Sustainability Reporting and Simulation Scope 3-model based on IBM Planning Analytics

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IBM Cloud

Directive 2014/95/EU requires disclosure of non-financial and diversity information, including data on sustainability for specific public companies

https://eur-lex.europa.eu/legal-content/DE/TXT/?uri=celex%3A32014L0095

Reporting on key sustainability data, categorized by the three areas ESG - reflecting UN Sustainable Development Goals as basis for consolidated sustainability data sets

Customer challenges

- Stakeholder management: employees, regulators, investors, and customer
- Mounting pressure to progress toward more sustainable and socially responsible business operations
- Managing and operationalizing sustainability data across siloed sources and evolving reporting datasets

Environmental

- Zero-Emission
- Carbon-neutral Production
- Resource consumption and supply chain

Social

- Dignity and Equality
- Traffic and product safety
- Health and well being
- Corporate responsibility

Governance

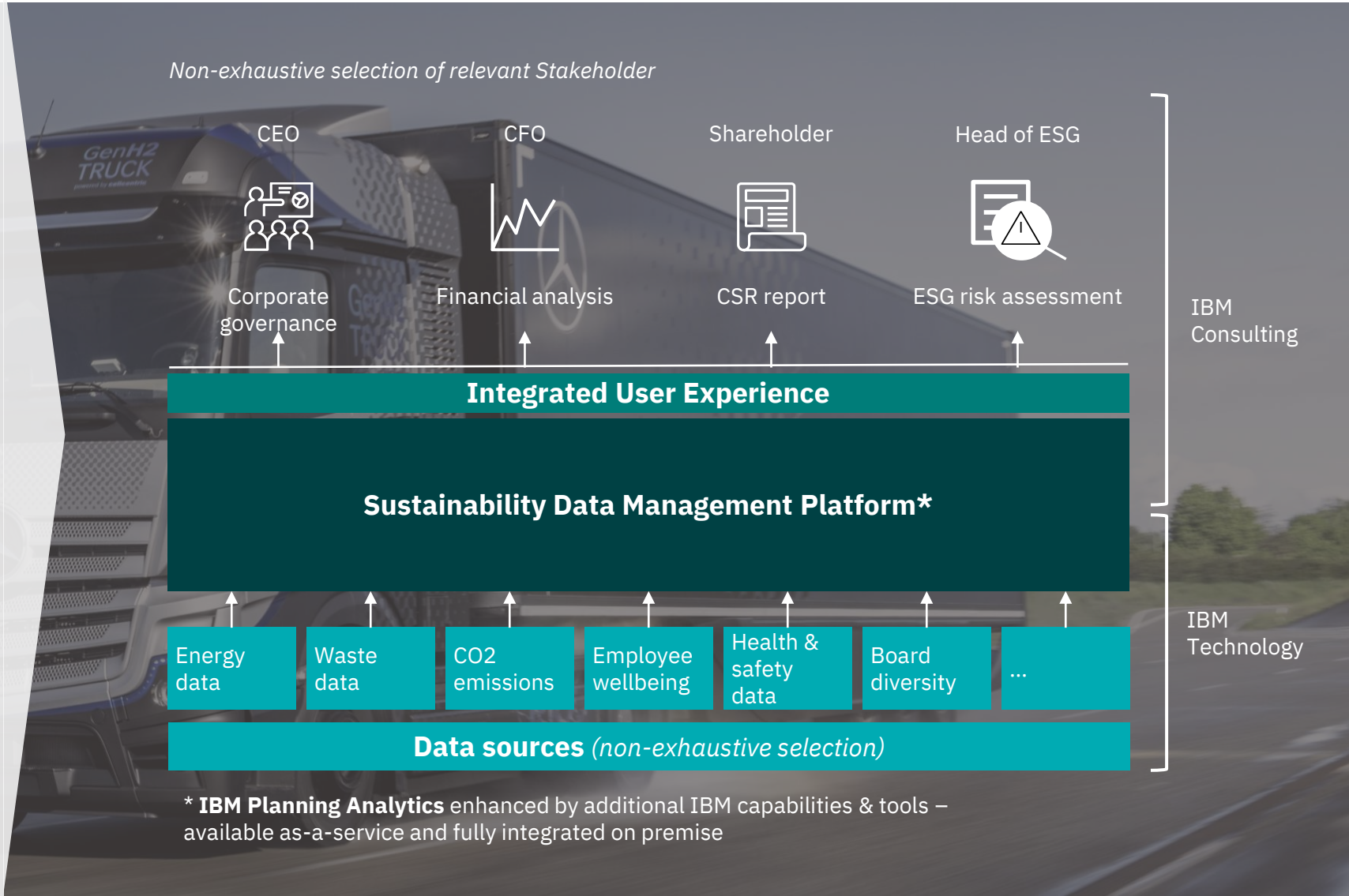
- Governing purpose
- Stakeholder engagement
- Ethical behavior
- Risk & Opportunity oversight

The **ISO standards and regulations** aim to support the alignment of ESG goals with SDG by developing standards for companies – with IBM having extensive experience

