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Calculating Sustainability

Can accounting save the world?

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Key assumptions and findings

1. There is an increasing awareness of the need to make Nature a stakeholder, with recent initiatives providing a seat on the board to Nature (e.g. Faith in Nature) or recognising its rights as a shareholder (e.g. Patagonia).

2. Corporate reporting struggles to deal with the impact on the environment of supply and value chains. Some practices focus merely on the impact of the environment on organisations (financial materiality); others try to include in this consideration also the inverse impact (double materiality). Due to the intrinsic uncertainty of how non-financial information is valued and measured, these concepts are acknowledged to be dynamic (dynamic materiality).

3. The plethora of initiatives challenge how we conceptualise capitalism. They also support different ways of accounting for social and environmental issues.

4. To date, accounting has facilitated organisations in creating and promoting non-financial reporting and introducing new systems that can support their journey towards achieving the United Nations' Sustainable Development Goals (SDGs).

5. Despite some exceptions (e.g. Integrated Reporting[1], impact-weighted accounts[2]), corporate reporting represents non-financial information separately from financial information to the detriment of encouraging holistic decision-making.

6. We propose a new tool that reconciles the financial (value-added statement rethought to include nature as a stakeholder to be remunerated) and non-financial dimensions (SDGs) of business actions and corporate reporting. We call this tool the 'Sustainable Value Table' (SVT).

7. By combining these two dimensions, the SVT functions as a powerful strategic planning tool that guides the decision-making process. It reveals how means (financial value) support the pursuit of ends (non-financial values) without making means an end in themselves.

8. It shows how tensions between them can be attenuated and orchestrated in such a way that they prompt a reflection on what strategies to pursue in the short- and long-term to steer organisations' sustainable development.

Contents

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Introduction

Is it not every manager's secret dream to be able to make decisions about the future of the organisation without jeopardizing sustainable development? Can accounting and the accountant make this dream come true?

Before answering both questions, we must first dive into the historical background of corporate reporting formats. Thereafter, we can embark on our journey of what accounting and accountants can do to steer sustainable development for organisations and at policy level.

Historically, the International Accounting Standards (IAS) allowed the use of different formats for drafting income statements. One of these formats was the value-added income statement – i.e. an accounting statement that identified how organisations create value from operations and then distribute this value among various stakeholders. The current IFRS standards no longer envisage this open choice and follow a more shareholder- and profit-oriented narrative. We argue that using a modified version of the value-added income statement – i.e. one that includes 'Nature' as a stakeholder to be remunerated (Quattrone, 2022) – would allow us to rethink capitalism according to a value-oriented approach that places stakeholders at its centre.

To this argument, we conducted a series of case studies to test the feasibility of introducing the revised value-added income statement. We interviewed several organisational actors, among them CSR Manager, Sustainability Manager, and CEOs across different sectors (real estate, energy and multiutility sector). The findings of the interviews suggested that the difficulties of recognising 'nature' as a stakeholder stem from the current reporting standards and can be overcome through policy interventions introducing lawlike obligations of environmental compensation obligations.

To further navigate the different conceptions of capitalism, accounting must recognise both financial and non-financial dimensions and the tensions arising from their combined investigation. In detail, the financial dimension reflects the interests of organisations. Instead, the non-financial one portrays environmentally supportive interests, i.e. social and environmental dimensions, that might clash with the organisations' one.

The modified value-added income statement, when linked to the UN SDGs, could provide the 'space' where tensions become visible. It would aid in exploring the interaction and orchestration of the financial and non-financial aspects. Furthermore, the link itself emphasises the needed shift from a single-materiality approach - i.e. the impact of the environment on the organisation's financial value - to a double-materiality approach, where the organisation's impact on the environment is also considered. We call this space the 'Sustainable Value Table' (SVT).

