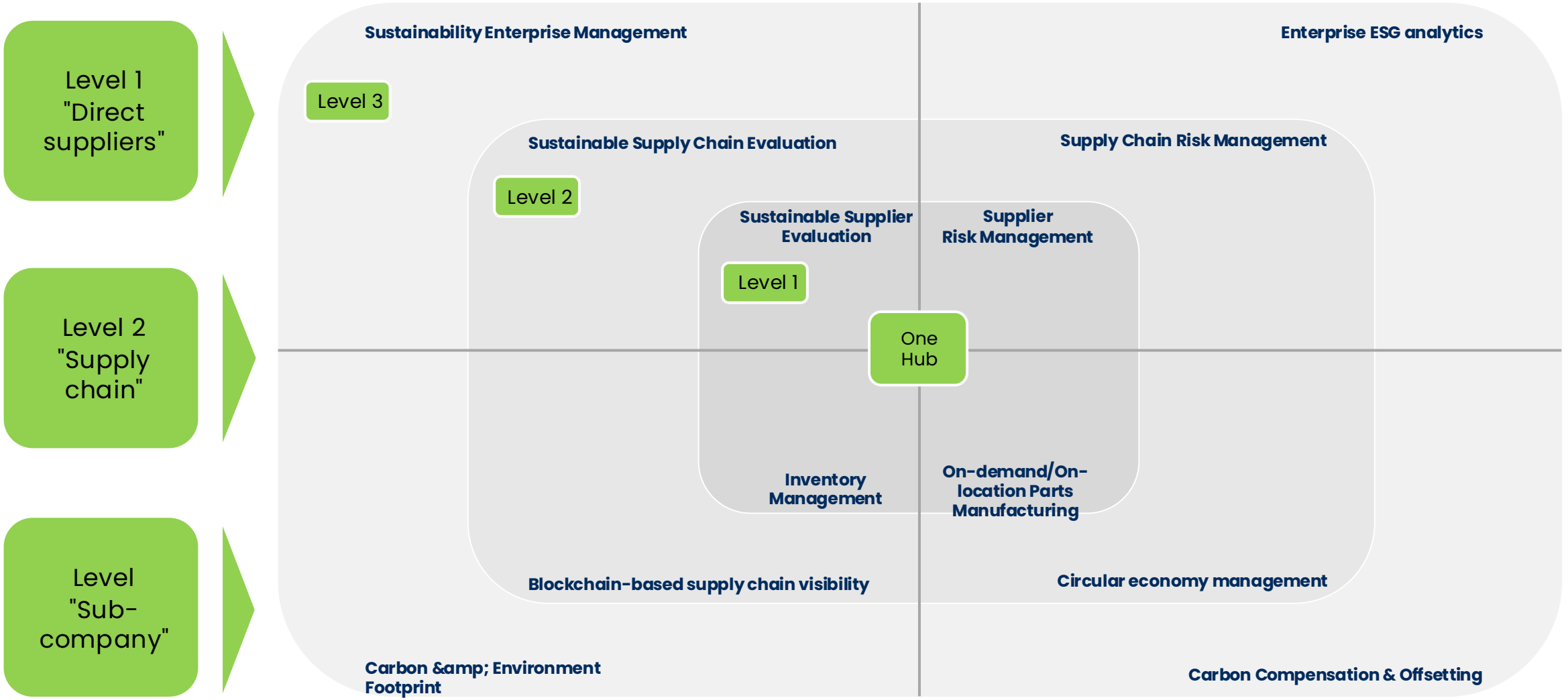
IPG DIGITAL TOOL MAP | IPG distinguishes between 12 different tool clusters for sustainability in purchasing and SCM



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Source: IPG Research, PPE Benchmarking PPE ≈ Procurement Performance Excellence @ IPG

IPG DIGITAL TOOL MAP | Twelve digital solution spaces shape the "Lifecycle Sustainability Manager"

Lifecycle sustainability manager

Lifecycle sustainability manager

3.1 Sustainability enterprise management

Software application or process for integrating sustainability principles into a company's business activities, management, and strategy with the aim of creating long-term value for the company and society.

3.2 Enterprise ESG Analytics

Software application or process for analyzing and evaluating a company's environmental, social, and governance (ESG) performance, practices, and impact using data-driven methods and tools.

2.1 Sustainable Supply Chain Evaluation

Software application or process for assessing and analyzing the environmental, social, and economic impacts of an entire supply chain across all tiers to ensure that sustainable practices are integrated into the life cycle of goods and services.

2.2 Sustainable Supply Chain Risk Management

Software application or process for identifying, assessing, and mitigating risks within the entire supply chain in relation to environmental, social, and economic factors to ensure that sustainable practices are adhered to.

1.1 Sustainable Supplier Evaluation

Software application or process for evaluating suppliers or approving potential suppliers based on quantitative and qualitative assessments with a focus on sustainability practices

1.2 Sustainable Supplier Risk Management

Software application or process for assessing and managing risks in the supply chain with a focus on sustainability practices at tier 1 suppliers, including environmental, social, and governance (ESG) requirements.

Hubs

Software application or process for measuring and monitoring the total greenhouse gas emissions and environmental impact of a product, service, person, organization, or country, usually expressed in carbon dioxide equivalents.

Software application or process based on blockchain technology to improve transparency, traceability, and trust within supply chains by creating a decentralized and immutable ledger that records and securely stores transactions, enables real-time visibility into supply chain operations, and ensures the authenticity and reliability of supply chain data.

Software application or process used to track and control inventory throughout the supply chain, from purchasing to production to final sale.

Software application or process that manufactures parts and products on demand and at the location where they are needed. This often involves the use of technologies such as additive manufacturing (3D printing) to produce components quickly and efficiently.

Software application or process for the sustainable management of resources and products with the aim of minimizing waste and maximizing resource efficiency. It involves rethinking business models, products, and services from a circular perspective and developing strategies for innovation and overcoming real challenges in circular products and processes.

Software application or process for offsetting greenhouse gas emissions by investing in projects that reduce, avoid, or eliminate emissions elsewhere, often measured in carbon credits or offset credits equivalent to a reduction of one ton of carbon dioxide equivalent.

1.3 Inventory Management

1.4 On-demand/ Additive Manufacturing

2.3 Blockchain-based Supply Chain Visibility

2.4 Circular Economy Management

3.3 Carbon & Environment Footprint Tracker

3.4 Carbon Compensation & Offsetting

Source: IPG Research, PPE Benchmarking PPE ≈ Procurement Performance Excellence @ IPG

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IPG DIGITAL TOOL MAP | The number of digital tools for lifecycle sustainability managers is growing rapidly – there are currently over 150 solution providers.

Status Sep. 2025

Source: IPG Research, PPE Benchmarking PPE ≈ Procurement Performance Excellence @ IPG

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IPG DIGITAL TOOL MAP | Taxonomy - Lifecycle Sustainability Manager – use cases Level 1

Lifecycle sustainability manager

Lifecycle Sustainability Manager

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3.3 Carbon & Environment Footprint Tracker

Software application or process for measuring and monitoring the total greenhouse gas emissions and environmental impact of a product, service, person, organization, or country, usually expressed in carbon dioxide equivalents.

2.3 Blockchain-based supply chain visibility

Software application or process based on blockchain technology to improve transparency, traceability, and trust within supply chains by creating a decentralized and immutable ledger that records and securely stores transactions, enables real-time visibility into supply chain operations, and ensures the authenticity and reliability of supply chain data.

1.3 Inventory Management

Software application or process that tracks and controls inventory throughout the supply chain, from purchasing to production to final sale.

1.4 On-demand/ Additive manufacturing

Software application or process that manufactures parts and products as needed and where they are needed. This often involves technologies such as additive manufacturing (3D printing) to produce components quickly and efficiently.

2 Circular Economy Management

Software application or process for the sustainable management of resources and products with the aim of minimizing waste and maximizing resource efficiency. It involves rethinking business models, products, and services from a circular perspective and developing strategies for innovation and overcoming real-world challenges in circular products and processes.

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Software application or process for offsetting greenhouse gas emissions through investments in projects that reduce, avoid, or eliminate emissions elsewhere, often measured in carbon credits or offset credits equivalent to a reduction of one ton of carbon dioxide.

Source: IPG Research, PPE Benchmarking PPE ≈ Procurement Performance Excellence @ IPG

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Sustainable Supplier Evaluation (assess status)

1.1

Sample description

› Improving the planning, execution, and quality control of sustainability issues in the supply chain depends on **monitoring and optimizing supplier performance**, which is difficult but necessary.

› To assess **suppliers' sustainability performance** and optimize communication with them, companies need reliable **supplier assessment software.**

› With the help of supplier assessment forms and **supplier scorecards**, companies can get the most out of their supplier performance management.

IPG ToolMap

Lifecycle sustainability manager

1. **Sustainable Supplier Evaluation**
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3. Inventory Management
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12. Carbon Compensation & Offsetting

Examples

greenly

TealBook

BENCHMARK ESG™ | Gensuite®

Focus

› Enhanced **control and monitoring** of those involved in the supply chain (focus on Tier 1 level).

Advantages

› Rapid **identification of reputation risks** posed by suppliers

› **Suppliers take responsibility** for their own performance and activities, as partnerships are established within a transparent framework

› **Provision of catalogs of measures** to combat bribery and corruption and to ensure information security

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Source: IPG Research

Sustainable Supplier Risk Management (Tier 1 level) – Collaboration

1.2

Sample description

› Digital solutions for **identifying, assessing, and managing risks associated with direct suppliers (Tier 1)**, particularly with regard to environmental, social, and regulatory requirements (ESG).