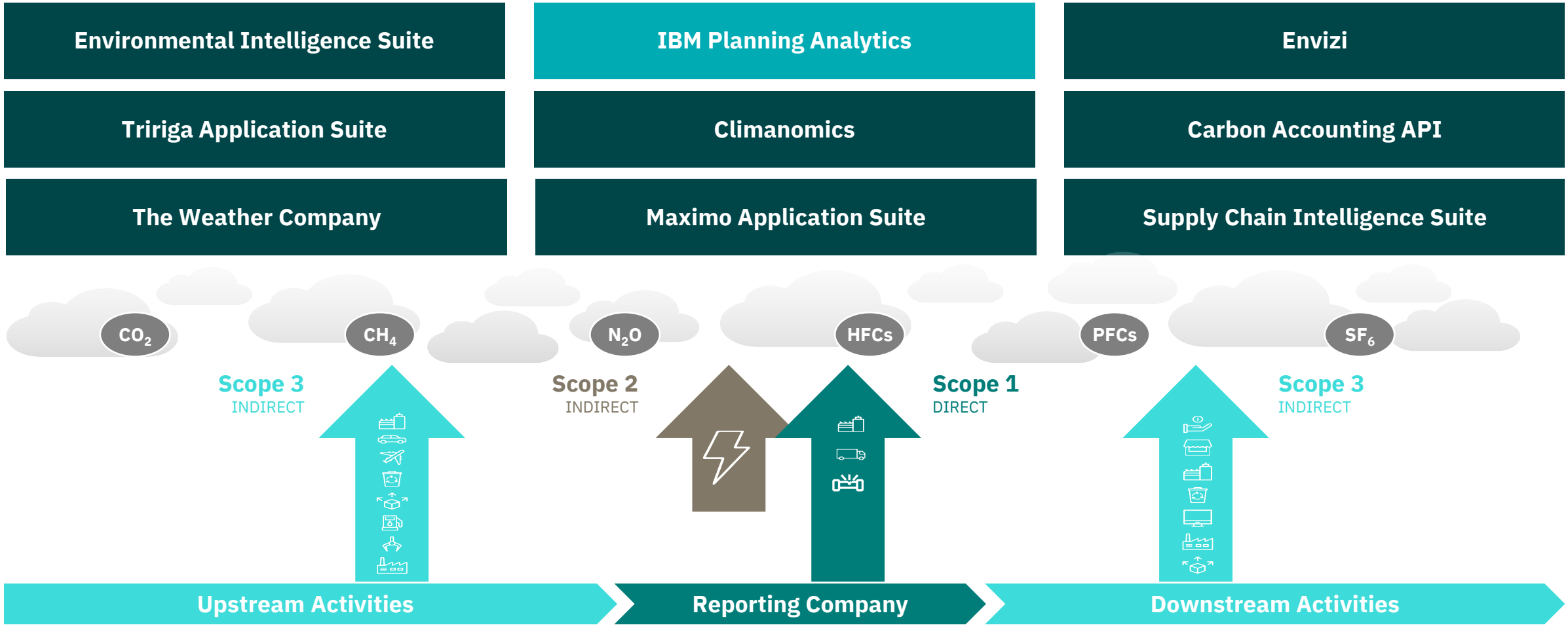
To accelerate from sustainability insights to action, companies have to improve management of data across siloed sources and datasets

