Sustainable Performance Accounting (SPA)
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1. Methodology

Sustainable Performance Accounting (SPA) describes a new axiomatic of business accounting that integrates sustainability into the profit and loss (P&L) statement using methods of accounting (position paper SPA 2022).

The linkage of (a) sustainability disclosure statements to each other and b) to other parts of the annual financial statements has not yet been sufficiently taken into account in the ESRS (Status 4/2022), so that the character of integrated reporting is not yet properly reflected.

Furthermore, we are concerned that, should up to 137 additional disclosure requirements of sustainability information now be included unfiltered in the management commentary then can the annual financial statement and the management commentary still be comprehensible?

In particular, the annual financial statements, including the management commentary, are often criticized as being too extensive in some cases. This huge amount of data could lead to information overload for stakeholders and might hinder the desired ESG steering effect.

Therefore, the sustainability information should be clearly structured, measured, monetized and initially aggregated to just one or only a few performance indicators. We suggest that the classical and established performance indicators for pure financial reporting, such as net profit, EBIT or return on equity, are compared to the corresponding ESG integrated performance indicators and published in the management commentary. This presupposes that sustainability information with its monetary values is recorded in a separate ESG-accounting system. ESG-accounting would then cover the financial materiality in the sustainability reporting, but without the matters already recorded in financial accounting. Differences between and sustainability performance, e.g. net profit and ESG integrated net profit, would become more apparent. The reasons for this difference are then briefly explained according to the three areas E, S and G, and, for more detailed information, referenced to the relevant passages of the disclosure requirements of the sustainability reporting and/or the notes to the financial statements.
Overall, the following five application steps result for SPA:
- SPA1: Determination of the ESG issues.
- SPA2: Measurement of the ESG issues.
- SPA3: Posting of the ESG issues.
- SPA4: Determination of the integrated performance indicator(s).
- SPA5: Explanation of the differences of the performance indicator(s)

As some ESG issues are already part of classical financial statements, SPA would allow for better integrated reporting. In addition, SPA enables a drill-down presentation of the multitude of disclosure requirements for sustainability reporting. Based on the explanation of the differences between the non-integrated and integrated performance indicators, it is possible to selectively look up further details in the disclosure requirements of the sustainability reporting that are important to a stakeholder. In this way, information overload for stakeholders can be avoided.

When applying SPA, the sustainability performance must be measurable. Certain ESRS standards provide for potential financial effects so that these can already be used as accounting information. However, assessment procedures haven’t yet been established for all ESG issues. We assume, however, that over time more and more valuation techniques for ESG matters will become common practice. The SPA paper also contains a proposal for the measurement of ESG matters. Any accounting information that is added over time and that can be integrated into SPA makes it easier to read the financial statements and the management commentary, including the sustainability reporting; and enhances the information quality according to ESRS E1.2.1 para. 25.

Once the sustainability data has been determined and recorded, the establishment of an ESG system should not be a major additional expenditure to the already existing financial accounting. So, we suggest the application of SPA as another option for those companies that see the advantages of SPA and want to apply it. In a first step, applicants could be companies that want to eliminate the "P&L paradox of sustainable management" in classical financial reporting by applying SPA. This paradox arises from the time lag in the P&L between risk mitigation measures and the first time the risk becomes visible, which puts sustainable companies at a technical disadvantage in the P&L during the first few years.

2. Posting example

2.1 Initial situation

Company B is a medium-sized cement manufacturer with 160 employees. The following information is provided throughout the annual financial statements and management report, including the sustainability report. Company B shows a profit of € 1 million for each of the years 01 and 02.

Company B trains apprentices (trainees) amounting to 5% of its own workforce. Personnel expenses amount to € 13,612.50 p.a. per trainee. 25% of the total personnel expenses for trainees are ascribed to knowledge retention in the company with regard to natural employee turnover.