› Digital solutions enable **potential sustainability risks** to be **identified at an early stage and systematically minimized**.

› The software enables **ongoing monitoring of supplier risks**, provides real-time risk analysis, and supports the implementation of measures to improve sustainability performance.

IPG ToolMap

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Examples:

ecovadis SUPPLIER SUSTAINABILITY RATINGS

cority

SUPPLYSHIFT

Focus:

› **Identification and mitigation of procurement risks**

Advantages:

› Reduction of sustainability and reputational risks
› Improved compliance with regulatory requirements
› More efficient use of resources through risk-based supplier management

CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

Source: IPG Research, PPE Benchmarking PPE ≈ Procurement Performance Excellence @ IPG

Inventory Management

1.3

Sample description

› An **inventory management system** helps all types of companies automate their inventory processes, work efficiently, and increase their profits.

› **Inventory optimization**, **in the sense of minimizing inventory** through the use of virtual warehouses, etc., along the supply chain also **supports sustainability goals (including obsolescence and associated waste).**

› Inventory management involves tracking incoming and outgoing products and deliveries.

› Inventory management software **automates the process of tracking, reordering, and updating inventory**. It can be integrated into relevant business systems such as POS systems and accounting software. This allows all inventory-related processes to be streamlined.

IPG ToolMap

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Examples:

FISHBOWL

CIN7

inFlow

Focus:

› Optimization of inventory levels

› Inventory listing and inventory management **along the procurement value chain**

Advantages

› **End-to-end transparency** of inventory along the entire value chain

› Simplified inventory management

› Accurate planning and inventory reconciliation

› Warehouse organization and employee efficiency

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Source: IPG Research

On-demand/on-location parts manufacturing

1.4

Sample description

› **On-demand manufacturing is** not about producing parts with large minimum order quantities and storing these goods in a warehouse, but rather about **producing only what customers need** when they need it **("on demand")**.

› By using an **on-demand platform**, buyers can **avoid** the **costs of setting up a supply chain for a new product**, as the platform automatically manages this process, reducing internal costs and the number of employees.

› The additive manufacturing process **drastically reduces material consumption** in the manufacturing process.

› Purchasers can **minimize** their **inventories** and thus also **pursue sustainability goals**.

IPG ToolMap

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Examples:

SpareParts 3D

Xometry

Focus:

› 3D printing of spare parts on site or nearby

Advantages

› Fast, single-step production
› Customization (more design freedom)
› Reduced inventory
› Cost reduction (lower machine, material, and labor costs)

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Source: IPG Research

IPG DIGITAL TOOL MAP | Taxonomy - Lifecycle Sustainability Manager – use cases Level 2

Lifecycle sustainability manager

Lifecycle Sustainability Manager

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2 Circular Economy Management

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Source: IPG Research, PPE Benchmarking PPE ≈ Procurement Performance Excellence @ IPG

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Sustainable Supply Chain Evaluation (status mapping)

2.1

Sample description

› The software for **assessing sustainability in the supply chain** enables companies to make decisions throughout the entire supply chain.

› It enables them **to track** the **sustainability risks of suppliers and sub-suppliers**.

› Through the platform, they can **determine whether their suppliers are implementing measures to address sustainability issues**.

› It is an intuitive, **secure platform** used **by sustainability officers and supply chain managers**.

IPG ToolMap

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Examples:

Transparency-One

SUPPLYSHIFT

Achilles

Focus

› Companies are informed about the **origin of all components of the product**.

Advantages:

› **Knowledge of the origin of all materials and components used in the product**
› Green marketing based on social responsibility
› Monitoring supplier diversity and compliance with social standards
› Partial carbon footprinting and measurement of Scope 3 emissions

Case study

› CaixaBank, one of Spain's largest banks, is working with Achilles to improve ESG criteria in its supply chain
› https://www.achilles.com/industry-insights/caixabank-is-improving-suppliers-esg-credentials-using-achilles/

by: Achilles

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Source: IPG Research

Sustainable supply chain risk management (collaboration at Tier n level)

2.2

Sample description

- Modern risk management solutions in purchasing help companies identify, assess, and manage **risks in the supplier and procurement environment** at an early stage.
- They provide transparency on **financial, operational, regulatory, geopolitical, and ESG risks** and enable strategic risk hedging.
- **TPRM** is integrated throughout the entire process to identify, monitor, and manage risks at an early stage.
- Risk management is not a module, but a **continuous control system in the S2P process**, ideally supported by automated, data-driven tools.
- It increases **resilience**, ensures **compliance,** and **protects reputation and business continuity**.

IPG ToolMap

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Examples: Prewave NAVEX everstream ANALYTICS ARAVO

Advantages:

› **Transparency** of risks across the entire supply chain (including sub-tier suppliers)
› **Early warning system** for geopolitical, financial, operational, and ESG risks
› **Compliance security** through automatic monitoring of regulatory requirements
› **Increased efficiency** through a central platform for risk identification, assessment, and monitoring
› **Supply continuity** through timely detection of disruptions and bottlenecks
› **Reputation protection** by avoiding scandals and negative headlines
› **Better basis** for decision-making in supplier selection, evaluation, and development

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Source: IPG Research, PPE Benchmarking PPE ≈ Procurement Performance Excellence @ IPG

Supplier Relationship Management (SRM) | Use cases in detail

1. Supplier Discovery Management (SDM)
2. Supplier Information Management (SIM)
3. Supplier Performance Management (SPM)
4. Supplier Relationship Management (SRM)
5. Supplier Risk & Compliance Management (SCRM / TPRM / GRC)
6. Supplier Qualification Management
7. Supplier Quality Management (SQM)

Monitoring of risks, regulatory requirements, and third-party risks in the supply chain

1. Supplier Risk Assessment
2. Compliance Monitoring & Sanctions Screening
3. Geopolitical Risk Monitoring
4. Sustainability & ESG risks
5. Concentration risks & dependencies
6. Operational risks & performance disruptions
7. Cybersecurity & IT risks
8. Risk-based category assessment

Source: IPG Research

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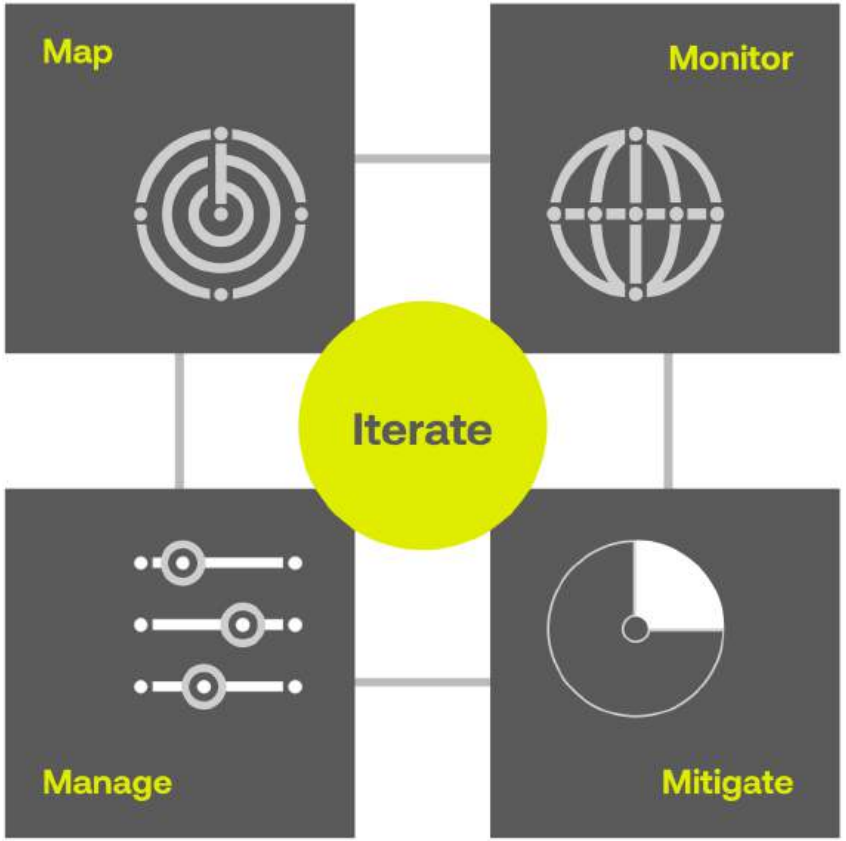
Prewave | Supply Chain Risk Management

Prewave

Figure 1:
Genpact's Supply Chain Risk and Resiliency Management Framework to meet CSDDD compliance



Map:
Mapping of supplier site locations to understand the flow of materials across the supply chain. This includes Tier-N mapping for key suppliers, components, and materials, enabling full visibility of critical nodes in the supply chain.

Monitor:
Ongoing supply chain monitoring connects supplier site locations to risks based on geography or industry, as well as specific events that impact individual locations.

Manage:
Establishing an effective and robust operating model integrates risk and compliance data into decision making platforms and processes across supply chain functions.

Mitigate:
Proactive and reactive actions that connect risk and compliance triggered from Prewave events to tangible impacts on the supply chain and are considered in scenario planning.