Challenges

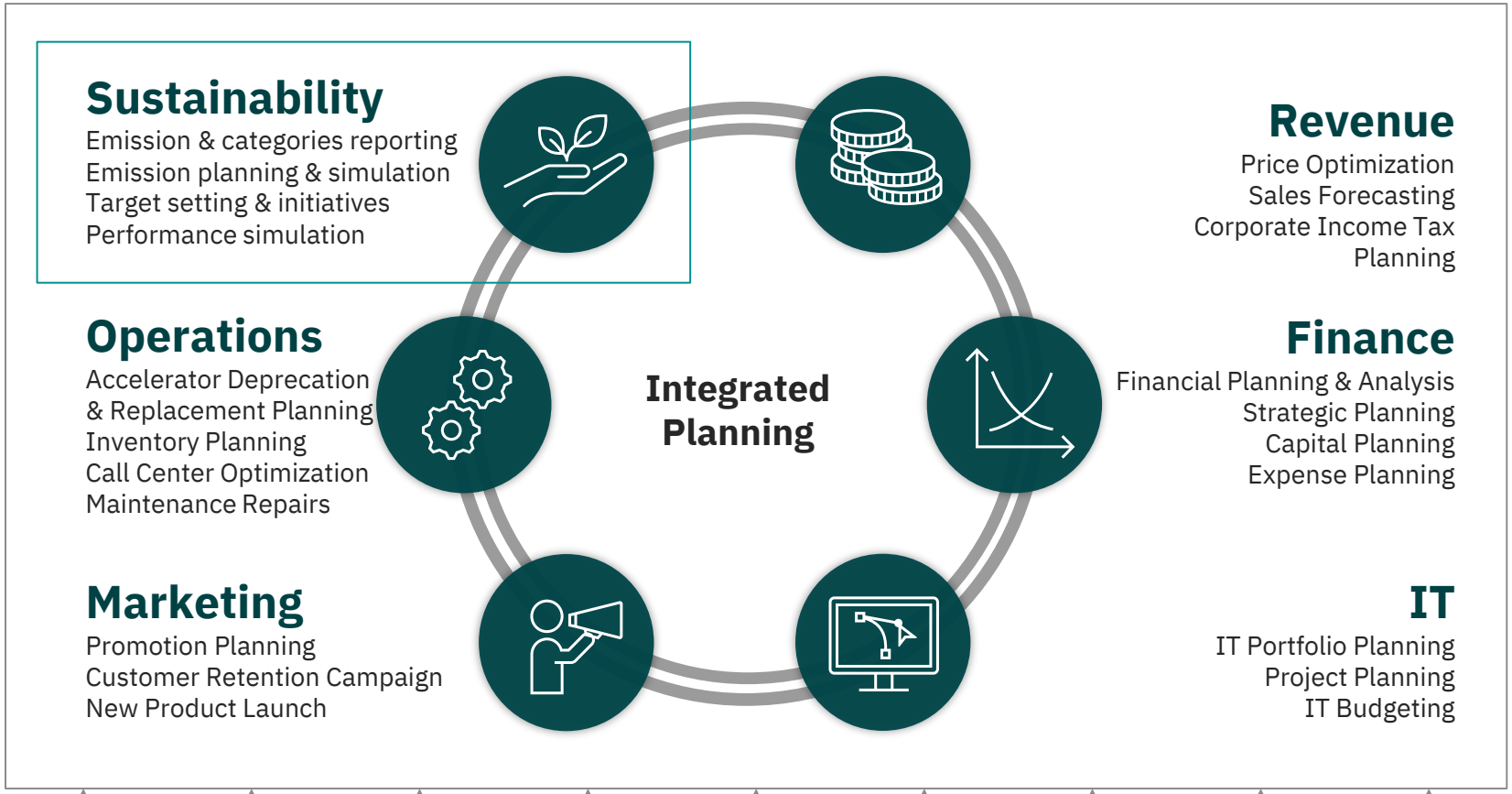
- Access, management and operationalization of sustainability data across siloed sources and evolving reporting datasets
- Slow integration of sustainability planning, reporting and result analysis into financial and business planning
- Pressure to move from data management to actions with impact
- Diverse Stakeholder demands for transparency and accuracy from Leadership, regulators, investors, and customers
- Lack of standardized industry reporting metrics
- Lack of data quality and accuracy as basis

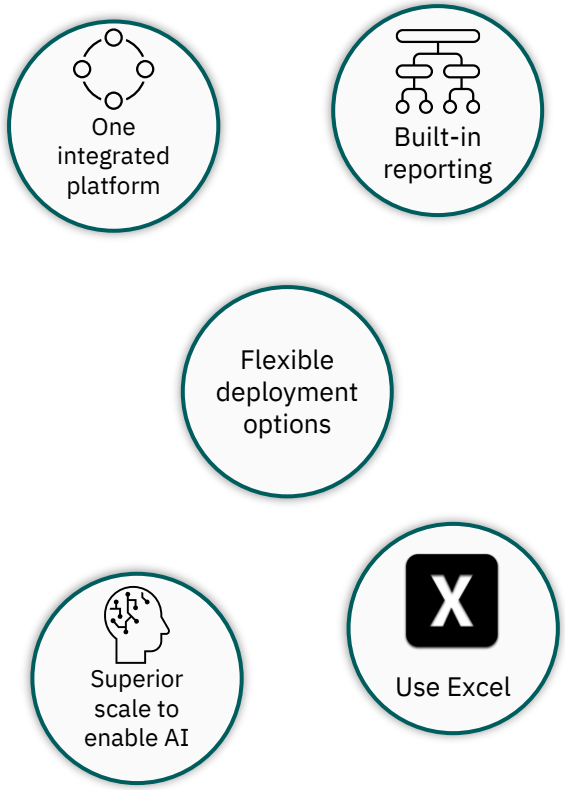


Additional IBM ESG, Climate Risk and Carbon Reporting Tools & capabilities that complement the solution demonstrated



IBM Planning Analytics supports planning, reporting and analysis of sustainability data as part of integrated planning