Company B produces 10,000 tonnes of cement annually in its cement plant, which consists of several production units. The production of one tonne of cement produces 0.8 tonnes of CO2e in the older cement plant. The price for CO2e in the framework of EU emissions trading (EU ETS) is - both in year 01 and 02 - 70 €/t CO2e. In 02, Company B invests € 2.5 million in a modern CO2 filter system, which is amortised over 25 years. Thanks to this filter system, CO2 emissions can be reduced by half and, at 0.4t CO2 per tonne of cement produced, are now even below the technical screening criteria of 0.489t CO2e according to the first climate environmental objective of the EU taxonomy regulation.
Company B is repeatedly accused of anti-competitive behaviour (i.e. price fixing) with other cement manufacturers, without any concrete proceedings having been initiated. Corresponding rumours arose again in the 01 financial year as a result of an investigative article in a renowned news magazine. Despite the introduction of appropriate internal governance structures, the management assumes that this reputation-damaging public image will result in a 10% turnover loss and thus production losses over a longer period of time. One scenario could be that, due to this possible development, a production unit representing approximately 10% of capacity is no longer needed for production in the future. In this case, the accounting consequence would be an impairment of this one production unit by €100,000 to the residual fair value of €30,000. According to the auditor, the facts are not yet concrete enough for consideration in the financial reporting.

Present SPA-compliant reporting for the years 01 and 02 for the performance indicator "net profit". Deferred tax should be waived for reasons of simplification.

2.2. Solution

SPA1: Identification of ESG issues

- **E**: The emission of CO₂ during production as well as the purchase of a filter to reduce CO₂ emissions fall into the category "climate change mitigation" and are thus the subject of an ESG issue. The relevant performance indicator is the number of tonnes of CO₂ equivalents (CO₂e/t).

- **S**: The training of trainees is assigned to the category "knowledge retention" and thus represents an S issue. The trainee ratio is the most important relevant performance indicator here.

- **G**: The damage to reputation feared as a result of the discussion about a possible cartel falls under the category "anti-competitive behaviour" and thus represents a G issue. The decline in production capacities is the relevant performance indicator here.

SPA2: Assessment of ESG issues

- **E**: The initial monetisation of the CO₂ emission amounts to €560,000 (10,000t CO₂e * 0.8t CO₂e/t * 70 €/t CO₂e). The halving of the CO₂ emission corresponds to an amount of €280,000 (560,000 €/2). The filter system is valued at the acquisition cost of €2,500,000. The annual amortisation amounts to €100,000 p.a. (€2,500,000 € / 25 years’ useful life).

- **S**: The training costs for all 8 trainees (5% of 160 employees) amounts to a total of €108,900 p.a. (8 trainees * €13,612.50 p.a.). With a training ratio of 5%, company B is in the yellow range in terms of knowledge retention performance according to the SPA limit value setting (traffic light principle). Accordingly, 25% of the total training costs, thus €27,225 (€108,900 * 25%), represent a sustainable intangible asset in the sense of the SPA methodology. **G**: In the case of a 10% decrease in production, a corresponding production unit is to be impaired to the fair value, which corresponds to an impairment amount of €100,000.
SPA3: Posting of the ESG matters

F-accounting

- **Year 01**
  - E: In the absence of an existing external obligation, no CO₂ provision may be entered in the F-accounting.
  - S: Personnel expenses of €108,900 were posted for the trainees.
  - G: An impairment of tangible assets, as in this case of a specific production plant, can in principle arise in F-accounting due to sales declines as a result of changed market demand - as in this case due to loss of reputation. However, in the present case these are still too uncertain to be recorded in the F-accounting.

- **Year 02**
  - E: The acquisition of the new filter system to the amount of €2,500,000 is posted under tangible assets with no effect on the profit and loss account and amortised with 1/25 in year 02 to the amount of €100,000 (€2,500,000 / 25 years) with effect on expenses. By recording the new filter system and the related turnover, CapEx and OpEx on separate (E) accounts in the F-accounting, a corresponding disclosure of all E-items can be ensured and at the same time data for taxonomy-compliant reporting in the sense of the CSRD in conjunction with the EU Taxonomy Regulation can be generated. (→ SPA3a)
  - S: Personnel expenses of €108,900 were posted for the trainees.
  - G: /.