Source: Prewave

CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

Prewave | Prewave covers risks in over 150 categories – Focusing on specific risks increases efficiency in risk management

Perspectives

- Disruption
- Sustainability / ESG
- Compliance
- Financial & Legal
- Customised

Risk Categories

Political unrest
- Political protests
- Bomb threats
- Shootings
- Terrorism

Financial stress
- Layoffs
- Unpaid wages
- Site closures
- Rating decreases

Legal stress
- Regulatory shutdown
- Lawsuits
- Corruption, theft
- Investigations

Labour unrest
- Labour strikes
- Labour protests
- Labour disputes
- Worker suicides

Cyber risks
- Data leaks
- Cyber attacks
- Data privacy issues

Operational risks
- Congestion
- Supplier issues
- Blockades & interruptions

CSR incidents
- Pollution
- Contamination
- Unethical labour
- Poor working conditions
- Other misconduct

Product incidents
- Product recalls
- Product hazards
- Product failures

Governance risks
- Management change
- Mismanagement
- Policy changes
- Corporate wrongdoing

Consumer unrest
- Consumer campaigns
- Boycotts
- Petitions

Natural disasters
- Floods
- Hurricanes
- Earthquakes
- Landslides

Strat. developments
- Mergers & acquisitions
- Partnerships
- Product launches
- Innovation activities

Industrial accidents
- Fires & explosions
- Building collapse
- Workplace accidents
- Equipment failure

Source: Prewave

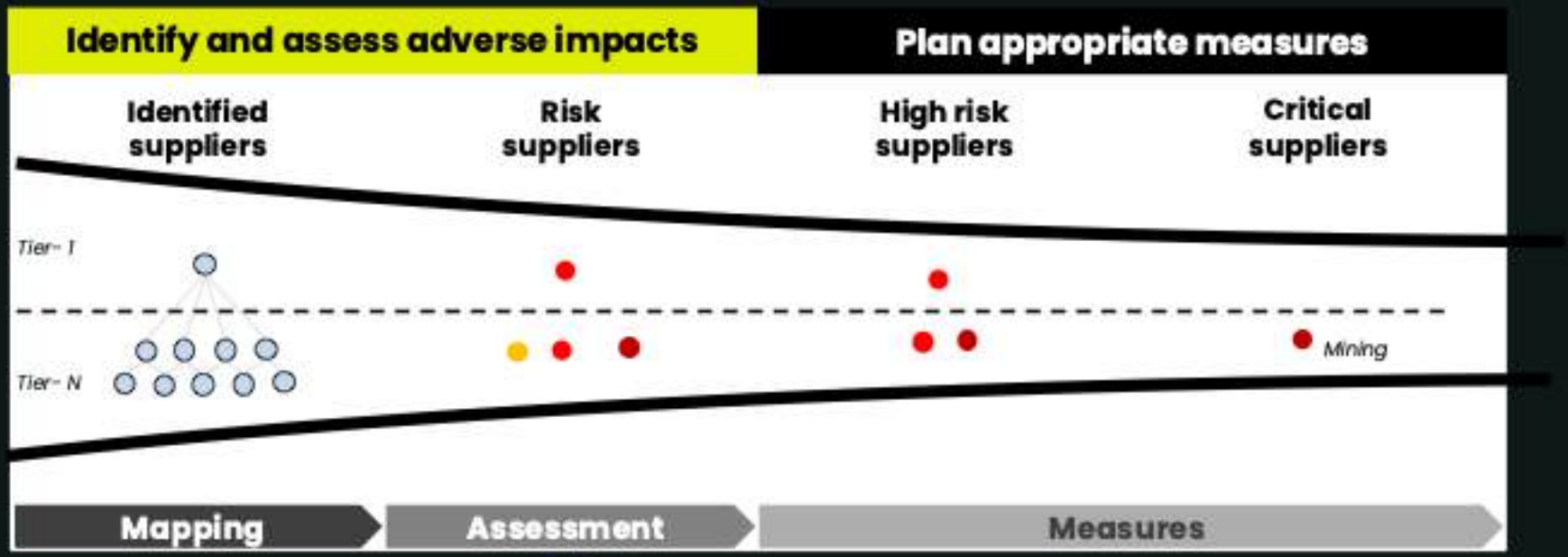
CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

Lifecycle sustainability manager

- verbindet zukünftige **Umwelt- und Regulierungsanforderungen** mit seinem **Wissen über das Versorgungsnetz**
- integriert die **Nachhaltigkeit in die Kategorie-Strategien** und **Beschaffungsprozesse**
- übernimmt die Verantwortung für die **Bewertung der Nachhaltigkeitsrisiken** von Lieferanten und Lieferketten
- entwickelt **Kosten-Nutzen-Analysen** für nachhaltige Alternativen

Battery Regulation Risk assessment with Prewave

EUBR



Tier-N Mapping

- Country & sector
- Media Screening
- Maturity & capacity
- Grievance findings

360° Scoring

Risk Analysis

Action Planning

EUBR Perspective
Annex X risk categories

Multi-tier transparency enabled by superintelligence.

Lifecycle sustainability manager

- verbindet zukünftige **Umwelt- und Regulierungsanforderungen** mit seinem **Wissen über das Versorgungsnetz**
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- entwickelt **Kosten-Nutzen-Analysen** für nachhaltige Alternativen

Public data mapping

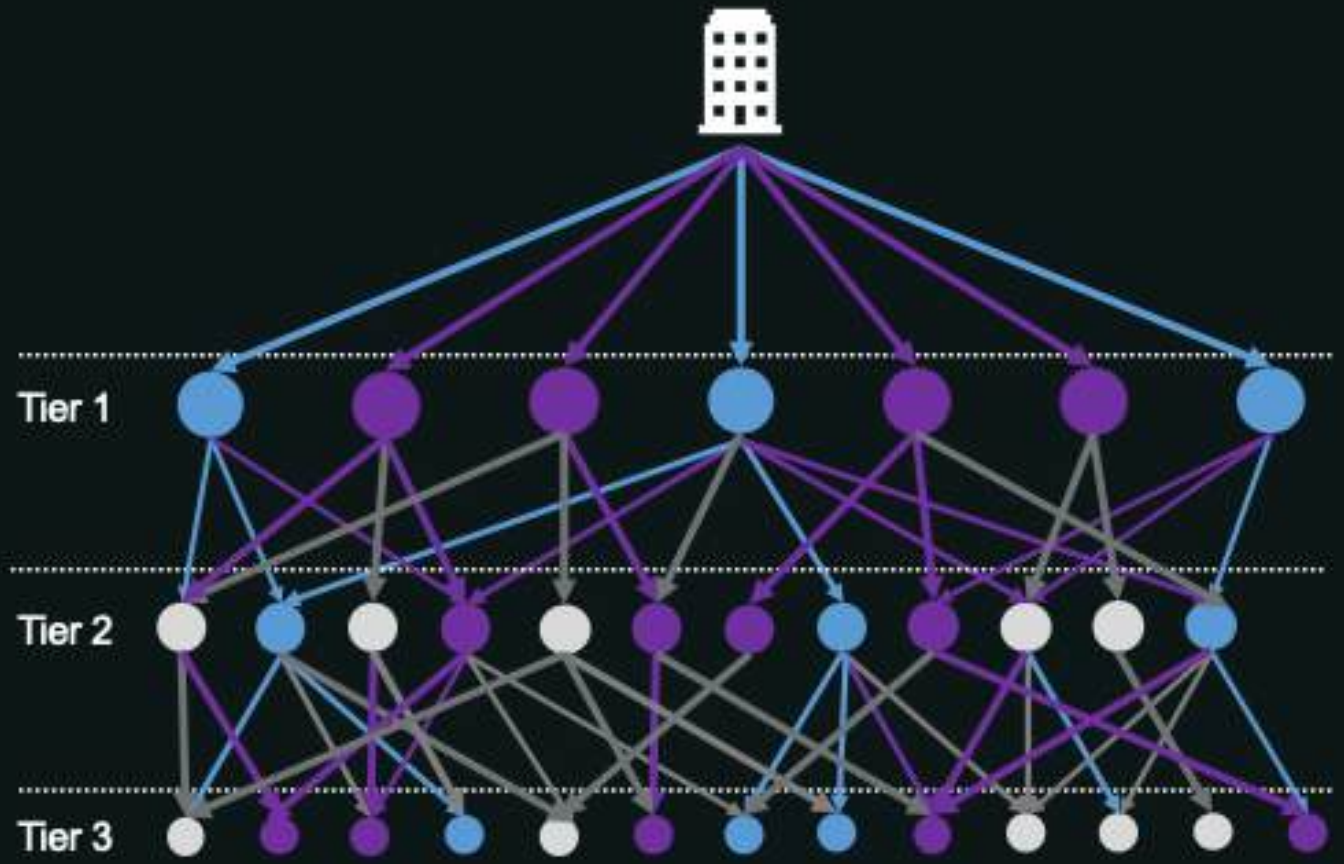
Sourced from public media and international trade data

Customs

Media

Predicted

Enabled by superintelligence.



Prewave

Prewave | Multi-tier transparency analysis

Prewave uses a combination of proprietary AI and a variety of external data sources for its multi-tier transparency analysis to map supply chains beyond direct suppliers (Tier 1) to raw materials. By linking these external sources with a bottom-up approach (starting with 300+ raw materials such as steel, cobalt, or leather), the tool creates transparency across the entire chain.

Key external databases and sources include:

1. Global customs data
Customs data is the backbone of top-down mapping. Prewave analyzes **bill of lading (BOL)** data, for example.
- **Benefits:** Identification of sub-tier suppliers (Tier 2, 3, 4+) as well as the type and quantity of products shipped between them.
- **Scope:** Enables the prediction of supply relationships even when no direct data is available.