Through an in-depth single case study, we tested the functionality and viability of the SVT. It is perceived as a useful tool for linking value creation and distribution without losing sight of the broader goals set by the SDGs. The SVT, ultimately, stimulates decision-making among management accountants about how value creation and distribution can be ameliorated in the pursuit of the SDGs. The following main capabilities of the SVT have emerged:

- **The SVT as a presentation tool for fostering engagement.** The visual matrix dimension of the SVT fosters engagement. By linking both financial and non-financial dimensions, it motivates organisational actors to convey the current state of the art and present possible future endeavours.
- **The SVT as a strategy and planning tool**. The value creation part of the value-added income statement requires broader and less immediate changes. For example, mitigating the negative impact of product X's revenues on SDG 7 requires time to rethink how the organisation creates value. The distribution of value, on the other hand, can be more easily manoeuvred and used as a short-term solution to offset any negative impacts.
- **The SVT as a possible future reporting tool.** It has the potential to become a viable reporting tool, provided that on the one hand a robust methodology is developed that supports a non-arbitrary use of the tool and, on the other hand, an accounting system is created that allows for classifying according to an SDG- based taxonomy.

Key conclusions

- The Sustainable Value Table (SVT) offers a space where organisational actors can discuss, propose ideas, brainstorm and strategize on the changes to be made in the long and short term. It recognises Nature as a key stakeholder and integrates it in the financial statements.
- In its current guise, the SVT functions as a strategic planning tool to forge future decision-making and considers the interplay between means (financial values) and ends (non-financial values), thus providing a solution to the tensions between the financial and non-financial dimensions of the business.
- The modified value-added statement enables organisations to consider how they can adopt a remunerative/ restorative approach to 'Nature', thus going also beyond merely compensating for natural resources used during day-to-day operations. The restorative approach can be integrated into business models that shape a more sustainable future landscape for organisations.
- For the SVT to become a reporting tool, accounting systems and bookkeeping need to support the classification of income statement items according to their impact on the SDGs.

Research objectives & methodology

During the pandemic, we contacted several large, medium, and small companies based in Europe to investigate the viability of the modified value-added statement and to test the SVT as an accounting tool that promotes sustainability-informed decision-making by organisations.

We conducted semi-structured interviews to explore the challenges related to the feasibility of constructing the modified value-added income statement that recognises 'nature' as one of the stakeholders to be remunerated. Then, we tested the application of the SVT identifying the practical implications for management accountants and policymakers.

Among the contacted organisations the following three have been particularly relevant for discussing the research object:

- **Altria** is a listed leading manager for office real estate operating in Germany.
- **Better Energy** is a renewable energy company that creates new green energy. It designs, develops, builds, operates, and owns renewable power plants that generate clean electricity.
- **Smart Energy**[3] is a state-owned 100% sustainable green tech company that provides energy services, deals with district heating systems, energy sales and e-mobility, and supports smart energy and innovative environmental projects.

Out of the three organisations, **Smart Energy** already followed a similar approach to the revised value-added income statement proposed. It also developed a fund for remunerating the environment for the resources used. Given these premises, we tested the SVT within Smart Energy through a series of group interviews.

Main findings and their implications for practice

Current financial reporting standards (Figure 1, left-hand side) promote a profit perspective, as they focus only on the interests of shareholders, investors and lenders. Yet today, this perspective is perceived by many as increasingly unsustainable in the long-run and therefore a movement towards greater inclusion of other stakeholders is in sight.

For financial reporting to recognise stakeholders, it is useful to take a closer look at the value-added income statement (Figure 1, right-hand side). Here, the value created corresponds to the value that the company has added as a result of its business operations and thus corresponds to the difference between the value of production and externally acquired factors of production. This wealth created by the company is then shared among various stakeholders, including employees, capital providers, the State, shareholders and finally the company itself through retained earnings. We propose the use of a modified version of the value-added income statement, which incorporates 'Nature' into the calculation of value distribution (Quattrone, 2022). Since organisations undoubtedly deploy natural resources in their operations, 'nature' should be recognised as a compensable stakeholder. This item in the value-added income statement flags an effort by the company to make up for its negative externalities.