ESG-accounting

- **Year 01**
  - E: Recording of a CO₂ provision to the amount of €560,000 as an expense (→ SPA3c).
  - S: Recognition of training costs as intangible asset in the ESG-accounting to the amount of €27,225 with a simultaneous corresponding cost reduction in the P&L (→ SPA3b).
  - G: Impairment of €100,000 on the production unit that may no longer be needed (→ SPA3d).

- **Year 02**
  - E: Since the new filter system saves half of the CO₂ and the CO₂ price has remained unchanged, half of the CO₂ provision of €280,000 (560,000/2) can be reversed to increase the P&L (→ SPA3c).
  - S: Recognition of the training costs as an intangible asset in the ESG-accounting to the amount of €27,225 with a simultaneous corresponding cost reduction in the P&L (→ SPA3b).
  - G: /.
SPA4: Determination of the integrated performance indicator

From Tables 1 and 2:

- **Year 01:**
  - Net profit\(_{INT}\) = € 367,225;
  - Delta to net profit = - € 632,775 (€ 1 million - € 0.367 million)

- **Year 02:**
  - Net profit\(_{INT}\) = € 1,307,225;
  - Delta to net profit = € 307,225 (€ 1.307 million - € 1 million)

SPA5: Explanation of differences in the performance indicator

- **Year 01:** Explanation of the integrated situation of company B

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<td>F</td>
<td>Facts</td>
<td>Amount €</td>
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<td>Net profit</td>
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<td>Recognition trainee costs</td>
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<td>S2.9* &amp; Notes personnel expenses</td>
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<td>5</td>
<td>CO(_2)-provision</td>
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<td>E1.17*</td>
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<td>6</td>
<td>Impairment of Production unit</td>
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<td>7</td>
<td>Net profit(_{INT})</td>
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* Data points from the ESR5 standards (as of 04/2022)

**Tab. 1: Derivation of the net profit\(_{INT}\) for the year 01**

"The net profit\(_{INT}\) of the year 01 amounts to € 367,225 and is € 632,775 lower than the net profit. As can be seen in Table 1, this difference is attributable to each of one E, S and G issues. Details on the individual ESG issues are the subject of specific explanations in the sustainability report as part of the management report and in part also in the notes, which are referenced in the table (see column D of tab. 1). Expenses for trainees (S) to the amount of € 27,225 were recognised as intangible assets in ESG-accounting. The expenses for trainees recorded in the profit and loss accounts can be found in the notes on personnel costs. A provision of € 560,000 was recorded in the ESG-accounting for the CO\(_2\) equivalents (E) emitted during cement production. In addition, an unscheduled impairment of €100,000 was made on one production unit. As background information this is a possible decline in demand and thus a no longer given utilisation of this production unit may have been due to a reputational risk in connection with reports of alleged price fixing (G)."
"The net profit of the year 02 amounts to € 1,307,225 and is € 307,225 higher than the net profit. As shown in table 2, this difference is due to two ESG issues. Details on the individual ESG issues are part of the management report and are the subject of specific explanations in the sustainability report and in part also in the notes, which are referenced in the table (see column D of tab. 2). Expenses for trainees (S) to the amount of € 27,225 were recognised as intangible assets in ESG-accounting. The expenses for trainees recorded in the P&L can be found in the notes on personnel expenses. With the acquisition of a new filter system, which was recognised in F-accounting, CO₂e emissions can be reduced by half. This leads to a P&L-increasing reversal of the corresponding CO₂ provision (E) to the amount of € 280,000 in ESG-accounting. On the other hand, € 100,000 of amortisation on the filter system must be taken into account in this case. Details on this can be found in the notes on amortisation.

### Tab. 2: Derivation of the net profit for the year 02

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* Data points from the ESG standards (as of 04/2022)