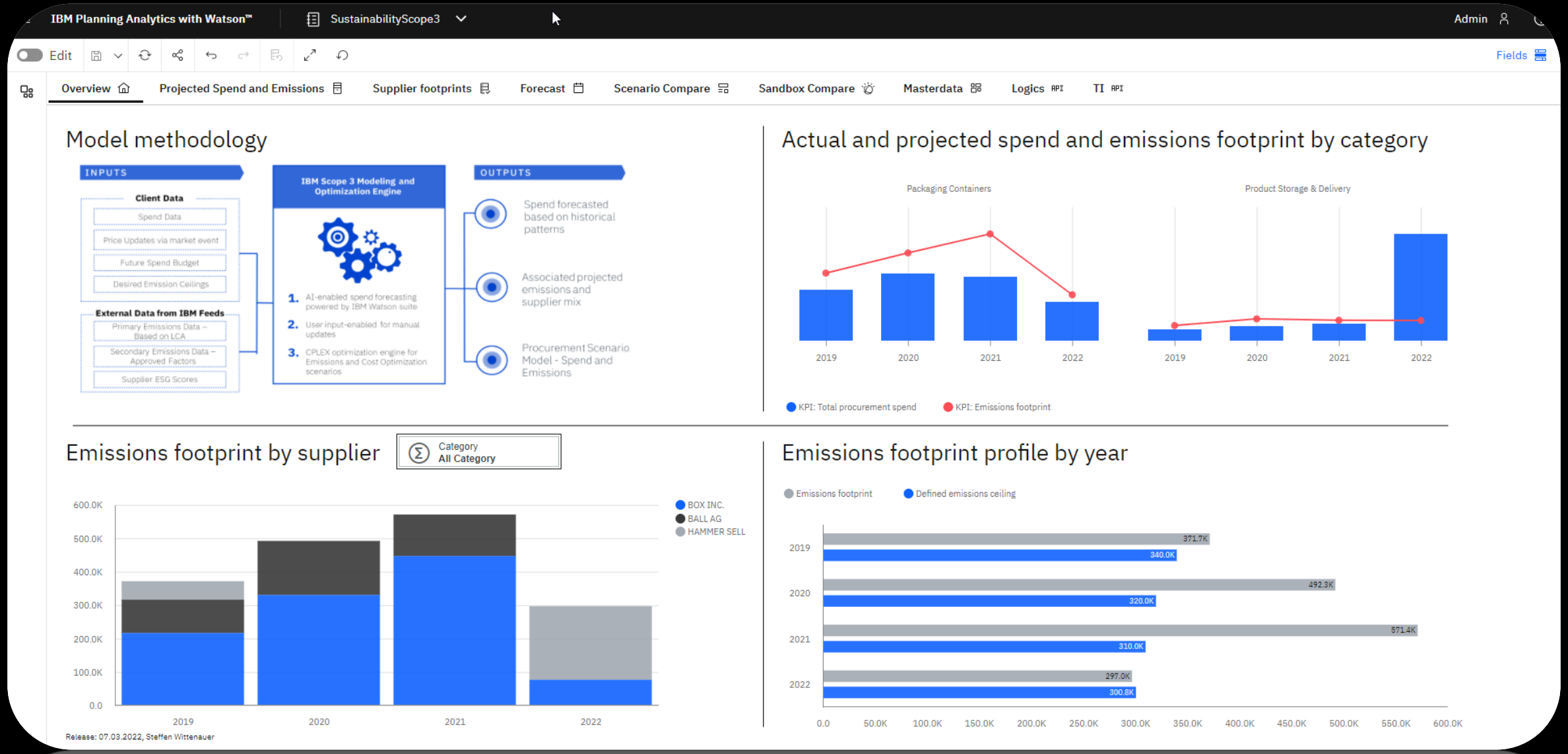


Available: on premise (local) or IBM SaaS

Scope 3-reporting / -planning / -simulation

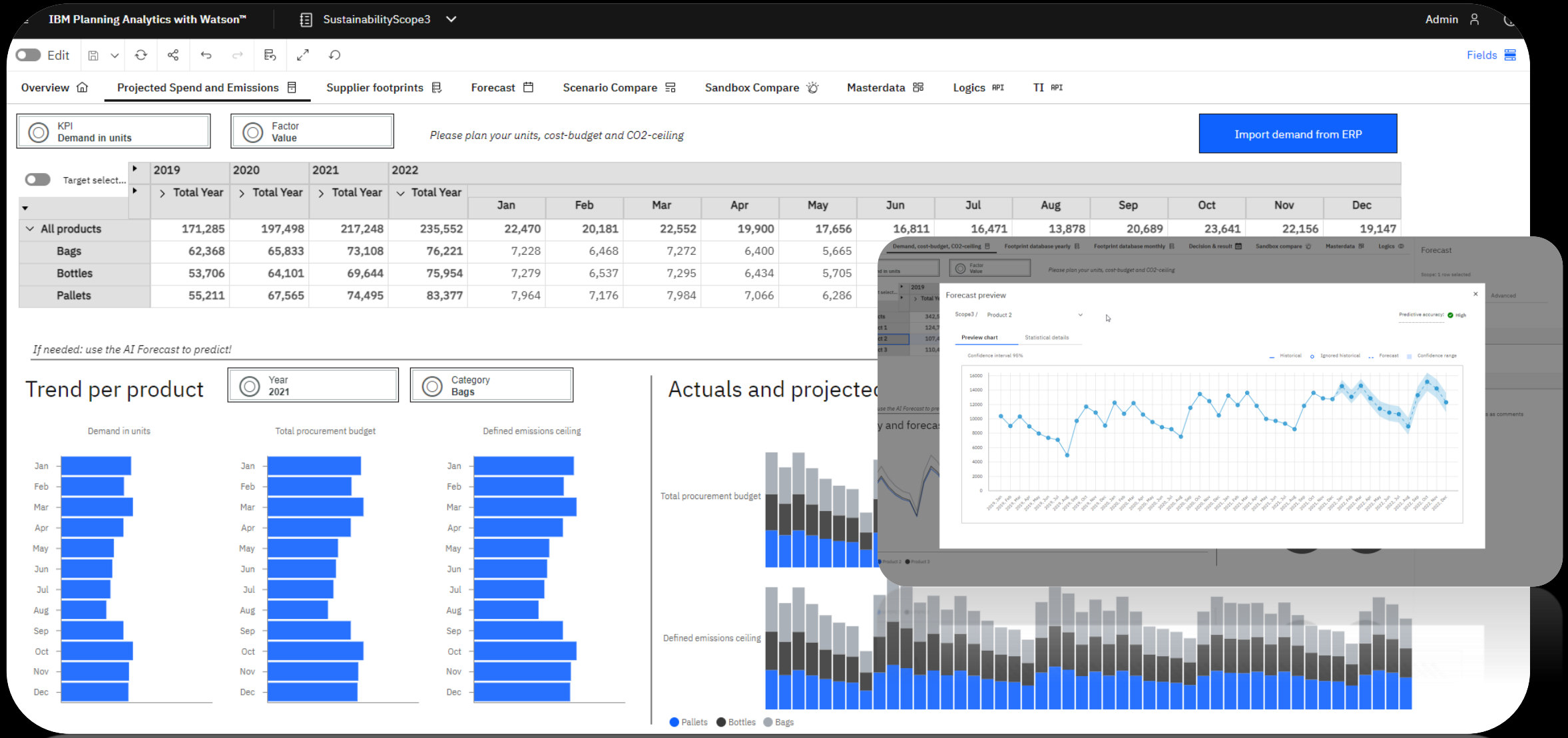
- Purpose: possible starting point for each client having not yet any reporting or target-setting for sustainability scope 3 – especially in the procurement-department
- Content: based on footprints (CO2, costs etc.) and material-demand & cost-budget, a client can simulate the scope 3-effect vs. occurring costs
- Datasources: masterdata can be manually adapted – actuals can be loaded (files, datawarehouse etc.) or manually inputted
- Technology: IBM Planning Analytics, ILOG CPLEX (as addit. optimization-component for sustainability vs. costs)