Figure 1 - From the current financial statement format to the creation and distribution of value

From a profit-oriented perspective...

Revenues	+
Cost of Goods Sold	-
Gross Margin	=
Operating expenses	-
Operating income	=
Financial income	+/-
Profit Before tax	=
Tax	-
Net profit	=

... to a value-oriented perspective

Revenues	+
Cost of production and services	+
Value added by operating activities	+
Interest received	+
Dividends received	+
Wealth created	=
Distributed as follows:	
Employees (through salaries, wages and benefits)	-
Providers of interest bearing capital (through interest)	-
The State (for services through tax payments)	-
The Firm (through retained earnings)	-
Shareholders (through dividends)	-
Wealth distributed (= to wealth produced)	=

Feasibility of adopting a value oriented perspective with 'nature' as a stakeholder

In our interviews, we collected contrasting opinions and perspectives regarding the feasibility of the use of the modified value-added statement.

Reactions differed mainly in relation to the accounting treatment of the provision for nature. As the CEO of Alstria pointed out, this was mainly because in the IFRS 37 - Provisions, Contingent Liabilities and Contingent Assets there were no grounds for recognising 'nature' as a material stakeholder. It was precisely this recognisability challenge that was the focus of discussion between Alstria and their external auditors. The CEO reasoned that:

> *"There is a problem with nature, and we worked on our carbon account with PwC and this was something that they really struggled to wrap their head around since you don't have a transaction [...] You basically are not paying for something, so you're borrowing basically money from nature and that creates a liability as you have unpaid capital, which you have borrowed from somebody that you would need to settle in the future."*

Another concern surrounding the item 'nature' in the modified value-added income statement was raised by the Sustainability Manager of Better Energy. Her concern related to the meaning of 'sustainability'. The lack of clarity on the meaning of sustainability possibly entails the creation of the fund for nature for the sake of rhetoric only. She suggests relying on the Future-fit Benchmark[4] for defining sustainability. This latter approach, unlike others, envisions the need for a restorative approach that goes beyond monetary compensation:

> *"The challenge with only looking at sustainability at this point in time – with nature being degraded, with climate change, with biodiversity loss, ecosystems collapse -is that it is actually no longer enough to be sustainable. We have to start giving back [...] We have to start building into a business model the restorative behaviour[...] "*

> *We have to start building into a business model the restorative behaviour that ultimately feeds nature in a way that it becomes regenerative so that business becomes part of the national system."*

The response was different for the multi-utility. Due to the unique context in which it operates and the support it received in terms of legislative guidance on sustainable development from the local government, it had no major problems in introducing this fund into its financial statements. The auditors recognised that its inclusion in the financial statements was necessary due to local legislation obliging the company to pay such sums for the natural resources used. As argued by the CSR manager:

> *"This [the introduction of the fund for nature] is relatively easy for us because of the provision that we have. We have a plan [denominate plan for environmental funds], where we pay a certain amount of our revenue to initiatives or we dedicate them to initiatives that are linked to certain aspects to improve the communities in which we operate."*

