Westernacher
NONSTOP INNOVATION

Sustainability Analytics: How to integrate the reporting and planning of your carbon emissions into your company.

Practical Guide – Part 3

In the first part of our 2022 white paper series, we focused on companies' motivations to reduce their carbon footprint and how systems like SAP S/4HANA and SAP Analytics Cloud can provide the needed architecture for controlling a corporate carbon footprint according to Greenhouse Gas Protocol. In the second part of the series, we looked into ways of setting up SAP Analytics Cloud to act as a carbon footprint monitor and offer simulation options to run what-if scenarios and to evaluate business cases.

Having identified the right toolset with the required capabilities, companies now need to find ways to integrate these with existing operational systems and into their company processes. Sustainability needs to be incorporated throughout the organization from operations to decision-making.

1. As-is situation and integration into operational systems.

Companies are still at the early stages when it comes to managing accounting and reporting requirements for CO_2 emissions. Enterprise Resource Planning (ERP) systems have not yet embraced the changes for those requirements. Even a modern S/4HANA system does not yet offer full carbon accounting functionalities (comparable to financial accounting). SAP has already communicated to partners that an integration is planned, but it will be at least one or two more years until we can expect this to be available to customers. In the meantime, companies need to use their ERP, as well as other source systems, as an input source to calculate their corporate carbon footprint (CCF) in separate reporting tools. Using tools such as Microsoft Excel with manual inputs can require major efforts of several weeks when companies calculate their yearly Corporate Carbon Footprint (CCF). Therefore it is advisable to use tools such as SAP Analytics Cloud with built-in interfaces e.g. to SAP S/4HANA for direct data import or even live data connection.

SAP offers a considerable amount of standard extractors for SAP S/4HANA and SAP Analytics Cloud that allow access to information, such as working hours from Cross Application Time Sheet (CATS) or material usage according to Bill Of Materials (BOMs). In case of customizations e.g. within SAP S/4HANA Private Cloud, existing extractors can be easily adapted to extract information from Z-fields or tables. Direct data connections give companies the chance to update their CCF in a few seconds, work with a live reporting on a daily basis and provide management the option to drill down to the individual product's CO_2 emission.

Companies need to integrate the green line in their decision-making processes in the future.

2. Integration of the Green Line into decision-making.

Previously, companies used to take decisions based on two aspects:

1. Implication on operations

- What can I do better afterwards?

- How can my processes or products improve?

2. Implication on financials

- How much does this cost my company?

- How much money can I save over time?

But the sustainability aspect brings a new layer of decision-making, with bi-directional connection towards operations as well as financials.

Traditional decision layers

Operations + Finance

+

New decision layer

Sustainability
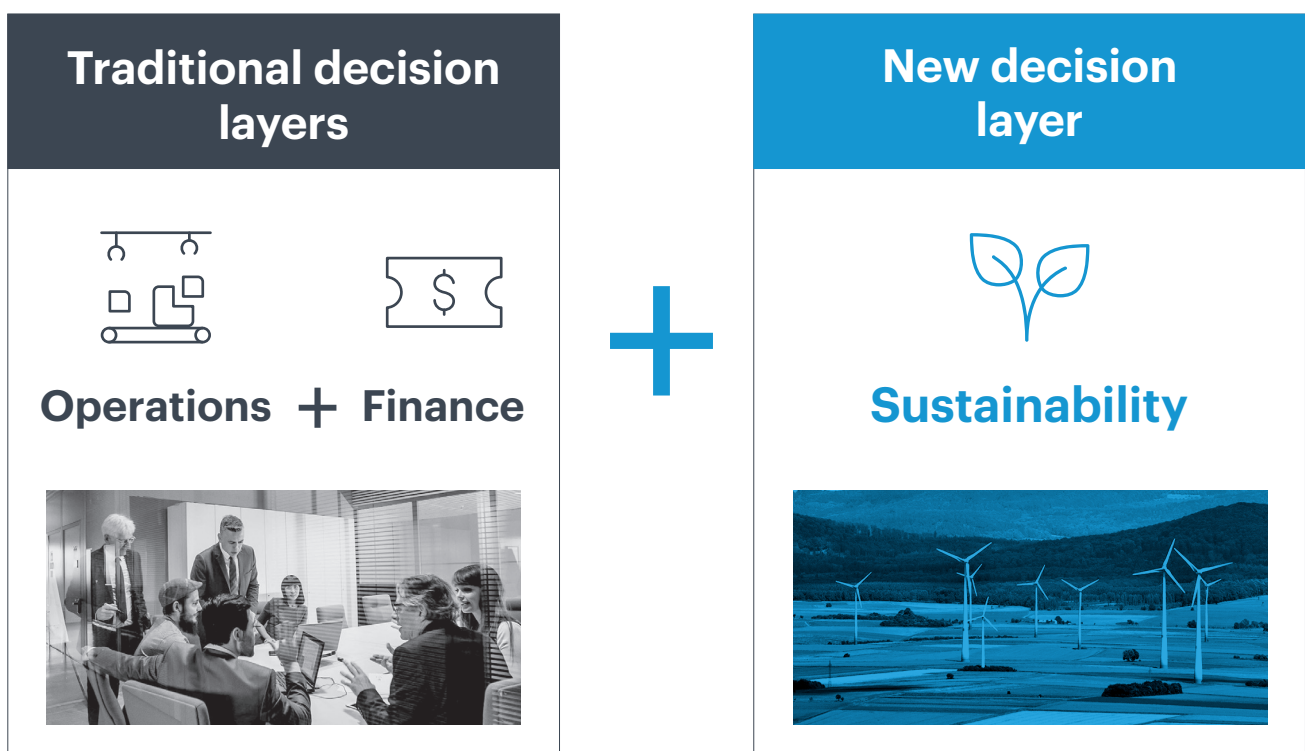
Any change in operations can be expressed in cost/savings in currency or CO_2 emissions. The same holds true for any new CO_2 savings initiative, which will lead to changes in operations and most likely financial cost/savings. In other words: we have a "decision triangle" of bottom (operations), green (sustainability) and top line (financials).