2. Public media and news sources
Prewave's AI continuously scans information in over **50 to 120 languages**.
- **Sources:** Local and global news media as well as specialized trade publications.
- **Content:** Early warning signals for over 140 risk categories, including labor unrest, accidents, or fires.

3. Social media and networks
- The platform extracts and combines millions of data points from **social networks** to gain real-time insights into incidents on the ground.

4. Specialized public and regulatory databases
- **Environmental and geodata:** Inclusion of weather data, earthquake reports, and **satellite imagery** (e.g., to verify forest areas for EUDR compliance).
- **Compliance lists:** Comparison with sanctions lists, forced labor lists (e.g., UFLPA), and other regulatory directories.
- **Company registers:** Verification of over one million companies worldwide with regard to regulatory requirements.

5. Supplier and industry data
- Prewave combines the above sources with specific customer and industry data to create a global “supply chain graph” that currently covers over **2.6 million locations** and 10 million supplier relationships.

CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

Illy caffè – Global coffee company

Supplier portal for collecting, summarizing, and analyzing large amounts of data between purchasing and suppliers, including pre-suppliers
=> Focus on transparency and traceability in the supply chain

- **Supplier portal for prequalification** with specific questions on company organization, geographic reach, financial and operational issues, references, certifications, innovation, ethical and sustainability aspects
- **Governance & compliance for process traceability** and risk mitigation, **360-degree management of all suppliers**, performance monitoring and improvement, compliance with guidelines and the purchasing process
- **Transparency** that ensures **ethical behavior** in processes and **access to data** and information
- Introduction of **common global methods between purchasing and suppliers**, **standardization** of procedures, **acceleration of** internal and external responses in terms of time spent on the purchasing process, and **continuous improvement** through the **exchange of best practices**
- **Economic profitability**: Achieving economic benefits through the digitalization of processes and **reduction of total operating costs** in various expense categories

› Process automation

› Supplier portal for pre-qualification, evaluation, monitoring, and development

Source: IPG Research, Illy

CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

Blockchain-based supply chain visibility (traceability)

2.3

Pattern description

› Digital solutions use **blockchain technology to improve transparency, traceability, and trustworthiness in supply chains**.
› It creates a **decentralized and immutable ledger** for secure storage and tracking of transactions.
› By using blockchain technology, **transactions** are **documented in real time** and cannot be changed retrospectively.
› This enables companies to **seamlessly track** the **status and origin of their products** and minimize fraudulent activity.
› This can be a decisive advantage, especially in **industries with complex supply chains**, such as the food or electronics industries.

IPG ToolMap

Lifecycle sustainability manager

1. Sustainable Supplier Evaluation
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9. Sustainability Enterprise Management
10. Enterprise ESG Analytics
11. Scope 3 Carbon Management/Product Carbon Footprint Calculation
12. Carbon Compensation & Offsetting

Examples:

vechain

IBM

Focus:

› Transparency and authenticity in process automation

Advantages:

› **Real-time transparency** in the supply chain
› **Prevention of counterfeiting** and non-certified materials
› **Greater control** over sustainability standards
› **Improved responsiveness** to product recalls or compliance issues

* Blockchain technology is a **decentralized, distributed database technology** that enables **transparent and secure recording of transactions**

CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

Source: IPG Research, PPE Benchmarking PPE ≈ Procurement Performance Excellence @ IPG

Unilever – Global consumer goods manufacturer

Achieving a deforestation-free supply chain* by 2023

- Unilever has been a leader in responsible sourcing practices for over a decade. This includes requiring its suppliers to commit to paying **workers a living wage** and a living income. The latter includes a **commitment** to achieving **a deforestation-free supply chain**.
- A key step in achieving this is **improving supply chain traceability and transparency**.
- The company has trialed **technologies such as blockchain for agricultural commodities, satellite monitoring, and geolocation**.
- In one project, it has partnered with **Descartes Labs*** to create highly **detailed maps of its palm oil plantations.**
- This information, **combined with other data**, is **quickly processed** and provides procurement teams with **actionable insights** that they can use in **discussions with suppliers.**
- This **data-driven approach is now being extended to Unilever's entire procurement community** and is actively influencing the design of the sustainable procurement program.

* Deforestation-free supply chains ensure that no forest ecosystems are destroyed for the cultivation of agricultural commodities.

› Blockchain-based supply chain visibility

› Carbon & Environment Footprint Tracker

Source: IPG Research, Unilever

* Service provider for the use of Earth observation and remote sensing data to monitor and analyze the effects of changing patterns on the Earth

CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

Walmart

Walmart is working with IBM Food Trust to build a blockchain-based platform

Description

Walmart has partnered with IBM to adopt a **blockchain* solution** to bring the **complex food system**, which is overcrowded with system solutions that do not communicate well with each other, into a new, sustainable era.

Blockchain technology offers all players in food safety **new methods of collaboration** that lead to **greater efficiency and transparency**.

Different food systems can capture information about the product along its value chain and feed it into the blockchain, where the data can be compared to gain various insights that lead to a more affordable, safer, and cheaper food system.

Walmart believes that **transparency is more important than traceability**, as blockchain not only provides information about **where food comes from**, but also answers questions such as:

- Was the **food produced safely and responsibly**?
- Was the **food grown sustainably**?
- **How many days** does the food have **left before it expires**?

› Blockchain-based Supply Chain Visibility

› Carbon & Environment Footprint Tracker

* Blockchain technology is a **decentralized, distributed database technology** that enables **transparent and secure recording of transactions.**

Source: IPG Research, Walmart

CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

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CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

Circular economy management (lifecycle perspective, downstream supply chain) 2.4

Sample description

› Digital solutions to **promote the circular economy**.

› The tools help companies **minimize waste**, **reuse materials efficiently**, and establish **closed-loop systems**.

› The platforms enable **detailed analysis of material and resource flows** within the value chain.

› Focus is on **leveraging secondary material opportunities**

› They offer companies the opportunity to develop **innovative business models** in line with the circular economy **by implementing strategies to reduce waste and promote recycling**.

IPG ToolMap

Lifecycle sustainability manager

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9. Sustainability Enterprise Management
10. Enterprise ESG Analytics
11. Scope 3 Carbon Management/Product Carbon Footprint Calculation
12. Carbon Compensation & Offsetting

Examples:

Resourcify

SERA

Ecochain

Focus:

› Monitoring of waste and circulating materials

› Elimination of waste and pollution

Advantages:

› **Reduction of waste** and conservation of natural resources

› **Increased resource efficiency** through circular strategies

› Promotion of **sustainable product design** and material recycling

› **Improvement of regulatory compliance** in the area of circular economy

CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

Source: IPG Research, PPE Benchmarking PPE ≈ Procurement Performance Excellence @ IPG

Circular economy management (lifecycle perspective, downstream supply chain) 2.4

Primary material

- Material produced from **virgin natural resources**.
- Examples: newly mined iron ore, fresh timber, crude oil used for plastics.
- Characteristics: high environmental impact due to extraction, high energy use, biodiversity loss.´

Secondary material

- Material produced from **recovered, recycled, or reclaimed sources**.
- Examples: recycled aluminium, recycled plastics, recovered paper fiber.
- Characteristics: dramatically lower environmental impact—less energy, less waste, and reduced need for new resource extraction.

Aspect	Primary Material	Secondary Material
Origin	Natural resources (mining, harvesting)	Recycling, reuse, remanufacturing
Environmental Impact	High: extraction, energy, pollution	Low: avoids extraction, reduces waste
Energy Requirement	Typically high	Typically much lower
Examples	New aluminium from bauxite, virgin plastic, mined steel	Recycled aluminium, recycled PET, scrap-based steel
Role in Circular Economy	Linear economy	Circular economy cornerstone

CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

Source: IPG Research, PPE Benchmarking PPE ≈ Procurement Performance Excellence @ IPG

IPG DIGITAL TOOL MAP | Taxonomy - Lifecycle Sustainability Manager – use cases Level 3

Lifecycle sustainability manager

Lifecycle Sustainability Manager

3.1 Sustainability enterprise management

Software application or process for integrating sustainability principles into a company's business activities, management, and strategy with the aim of creating long-term value for the company and society.

2.1 Sustainable Supply Chain Evaluation

Software application or process for assessing and analyzing the environmental, social, and economic impacts of an entire supply chain across all stages to ensure that sustainable practices are integrated into the life cycle of goods and services.

1.1 Sustainable Supplier Evaluation

Software application or process for evaluating suppliers or approving potential suppliers based on quantitative and qualitative assessments with a focus on sustainability practices

1.2 Sustainable Supplier Risk Management

Software application or process for assessing and managing risks in the supply chain with a focus on sustainability practices at supplier level 1, including environmental, social, and governance (ESG) requirements.

2.2 Sustainable Supply Chain Risk Management

Software application or process for identifying, assessing, and mitigating risks within the entire supply chain in relation to environmental, social, and economic factors to ensure that sustainable practices are adhered to.

3.2 Enterprise ESG Analytics

Software application or process for analyzing and evaluating a company's performance, practices, and impact in the areas of environment, social, and corporate governance (ESG) using data-driven methods and tools.

Software application or process for measuring and monitoring the total greenhouse gas emissions and environmental impact of a product, service, person, organization, or country, usually expressed in carbon dioxide equivalents.

Software application or process based on blockchain technology to improve transparency, traceability, and trust within supply chains by creating a decentralized and immutable ledger that records and securely stores transactions, enables real-time visibility into supply chain operations, and ensures the authenticity and reliability of supply chain data.

Software application or process that tracks and controls inventory throughout the supply chain, from purchasing to production to final sale.