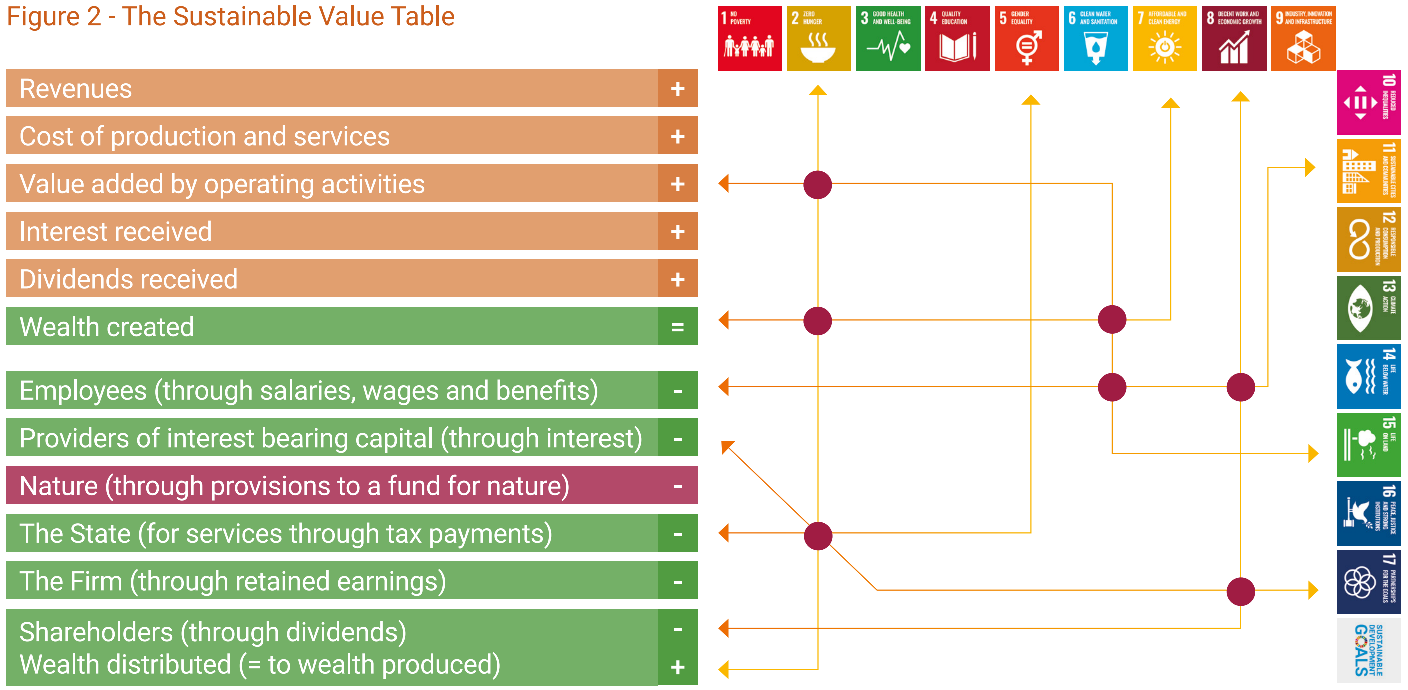
The lessons learned from this latter case were twofold with regard to the feasibility of the modified value-added income statement. First, 'nature' was implicitly treated as a stakeholder. Although it did not appear in their value-added income statement as a separate account, it was aggregated under another caption (remuneration to the State). Secondly, and as a consequence of the above, the development of a fund for nature is not theoretically impossible. It should be noted, however, that the feasibility of creating this fund in the case of Smart Energy was largely determined by the support received from the local legislature, which facilitated, through the existence of a law to draw on, Smart Energy's interaction with its auditors.

Linking the value-added statement with the SDGs: A restorative approach in management accounting practices

By linking the value-added income statement to the SDGs we formed a matrix, i.e. the SVT (Figure 2). This matrix creates a space in which the various stages of value creation and distribution can be linked to the relevant SDGs, based on their expected impact.

The SVT acts as a guide, where organisations can understand how value creation and distribution are linked to one or more SDGs independently from the sector and/or industry.

Figure 2 - The Sustainable Value Table



The SVT at its heart could allow for decision-making that goes beyond merely compensating 'nature'. Alternatively, a more restorative approach to management could be taken. This aspect emerged in the interview with Better Energy's Sustainability Manager when she argued that:

> *"We have to start giving back, and that's where you piqued my interest with this nature through provisions to a fund for nature because we actually have to take into consideration a gift back. We have to start building into a business model the restorative behaviour that ultimately feeds nature in a way that it becomes regenerative so that business becomes part of the national system [...] So, I actually think that sustainability is the lowest bar but we actually have to get companies understand the restorative responsibility that they have through years of negative practice in terms of impact. So I see lots of potential here."*

Testing the SVT: The case of Smart Energy

To test the practicability of the SVT, by detecting its capabilities, we conducted a series of group interviews within Smart Energy. In particular, we tested the tool by engaging the CSR Manager of Smart Energy, the CSR Advisor and their new hire, the Impact Manager, in a mapping exercise and brainstorming session.