Scope3-landingpage with a KPI-overview



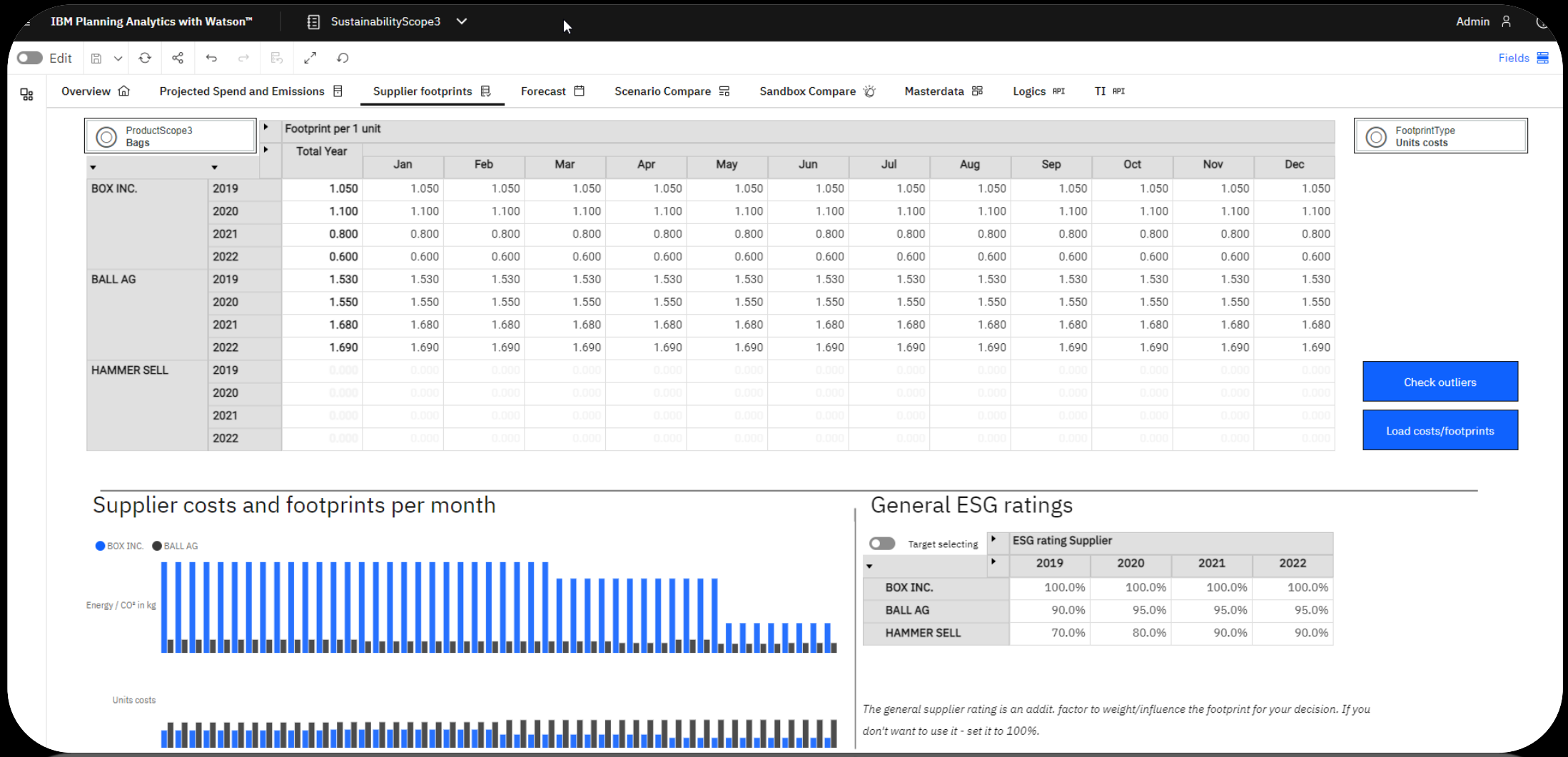
The defined main-KPIs and display of the process