1.3 Inventory Management

Software application or process that manufactures parts and products as needed and where they are needed. This often involves technologies such as additive manufacturing (3D printing) to produce components quickly and efficiently.

1.4 On-demand/ Additive Manufacturing

Software application or process for the sustainable management of resources and products with the aim of minimizing waste and maximizing resource efficiency. It involves rethinking business models, products, and services from a circular perspective and developing strategies for innovation and overcoming real-world challenges in circular products and processes.

2.3 Blockchain-based supply chain visibility

2 Circular Economy Management

Software application or process for offsetting greenhouse gas emissions through investments in projects that reduce, avoid, or eliminate emissions elsewhere, often measured in carbon credits or offset credits equivalent to a reduction of one ton of carbon dioxide.

3.3 Carbon & Environment Footprint Tracker

3.4 Carbon Compensation & Offsetting

Source: IPG Research, PPE Benchmarking PPE ≈ Procurement Performance Excellence @ IPG

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Sustainability Enterprise Management (company-wide, internal collaboration)

3.1

Sample description

› **Sustainability Enterprise Management Software solutions** that help **plan and manage sustainability activities across the entire enterprise**.

› This software can offer a variety of features and modules ranging **from carbon management to materiality assessment**.

› It also features **comprehensive data management and reporting capabilities** that respond in real time to stakeholder requests, meaning that **integrations with SaaS tools and big data visualization** are mandatory for this type of software.

IPG ToolMap

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12. Carbon Compensation & Offsetting

Examples:

WeSustain

apexESG Enterprise

staarsoft

Focus:

› **Highly effective**, **optimized**, and **transparent** sustainability management

› **Time-** and **cost-efficient** activity management

Advantages

› User-friendly

Case

› NEUMANN KAFFEE GROUP

› https://www.wesustain.com/en/case-report-neumann-kaffee-gruppe/

by WeSustain

CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

Source: IPG Research

Enterprise ESG Emissions Analytics & Reporting
(ESG emissions measurement, Scope 1-2-3)

3.2

Sample description

› The **ESG analysis software for companies** automates the **process of calculating emissions**, making it more efficient and less prone to errors.

› It **collects, cleans, calculates, links,** and **communicates emissions data**, enabling organizations **to track, analyze**, and report on their **environmental performance**.

› **ESG reports** help users build trust and transparency with their stakeholders.

IPG ToolMap

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Examples:

Metrio

shipzero by APPANION

Focus:

› Emissions measurement and identification of improvement potential

Advantages:

› Track supplier performance
› Transparency

CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

Source: IPG Research

Carbon & Environment Footprint Tracker (CO_2 and environmental footprint tracking)

3.3

Sample Description

› **Carbon & Environment Footprint** software helps **companies seamlessly capture, analyze, and report emissions data across all three areas of the Greenhouse Gas (GHG) Protocol** throughout the supply chain and within the company.

› Carbon management solutions typically combine **carbon accounting**, **product carbon footprints (LCA)**, and **supply chain emissions (Scope 3)** into a **single integrated system to centralize complex data streams** and enable flexible **reporting** that opens up greater **decarbonization options**.

IPG ToolMap

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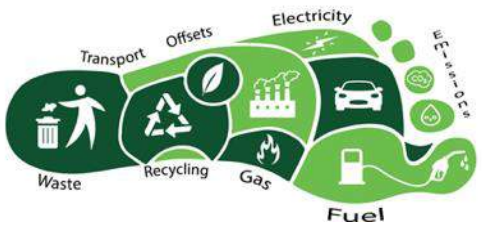
12. Carbon Compensation & Offsetting

Examples:

carbmee

Carbon Chain



Sievo

Telusio

osapiens

Focus:
› Measuring and reducing the environmental impact of procurement activities

Benefits:
› Transparency regarding a company's environmental impact
› Support in implementing CO_2 reduction measures
› Compliance with regulatory requirements and sustainability goals

CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

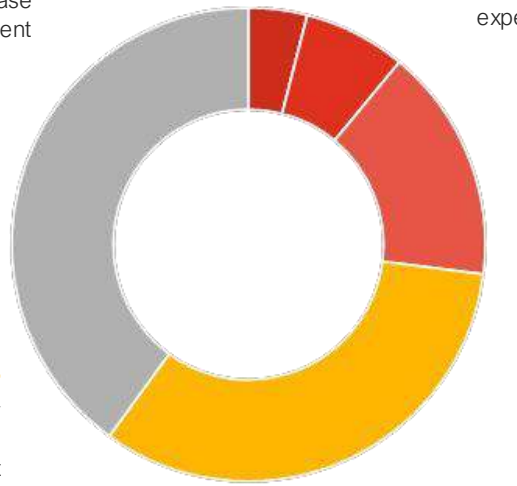
Source: IPG Research, PPE Benchmarking PPE ≈ Procurement Performance Excellence @ IPG

The CO2 emissions tracker can be a decisive factor in applying sustainability in purchasing

3.3

CPOs' assessment of "CO2 emissions trackers"

40%
cannot assess the potential added value of this use case for a procurement department



27
Have already used or experienced the use case

4
Are part of a consortium for tracking CO2 emissions with cross-company targets

7
Regular use of the CO2 emissions tracker

16
Conducting proof of concepts (POCs) and/or experiments with the CO2 emissions tracker

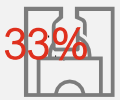
33
identified an opportunity but no corresponding offer on the market

Industry Vision

Top 5 industries that use CO2 emission trackers or have experience with this use case

38
Technology
Software, Telecoms & Logistics

35%
Transport


33%
Consumer goods

30%
Manufacturing

30
Banking, Insurance, Financial Services

Sustainability will be a decisive factor in the future – 27% of companies have already introduced or started to introduce a system for tracking emissions

Tracking CO2 emissions is increasingly becoming a legal and social obligation. Therefore, procurement can play a key role in this initiative

The advantage of tracking suppliers' emissions is recognized, but implementation is lacking due to market availability

Another 30% of respondents are already facing the transition to net zero. However, they lack a structured approach to tackling the problem and need a tool

40% of companies are not (yet) interested in tracking their suppliers' CO2 emissions

Even though sustainability and the tracking of CO2 emissions are widely discussed in industry, the added value often remains unclear, especially in terms of financial savings

Source: IPG Research, PWC

CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

Olam International – the world's largest supplier of cocoa beans and products, coffee, cotton, and rice

3.3

AtSource

AtSource was created by Olam Group in 2018 as part of its mission to re-imagine global agriculture and food systems.

Recording the ecological footprint for transparency in their complex supply chains

› Olam International develops the **Digital Footprint Calculator**, an addition to its sustainable sourcing solution AtSource (a SUSTAINABILITY INSIGHTS PLATFORM)

Solution

Olam's AtSource tool **enables its customers to meet their expectations by providing them with access to information about the** causes and types of impacts in their **supply chains, tracing them back to the farm level**.

Olam International **wants to integrate environmental sustainability metrics into AtSource and convert this data into environmental** impacts—a major challenge given the scale of Olam's global operations.

Actions

Olam's IT teams are developing the "Digital Footprint Calculator," an **online tool that converts agricultural and processing data into comprehensive insights into environmental impacts.**

To analyze the data, Olam used **LCA (life cycle analysis)-based approaches** and innovative methods to account for the impacts and benefits of agricultural practices.

Results

The integration of the Digital Footprint Calculator into AtSource **makes it the most complete and comprehensive platform for sustainable sourcing in the agriculture and food sector.**

Olam provides its customers with the data they need to **identify hotspots** and **track** progress **toward their sustainability goals**.

› Carbon & Environment Footprint Tracker

› Multidomain Master Data Mgmt.
› Network & Market Data Intelligence

* Life cycle assessment (LCA), also known as life cycle evaluation, is a method for assessing the environmental impact of a product throughout its entire life cycle.

Source: IPG Research, Olam

Olam International is a food and agriculture company operating in 60 countries, supplying food and industrial commodities to over 19,800 customers worldwide. Olam is one of the world's largest suppliers of cocoa beans and products, coffee, cotton, and rice.

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CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

BASF – the world's leading chemical company

We create chemistry

3.3

New BASF dashboard for sustainable purchasing and for BASF customers

- BASF offers customers a **new digital application**, **MyCarbonFootprint**, which provides them with comprehensive insight into the **sustainability status of the BASF product portfolio they have purchased**
- **Based on the quantities** of a specific product **purchased**, MyCarbonFootprint calculates its CO2 emissions, carbon footprint, and share of renewable raw materials according to individual purchases from BASF, **from** cradle to gate, i.e., from creation to shipment.
- The app, called **"MyCarbonFootprint," helps users** find **suitable products** to achieve sustainability goals in terms of **CO2 reduction** and the use of **renewable raw materials**.
- The app contains data on over **700 selected products.**

* Product Carbon Footprint (PCF) is a method for determining the total amount of carbon dioxide (CO2) and other greenhouse gases (GHG) emitted during the entire life cycle of a product.

- As part of a **method test**, **TÜV Rheinland** has certified that BASF's PCF* calculation solution and methodology is **scientifically sound**, complies with ISO 14067:2018, and reflects the state of the art.