We showed them the SVT, as depictured below, grouping SDGs according to whether they increase positive externalities or reduce negative ones (Montiel et al., 2021). We developed this SVT based on Smart Energy's financial statements and the organisation's activities (Figure 3).

Figure 3 - The SVT adapted to Smart Energy

		Increasing positive externalities						
		Increasing knowledge		Increasing wealth			Increasing health	
		SDG 4 - QUALITY EDUCATION	SDG 9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE	SDG 5 - GENDER EQUALITY	SDG 1 - NO POVERTY	SDG 8 - DECENT ECONOMIC GROWTH	SDG 2 - ZERO HUNGER	SDG 3 - GOOD HEALTH AND WELLBEING
CREATION OF VALUE	**2021 (in 1'000)**							
A) REVENUES + OTHER REVENUES	2,082,825 €							
A.1. Generating Energy	170,710 €							
A.2. Commerce and Trading	113,105 €							
A.3. Distributing Energy and Gas	1,895,303 €							
A.4. Heathing and Services	98,607 €							
A.5. Smart Region	54,500 €							
- infragroup operations	- 249,400 €							
B) EXTERNALLY ACQUIRED COSTS	- 1,704,597 €							
B.1. Costs for raw materials, consumables and goods	- 1,091,134 €							
B.2. Cost for services	- 613,463 €							
= C) GROSS VALUE ADDED OF PRODUCTION	**378,228 €**							
D) OTHER EXPENSES FROM EXTRAORDINARY OPERATIONS	- 9,290 €							
= E) GROSS GLOBAL VALUE ADDED	**368,938 €**							
F) DEPRECIATION AND AMMORTIZATION	- 106,197 €							
= G) NET VALUE ADDED OF OPERATIONS	**262,741 €**							
DISTRIBUTION OF VALUE								
TO EMPLOYEES (salaries and benefits)	**71,792 €**							
TO PROVIDERS OF INTEREST BEARING CAPITAL (interests)	**15,210 €**							
TO NATURE/SOCIETY	**2,855 €**							
Environmental funds	*707 €*							
Sponsorships to communities	*2,148 €*							
TO THE PUBLIC SECTOR	**83,434 €**							
State (taxes)	*39,129 €*							
Local PAs (royalities, tariffs etc)	*44,305 €*							
TO THE SHAREHOLDERS (dividends)	**n.g.**							
TO THE FIRM (retained earnings)	**89,450 €**							
Net profit	*70,309 €*							
Retained earnings	*n.g.*							
Provision for risks and other expenses	*19,141 €*							
Var. in Reserves	*n.g.*							
= Value distributed	**262,741 €**							