In the previous practical guide, we covered how the SAP Analytics Cloud can support companies in calculating business cases while considering CO_2 emissions.

Without providing a reference to which tool Walmart used to calculate the net results, this example shows how important it can be for companies to have that decision triangle in mind: "Walmart identified through its [Green House Gases] (GHG) emissions that they spend a lot of energy on the heating and cooling of their buildings. Because of this, they installed around 10,000 high-efficiency rooftop heating and cooling units. These units produce 610,000 tons less of CO_2 per year. This also led to €8 million in cost savings."[1]

[1] Walmart business case

Of course it does not stop here. Carbon emissions also influence a company's strategy and ecosystem. As companies are carbon taxed for suppliers' and partners' emissions, the ecosystem plays an essential role in the road to decarbonization as well as the evaluation of potential financial risks. Considering the decarbonization strategy of a supplier might lead to very interesting insights. Your main supplier might not have a very ambitious sustainability strategy whereas the competitor might push decarbonization heavily.

Supplier decisions based purely on the purchase price may result in continuing business with the main supplier as it is cheaper. But considering the carbon taxation, the result may change and the sustainable supplier may come out with a lower total cost. Given the volatility of carbon pricing for the future, it is wise to simulate the total cost per supplier for the coming years before signing or extending a long-term procurement contract. This is more how the future will look.

3. Summary.

Companies can obtain competitive advantages by building up sustainability analytics in their organization to drive decarbonization. Current tools, such as Microsoft Excel, can be a short-term solution for reporting, but result in significant effort for the organization.

Systems, like SAP S/4HANA in combination with SAP Analytics Cloud, can structure information in a more efficient way, providing detailed reports and analysis within seconds. Sustainability managers in their companies can have real-time information and invest their time in putting new measures in place to further drive decarbonization.

The decision-making and planning process of former days will need to change in order to consider the green line and its implications on the top and bottom line. The simulation and planning options within SAP Analytics Cloud support very complex scenarios with multiple and flexible influencing factors, such as business cases and strategic procurement decisions, to define a company's strategy, and/or assess potential business risks.

Start your digital transformation with Westernacher.

Westernacher has been innovating business and IT for more than 50 years. We are successful in helping our customers with many different transformation initiatives by providing solutions for operational, organizational and technical issues:

Technical:

From implementing EWM, S/4HANA, SCE and other SAP solutions to developing custom ABAP and Fiori solutions.

Organizational:

Supporting businesses in the transformation to becoming a merchandise- focused retail organization. Providing an engaging vision and training to realize quick wins and removing (cultural) barriers.

Operational:

Developing innovative business processes to make the most of the new technology and information. Improving KPIs and creating KPPs to move the company from a reactive stage to an orchestrating stage.

To provide you with a better understanding, we offer an Inspiration Day, where we show you what sustainability analytics looks like and how it might impact your company. This is achieved through demonstrations and discussions with our Analytics experts.

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