› Carbon & Environment Footprint Tracker

Source: IPG Research, BASF

CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

Unilever – Global consumer goods manufacturer

Life cycle analysis tools and capabilities to develop decarbonization strategies for net-zero GHG emissions

- Unilever's procurement teams are involved in **identifying the ingredients and raw materials** that contribute most to **the company's carbon footprint**.
- Unilever has committed to **a** new **goal** of reducing the **greenhouse gas emissions** of its products from sourcing to sale **to zero by 2039**
- **Emissions from raw materials**, including third-party manufactured products, account for **49%** of Unilever's **estimated total annual emissions** of 32 million tons of carbon dioxide equivalent (CO2e)
- A **six-month pilot project with soda**, which is mainly used in Unilever's home care business, has identified opportunities **to significantly reduce Scope 3 emissions** (those generated outside of its own operations) over a five-year period **by working with procurement, R&D, and key suppliers**

- Unilever is now using this model, which requires scientific experts, **life cycle assessment** tools, and the application of specialist knowledge, **to develop decarbonization strategies for other materials and ingredients** over the next two years.

› Sustainable supplier risk management

› Carbon & Environment Footprint Tracker

› Circular economy management

CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

Source: IPG Research, Unilever

ERDBÄR – specialist manufacturer of organic products for children and babies

3.3

Scalable life cycle assessment of supply chains and product portfolios

› Due to the large number of suppliers across Europe with different raw materials and production processes, Erdbär developed a scalable platform that is capable of **evaluating data from the enterprise resource planning (ERP) system and linking supplier data with databases.**

The solution

Erdbär created a **comprehensive and scalable life cycle assessment model** by mapping its entire supplier structure and flow of goods and collecting and migrating **data along the entire value chain** (Scopes 1, 2, 3).

- This **enabled analysis at both the company and individual product levels**.
- **Relevant stakeholders in key functions** at Erdbär were trained, e.g., in
- **supply chain management** and **packaging,** in how to use the software and in its continuous development.

The results

The life cycle assessment developed enables Erdbär **to calculate article-specific carbon footprints for its entire portfolio** for the first time and to derive targeted measures for reducing CO2 emissions.

The **emissions remaining in areas 1 and 2 after the initial optimizations were neutralized through compensation projects**.

The **transparency of the supply chain (Scope 3) also made it possible** to **gain insights** into **which suppliers** are **already nearly climate-neutral** and where there are **opportunities for further reduction and compensation projects**.

› Sustainability Enterprise Management

› Carbon & Environment Footprint Tracker

› Supply Chain Risk Management

Source: IPG Research, Erdbär

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Approach

Telusio

3.3

Lifecycle sustainability manager

- verbindet zukünftige **Umwelt- und Regulierungsanforderungen** mit seinem **Wissen über das Versorgungsnetz**
- integriert die **Nachhaltigkeit in die Kategorie-Strategien** und **Beschaffungsprozesse**
- übernimmt die Verantwortung für die **Bewertung der Nachhaltigkeitsrisiken** von Lieferanten und Lieferketten
- entwickelt **Kosten-Nutzen-Analysen** für nachhaltige Alternativen

Datenlieferung

Sie übermitteln uns Ihre Daten – unabhängig von Vollständigkeit oder Format.

↓

Datenaufbereitung mit der TELUSIO Intelligence

Wir ergänzen die gelieferten Informationen – automatisiert und wissenschaftlich fundiert.

↓

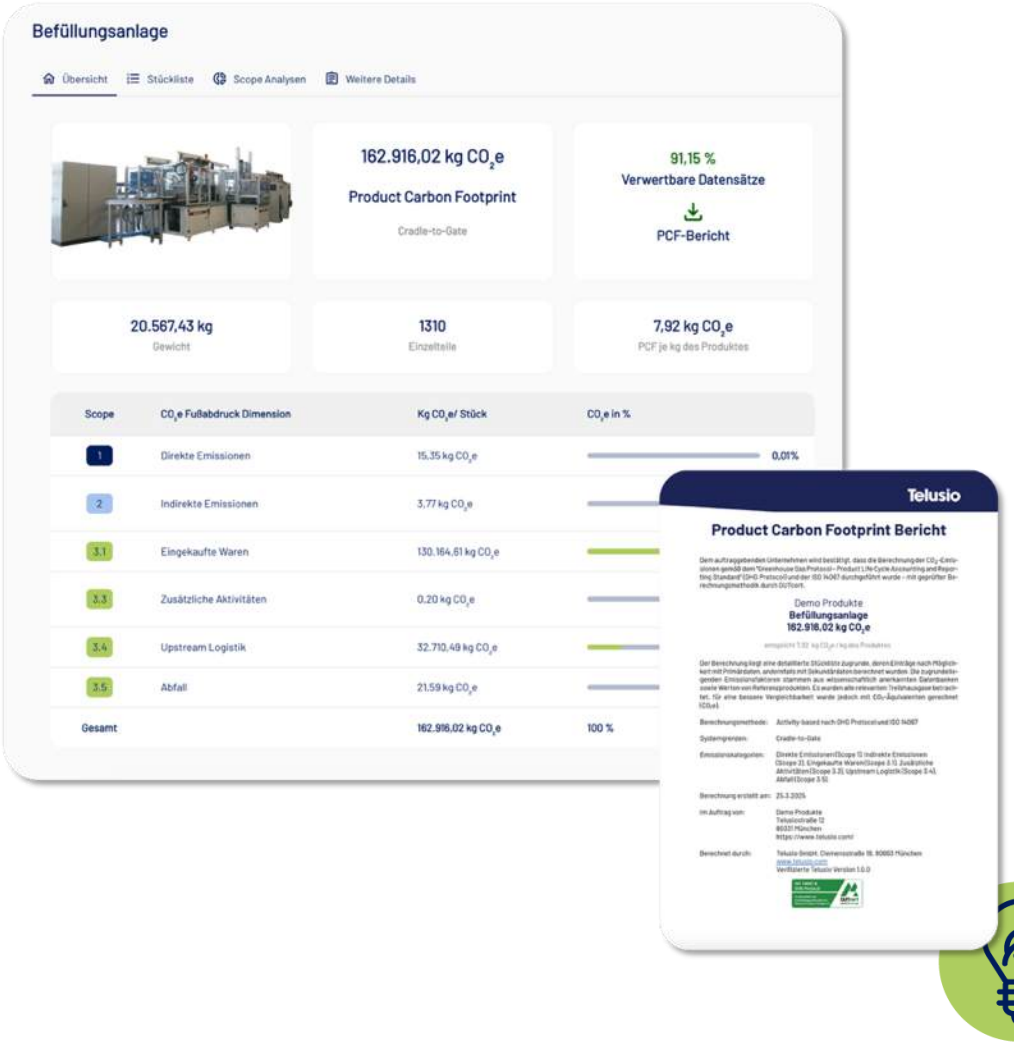
Automatische Berechnung

Egal ob Pilotprojekt oder gesamtes Produktportfolio – wir berechnen die Emissionen Ihrer Produkte automatisiert und verifiziert.

↓

Ergebnisanalyse

Der PCF-Report und Material- und Emissionsanalysen sind direkt in unserer Software einsehbar.



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Our methodology: Applying the activity-based approach using master data with CO2 emission factors enables a detailed PCF

Telusio

3.3

Quantification approaches

Primary data

Supplier information on materials, components
➔ Low response rate (<10 %); suppliers unable to provide information

Activity-based

Activities	X	Specific CO2 factors	➔ **Best possible transparency**

Spend-based

Spend	X	CO2 averages	➔ Price effects influence emissions

company data
based on ERP/CAD data (parts lists, master data, etc.)

X

Emission factor Database
Detailed database for materials and components in the mechanical engineering and electronics industries

Telusio

Telusios AI links company data with high-quality CO2 emission factors

ISO 14067 & GHG Protocol
Konformität der Ermittlungsmethodik für Product Carbon Footprints
GUTcert AFNOR Group

Expert review

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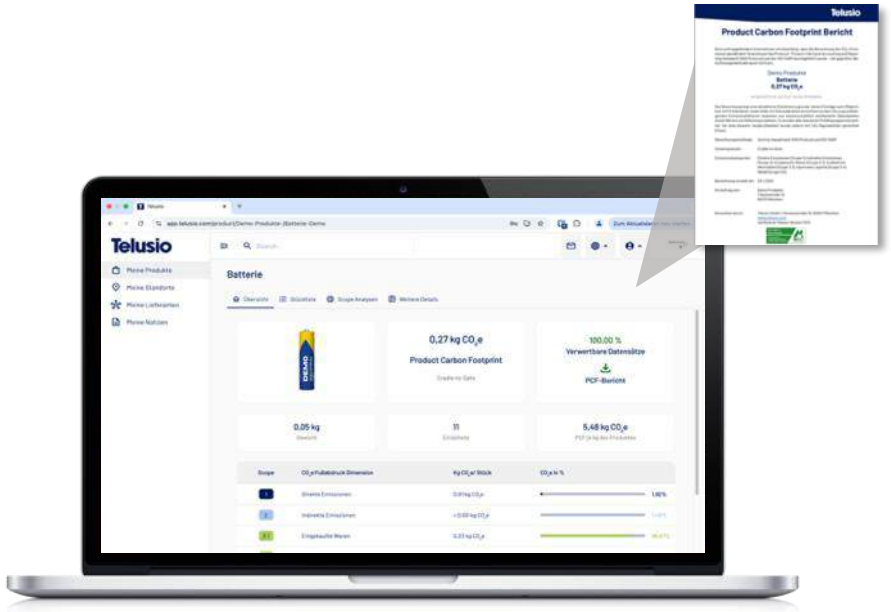
Telusio software enables digital and future-proof management of all product carbon footprints

Telusio

3.3

Telusio



Added value

- ✓ Digital PCF product file for all products and variants
- ✓ PCF results, including reports, with one click
- ✓ Automated CO2 hot spot analyses
- ✓ Annual recalculation of PCF results based on scientific adjustments to emission values

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Carbon Compensation & Offsetting

3.4

Sample description

› The main goal of **compensation solutions** is to help individuals and organizations **reduce** their **carbon footprint by investing in projects** that reduce or remove an equivalent amount of greenhouse gases from the atmosphere.