		Reducing negative externalities									
		Reducing the overuse of natural resources				Reducing harm to social cohesion				Reducing overconsumption	
		SDG 15 - LIFE ON LAND	SDG 6 - CLEAN WATER AND SANITATION	SDG 13 - CLIMATE ACTION	SDG 7 - AFFORDABLE AND CLEAN ENERGY	SDG 10 - REDUCED INEQUALITIES	SDG 16 - PACE, JUSTICE AND STRONG INSTITUTIONS	SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES	SDG 17 - PARTNERSHIPS FOR GOALS	SDG 12 - RESPONSIBLE CONSUMPTION AND PRODUCTION	SDG 14 - LIFE BELOW WATER
CREATION OF VALUE	**2021 (in 1'000)**										
A) REVENUES + OTHER REVENUES	2,082,825 €										
A.1. Generating Energy	170,710 €										
A.2. Commerce and Trading	113,105 €										
A.3. Distributing Energy and Gas	1,895,303 €										
A.4. Heathing and Services	98,607 €										
A.5. Smart Region	54,500 €										
- infragroup operations	- 249,400 €										
B) EXTERNALLY ACQUIRED COSTS	- 1,704,597 €										
B.1. Costs for raw materials, consumables and goods	- 1,091,134 €										
B.2. Cost for services	- 613,463 €										
= C) GROSS VALUE ADDED OF PRODUCTION	**378,228 €**										
D) OTHER EXPENSES FROM EXTRAORDINARY OPERATIONS	- 9,290 €										
= E) GROSS GLOBAL VALUE ADDED	**368,938 €**										
F) DEPRECIATION AND AMMORTIZATION	- 106,197 €										
= G) NET VALUE ADDED OF OPERATIONS	**262,741 €**										
DISTRIBUTION OF VALUE											
TO EMPLOYEES (salaries and benefits)	**71,792 €**										
TO PROVIDERS OF INTEREST BEARING CAPITAL (interests)	**15,210 €**										
TO NATURE/SOCIETY	**2,855 €**										
Environmental funds	*707 €*										
Sponsorships to communities	*2,148 €*										
TO THE PUBLIC SECTOR	**83,434 €**										
State (taxes)	*39,129 €*										
Local PAs (royalities, tariffs etc)	*44,305 €*										
TO THE SHAREHOLDERS (dividends)	**n.g.**										
TO THE FIRM (retained earnings)	**89,450 €**										
Net profit	*70,309 €*										
Retained earnings	*n.g.*										
Provision for risks and other expenses	*19,141 €*										
Var. in Reserves	*n.g.*										
= Value distributed	**262,741 €**										

Starting from an initial assessment of the SVT, all respondents expressed concern about the calculation, in financial terms, of the value of positive/negative impacts on the SDGs. The SDGs are too broad, which makes it difficult to capture the contributions to such wide concepts. There is an inherent difficulty in calculating how much, for example, revenues from energy generation contribute to one or more of the SDGs. This difficulty, although also widely shared by other sustainability and impact management tools, makes the SVT too premature to be used as a reporting tool. The possibility of compiling the SVT in the future has not been discouraged. At the moment, however, the support of accounting devices is insufficient to make a classification for each item based on the proposed SDG taxonomy.

To this end, the SVT is presently perceived as a useful presentation instrument ***"to make an analysis and then see where I want to go and what I want to focus on" (CSR Manager).***

This involves thinking about Smart Energy's current strategic plan and detecting how it is linked to the several SDGs. The tool engages in an initial appreciation of the state of art allowing organisational actors to identify the gaps, tensions and future endeavours necessary to be included in their strategic plans. This evaluation, in the eyes of the Impact Manager, starts from a qualitative analysis, that *"must always lead [...] It's quite difficult, as said, to measure, generally, the contributions to them [SDGs]."*

Such a qualitative assessment can be performed by placing, for example, pluses and minuses within the SVT space to indicate either positive or negative externalities on the SDGs. Tackling *SDG 7 - Affordable and Clean Energy* (see Figure 4), as an example on which to brainstorm, we let the Impact Manager think about the current contributions that Smart Energy was making to the selected SDG. Mainly positive impact emerged. This is related to the fact that Smart Energy is a renewable energy company. Revenues from "Commerce and Trading", however, harm SDG- 7 signalling a potential area for improvement in future.