Plan your future (unit-demand, cost-budget, CO2-budget)



If data is not available in source-systems like ERP etc. , units and budgets can be inputted or forecasted

Load/input ESG-footprints incl. costs and ESG-ratings for possible suppliers

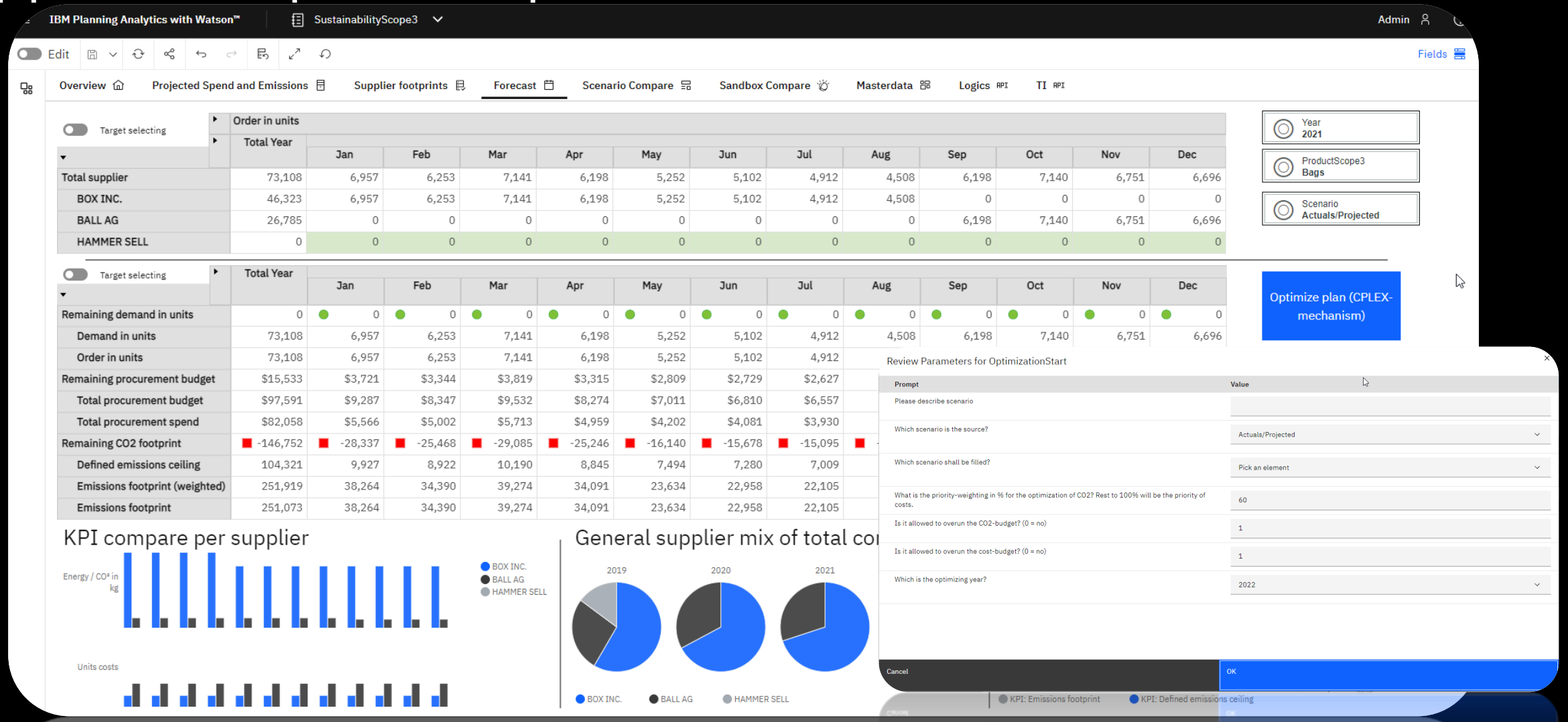


		Total Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BOX INC.	2019	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050
	2020	1.100	1.100	1.100	1.100	1.100	1.100	1.100	1.100	1.100	1.100	1.100	1.100	1.100
	2021	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800
	2022	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600
BALL AG	2019	1.530	1.530	1.530	1.530	1.530	1.530	1.530	1.530	1.530	1.530	1.530	1.530	1.530
	2020	1.550	1.550	1.550	1.550	1.550	1.550	1.550	1.550	1.550	1.550	1.550	1.550	1.550
	2021	1.680	1.680	1.680	1.680	1.680	1.680	1.680	1.680	1.680	1.680	1.680	1.680	1.680
	2022	1.690	1.690	1.690	1.690	1.690	1.690	1.690	1.690	1.690	1.690	1.690	1.690	1.690
HAMMER SELL	2019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	2019	2020	2021	2022
BOX INC.	100.0%	100.0%	100.0%	100.0%
BALL AG	90.0%	95.0%	95.0%	95.0%
HAMMER SELL	70.0%	80.0%	90.0%	90.0%