› These companies use **strict measurement and verification procedures** to quantify the emission reductions achieved by the projects they support.

› This ensures that **the claimed offsetting measures are credible and effective**.

IPG ToolMap

Lifecycle sustainability manager

1. Sustainable Supplier Evaluation
2. Sustainable Supplier Risk Management
3. Inventory Management
4. On-demand/On-location Parts Manufacturing
5. Sustainable Supply Chain Evaluation
6. Sustainable Supply Chain Risk Management
7. Blockchain-based Supply Chain Visibility
8. Circular Economy Management/ Waste Reduction
9. Sustainability Enterprise Management
10. Enterprise ESG Analytics
11. Scope 3 Carbon Management/Product Carbon Footprint Calculation
12. **Carbon Compensation & Offsetting**

Examples:

Carbon Credit Capital

CARBON TRUST

cloverly

Focus:

› Reducing the carbon footprint and contributing to global efforts to combat climate change

Advantage:

› Achieving carbon neutrality

Case

› Strategic approach to Safaricom's net zero ambitions

Safaricom

by: CARBON TRUST

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Source: IPG Research

Tuesday, February 10th
Day 1 – Morning: Module 5

09:00 – 12:00

1	**Fit for Sustainable Supply Chain in Europe** – welcome & introduction	09:00 – 09:15
2	**Module 5 - introduction** SUS supply chain analysis – 5-phase methodology	09:15 – 10:45 10:45 - 11:00
3	**M5 - Sprint** SUS supply chain analysis – Team SaraCook & Team BosnaCool	11:00 – 12:00

Tuesday, February 10th
Day 1 – Afternoon: Module 6

13:00 – 17:00

4	**Module 5 - Sprint review** Team Presentations – Team SaraCook & Team BosnaCool	13:00 – 13:45
5	**M6 - introduction** ToolMap Taxonomy and Tool introduction	13:45 – 14:45 14:45 –15:00
6	**M6 - Sprint** Tool prioritization & selection – Team SaraCook & Team BosnaCool	15:00 – 16:00
7	**M6 – Sprint review** Team Presentations – Team SaraCook & Team BosnaCool Wrap-up Day 1 & Outlook Day 2	16:00 – 17:00

Questions & comments Coffee break All times given are indicative and may vary.

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Digital Tool Guide – Tool prioritization & selection

Tool prioritization & selection

Step 1: Prioritize

- Outline what you consider to be the three most important digital tools for sustainable purchasing and justify your selection.

Step 2: Timing

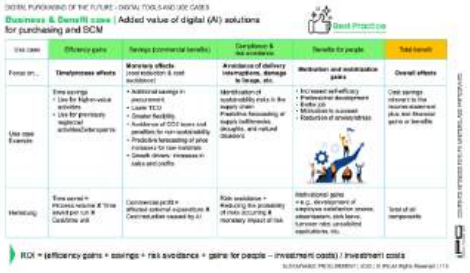
- In what order would you introduce the three selected tools into your purchasing department?

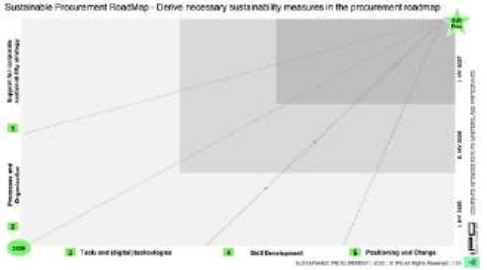
Step 3: Business & Benefit case

- Outline the business & benefit case for the first tool you plan to introduce.

Step 4: Projectplan / RoadMap

- Derive the necessary sustainability projects and task packages and locate them in your purchasing roadmap.





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Digital Tool Guide – Tool prioritization & selection

Selected Tool Pattern	Reason: How does the respective tool benefit your sustainable procurement organizatoon?

Step 1: Prioritize

- Outline what you consider to be the three most important digital tools for sustainable purchasing and justify your selection.

= Top 3 Werkzeuge

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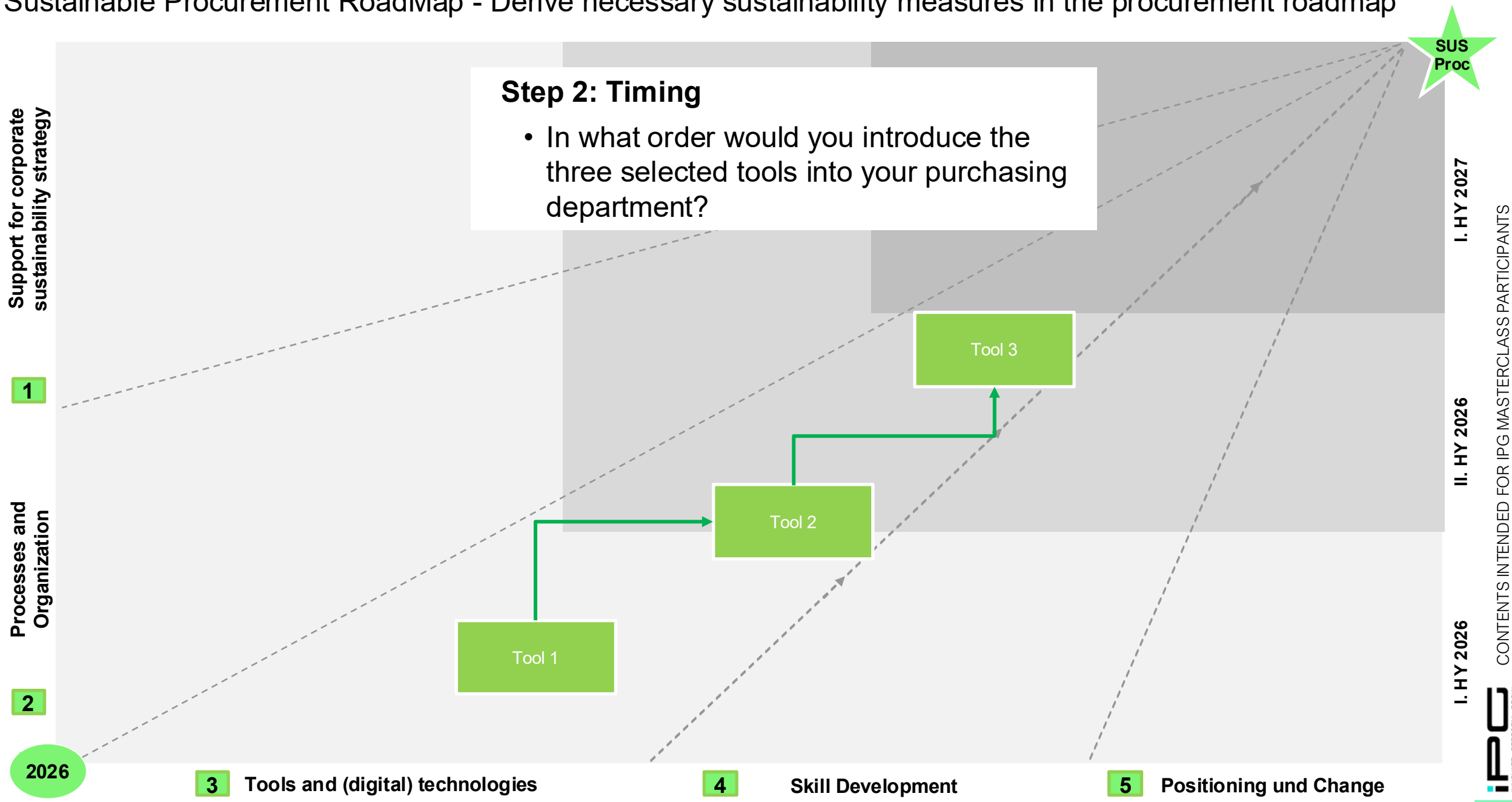
Sustainable Procurement RoadMap - Derive necessary sustainability measures in the procurement roadmap



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Business & Benefit case | Added value of digital (AI) solutions for purchasing and SCM

Selected Tool Pattern	Efficiency gains	Savings (commercial benefits)	Compliance & risk avoidance	Benefits for people	Total benefit
	Time/process effects	**Monetary effects** (cost reduction & cost avoidance)	**Avoidance of delivery interruptions, damage to image, etc.**	**Motivation and mobilization gains**	**Overall effects**
1.					
2.					
3.					

Step 3: Business & Benefit case

- Outline the business & benefit case for the first tool you plan to introduce.

CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

Business & Benefit case | Added value of digital (AI) solutions for purchasing and SCM

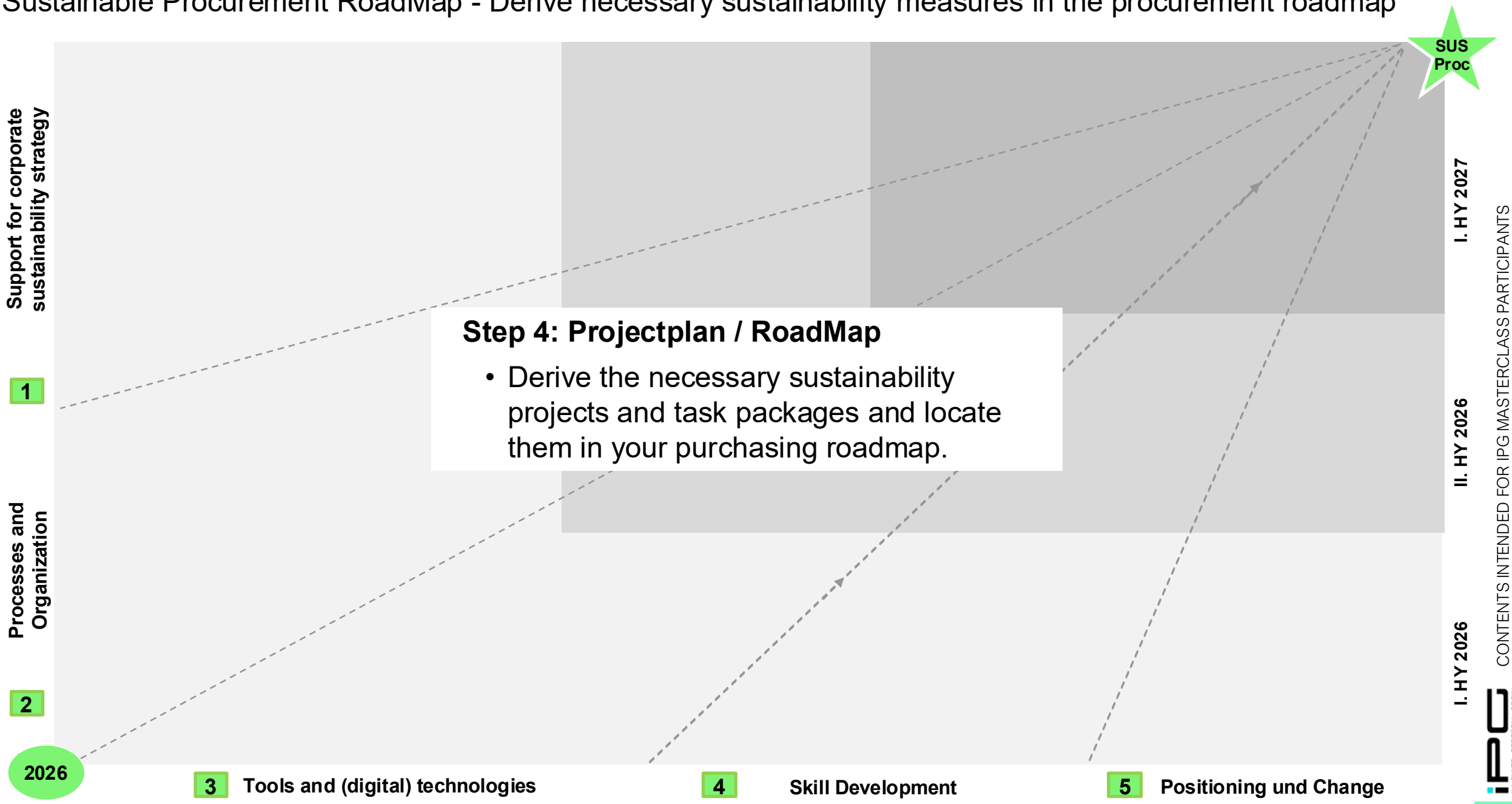
Best Practice

Use case	Efficiency gains	Savings (commercial benefits)	Compliance & risk avoidance	Benefits for people	Total benefit
Focus on...	**Time/process effects**	**Monetary effects** (cost reduction & cost avoidance)	**Avoidance of delivery interruptions, damage to image, etc.**	**Motivation and mobilization gains**	**Overall effects**
Use case Example	Time savings • Use for higher-value activities • Use for previously neglected activitiesZeitersparnis	• Additional savings in procurement • Lower TCO • Greater flexibility • Avoidance of CO2 taxes and penalties for non-sustainability • Predictive forecasting of price increases for raw materials • Growth drivers: increases in sales and profits	Identification of sustainability risks in the supply chain Predictive forecasting of supply bottlenecks, droughts, and natural disasters	• Increased self-efficacy • Professional development • Better job • Motivation to succeed • Reduction of anxiety/stress 	Cost savings relevant to the income statement plus non-financial gains or benefits
Herleitung	Time saved **=** Process volume **X** Time saved per run **X** Cost/time unit	Commercial profit **=** affected external expenditure **X** Cost reduction caused by AI	Risk avoidance = Reducing the probability of risks occurring **X** monetary impact of risk	Motivational gains = e.g., development of employee satisfaction scores, absenteeism, sick leave, turnover rate, unsolicited applications, etc.	Total of all components

ROI = (efficiency gains + savings + risk avoidance + gains for people – investment costs) / investment costs

CONTENTS INTENDED FOR IPG MASTERCLASS PARTICIPANTS

Sustainable Procurement RoadMap - Derive necessary sustainability measures in the procurement roadmap



Step 4: Projectplan / RoadMap

- Derive the necessary sustainability projects and task packages and locate them in your purchasing roadmap.

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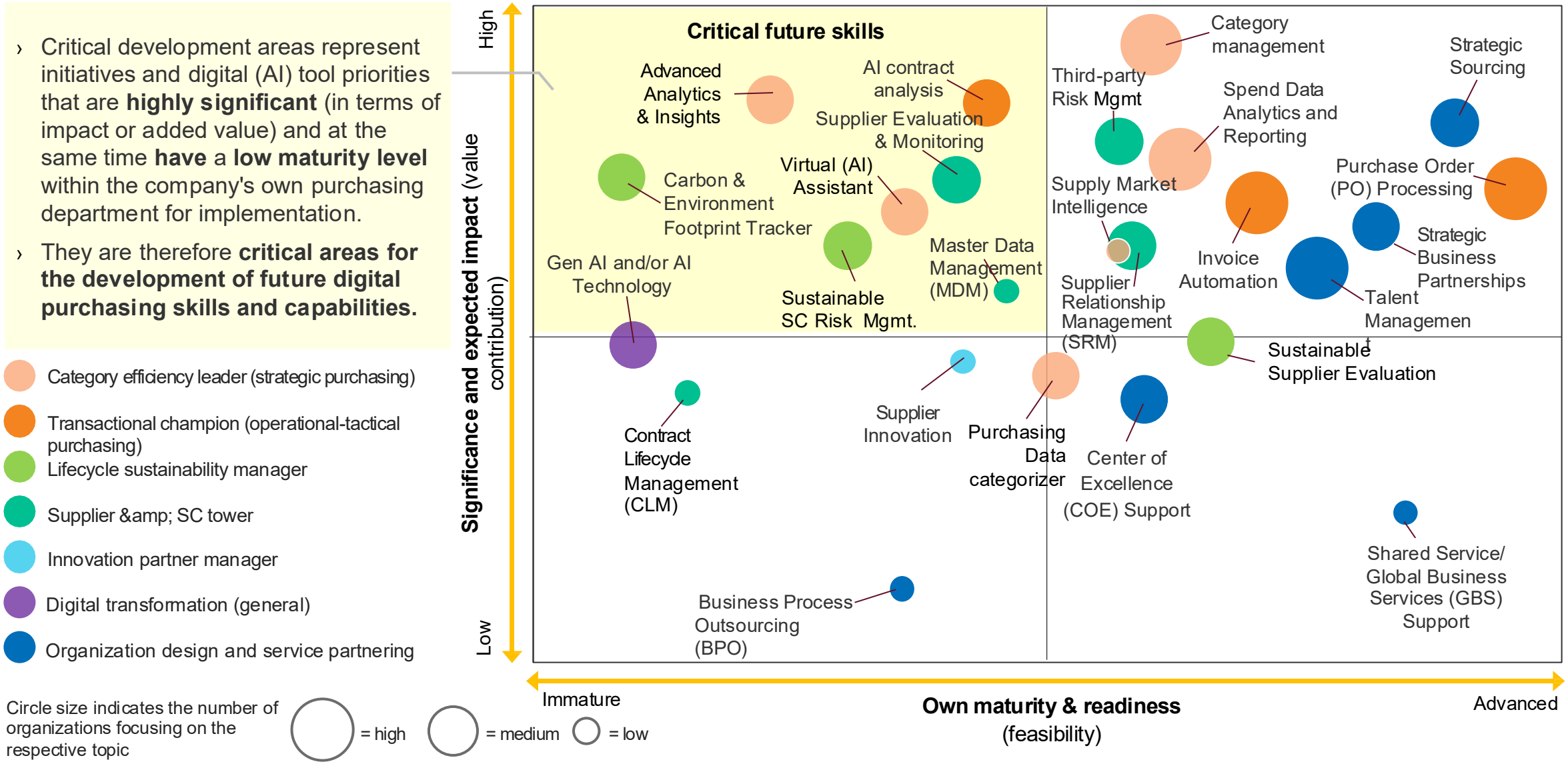
Tool prioritization for sustainable purchasing

Critical areas of development | Our latest analysis reveals eight future skills that are critical to the success of digital procurement.

- Critical development areas represent initiatives and digital (AI) tool priorities that are **highly significant** (in terms of impact or added value) and at the same time **have** a **low maturity level** within the company's own purchasing department for implementation.
- They are therefore **critical areas for the development of future digital purchasing skills and capabilities.**



Source: IPG Research (based on Hackett Group/JAGGAER, among others), IPG expert interviews, IPG ToolMap analyses

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Business & Benefit case | Added value of digital (AI) solutions for purchasing and SCM

Best Practice

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ROI = (efficiency gains + savings + risk avoidance + gains for people – investment costs) / investment costs

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Wrap-up Reflection

Questions?

Comments?

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