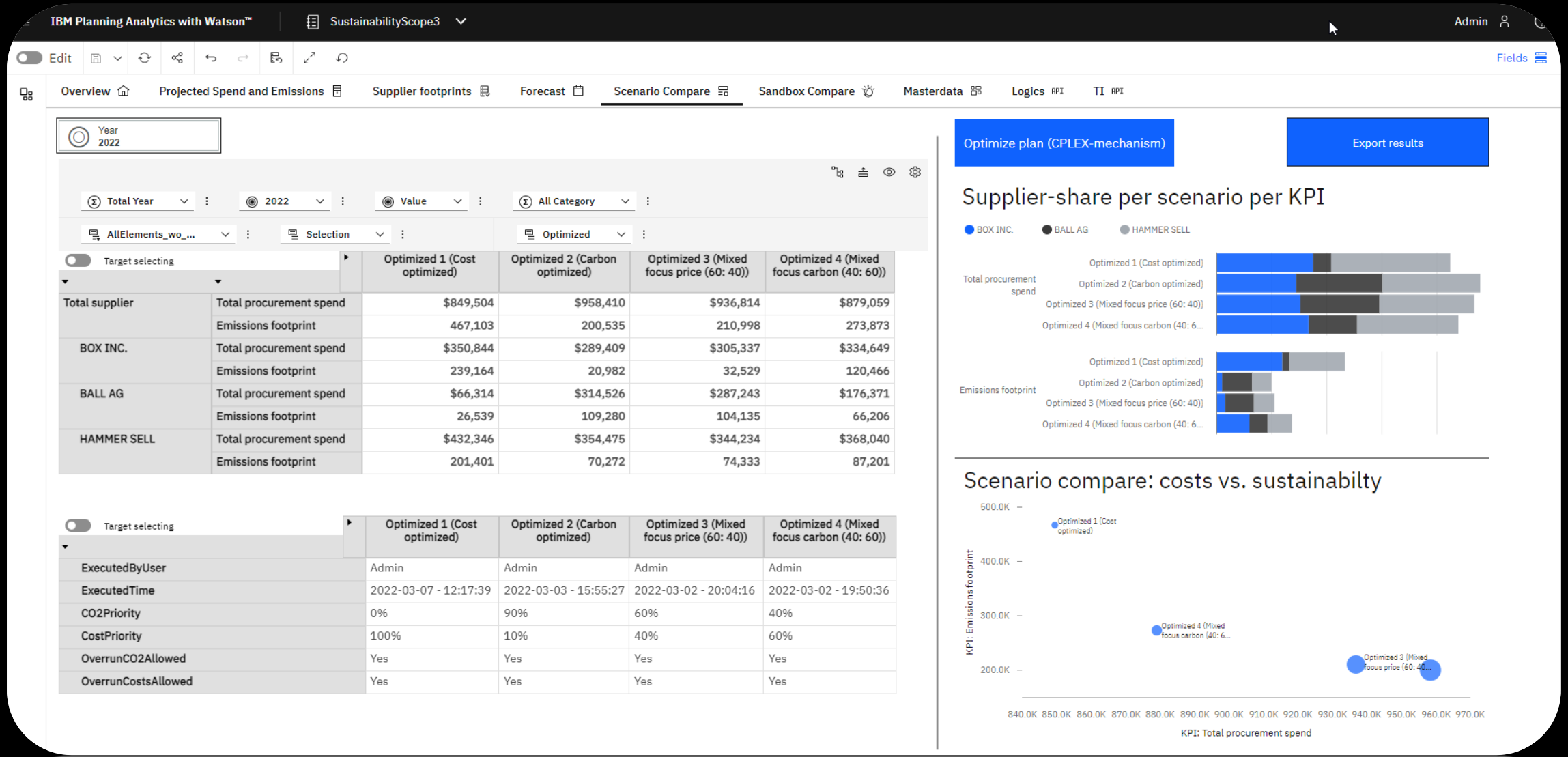
Load or input the different footprints like CO2 or costs on a yearly or monthly basis per product, supplier etc.

Plan, simulate or optimize your corporate plan concerning units, suppliers, scope 3-footprint, costs etc.



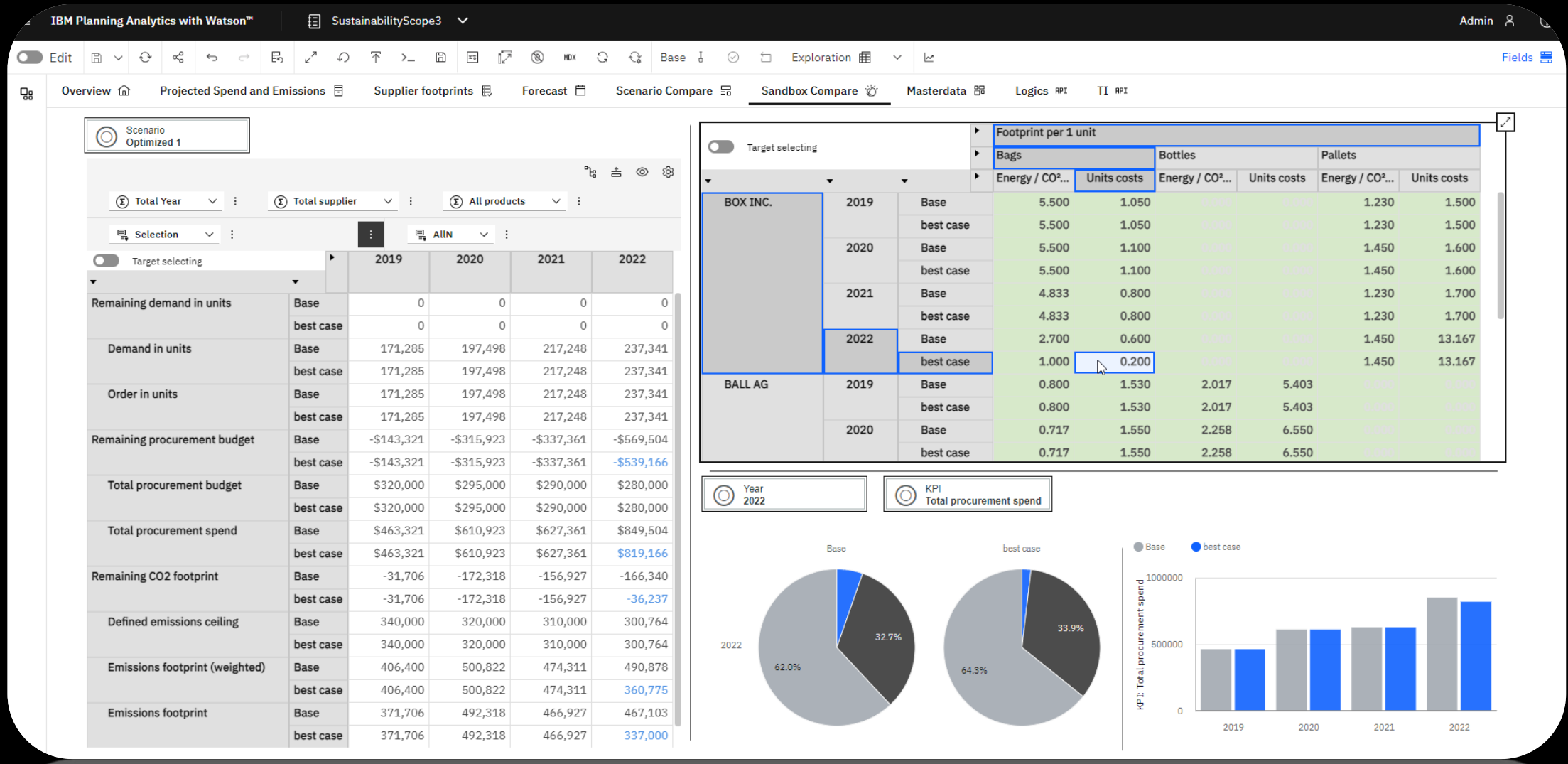
Find a decision to find the perfect product-supplier-mix concerning your targets incl. optimization in realtime to find your strategy

Compare the automated calculated scenarios



Compare the calculated options incl. the parameters and analyse all forecasted details on all levels of the model in realtime-speed for am optimized decission

Compare your realtime simulation/sandboxes and decide for your future



Open in realtime scenarios („sandboxes“) and simulate a parameter-change (footprint, units etc.) through the whole model

Why using IBM Planning Analytics for sustainability-topics?

- IBM is offering one platform for reporting /-planning or –simulation - addressing the sustainability-usecases for **all stakeholders**.
- **Link sustainability-results directly to existing other plans** like cost-planning, P&L or balance.
- The solution is able to **simulate in realtime** changes of all factors, drivers or parameters – the endusers can directly check sandboxing-results in the balance or other result-outcomes.
- The solution can handle **all types of masterdata** like products, material, regions, Accelerators, supply chain-processes etc. and can be flexible **adjusted by the business department**.
- No limitation for emission factors - ability to **create flexible new emission factors**. No limitation of userinterface languages.
- IBM Planning Analytics is a **mature native analytics-application** which can handle billions of datarecords in realtime-speed. Furthermore, the seamless analysis on all levels or aggregations through the whole data is possible.
- IBM Planning Analytics is **part of the integrated IBM Analytics portfolio** - other components like IBM Cognos Analytics, Watson Studio or ILOG CPLEX can enrich the solution (CP4D etc.).