Figure 4 – Qualitative assessment of SDG 7

		SDG 7 - AFFORDABLE AND CLEAN ENERGY
CREATION OF VALUE	2021 (in 1'000)	
A) REVENUES + OTHER REVENUES	**2.082.825 €**	
A.1. Generating Energy	170.710 €	+(X)
A.2. Commerce and Trading	113.105 €	-(X)
A.3. Distributing Energy and Gas	1.895.303 €	+(X)
A.4. Heathing and Services	98.607 €	+(X)
A.5. Smart Region	54.500 €	+(X)
- infragroup operations	- 249.400 €	
B) EXTERNALLY ACQUIRED COSTS	**- 1.704.597 €**	
B.1. Costs for raw materials, consumables and goods	- 1.091.134 €	neutral/ -(X)
B.2. Cost for services	- 613.463 €	
= C) GROSS VALUE ADDED OF PRODUCTION	**378.228 €**	
D) OTHER EXPENSES FROM EXTRAORDINARY OPERATIONS	- 9.290 €	
= E) GROSS GLOBAL VALUE ADDED	**368.938 €**	
F) DEPRECIATION AND AMMORTIZATION	- 106.197 €	
= G) NET VALUE ADDED OF OPERATIONS = Value created	**262.741 €**	
DISTRIBUTION OF VALUE		
TO EMPLOYEES (salaries and benefits)	**71.792 €**	
TO PROVIDERS OF INTEREST BEARING CAPITAL (interests)	**- €**	
TO NATURE/SOCIETY	**2.855 €**	
Environmental funds	*707 €*	
Sponsorships to communities	*2.148 €*	
TO THE PUBLIC SECTOR	**83.434 €**	
State (taxes)	*39.129 €*	
Local PAs (royalities, tariffs etc)	*44.305 €*	
TO THE SHAREHOLDERS (dividends)	**n.g.**	
TO THE FIRM (retained earnings)	**89.450 €**	
Net profit	70.309 €	
Retained earnings	*n.g.*	
Provision for risks and other expenses	*19.141 €*	+(X)
Var. in Reserves	*n.g.*	
= Value distributed	247.531 €	
NET IMPACT		*5 positive impacts, 1 negative impact and 1 negative towards neutrality impact*

For discovering instead how one line item of value creation contributes, such as revenues, across the SDGs, the Impact manager for instance highlighted how the revenues from the business unit "Generating energy" had both positive and negative externalities (Figure 5). Although energy production within Smart Energy derives solely from water resources, the energy plants that are located close to the rivers have negative externalities on SDG 15 – *Life on Land and SDG 6 – Clean Water and Sanitation.* In this regard, the net impact of the revenues from the business unit can be explored. Consequently, the SVT presents a space where tensions and trade-offs can be outlined and accordingly managed.

Figure 5 – Qualitative assessment of the revenues of "Generating Energy"

		Reducing negative externalities										
		Reducing the overuse of natural resources				Reducing harm to social cohesion				Reducing overconsumption		
		SDG 15 - LIFE ON LAND	SDG 6 - CLEAN WATER AND SANITATION	SDG 13 - CLIMATE ACTION	SDG 7 - AFFORDABLE AND CLEAN ENERGY	SDG 10 - REDUCED INEQUALITIES	SDG 16 - PACE, JUSTICE AND STRONG INSTITUTIONS	SDG 11 - SUSTAINABLE CITIES AND COMMUNITIES	SDG 17 - PARTNERSHIPS FOR GOALS	SDG 12 - RESPONSIBLE CONSUMPTION AND PRODUCTION	SDG 14 - LIFE BELOW WATER	*NET IMPACT*
	2021 (in 1'000)											
A) REVENUES + OTHER REVENUES	**2.082.825 €**											
A.1. Generating Energy	170.710 €	-(X)	-(X)		+(X)							*2 negative impact and 1 positive impact*

A summary of both individual mapping exercises (Figure 4 and 5) is depictured below (Figure 6). This latter figure, shows on point 3 how the Environmental fund, i.e. the provision for nature, is used by Smart Energy to compensate the negative effects of the energy plants in the value creation process on SDG 15 and SDG 6. This interplay among items indicates the space where reflections occur.

Figure 6 – The interplay between value creation and distribution with SDGs

		Reducing negative externalities		
		Reducing the overuse of natural resources		
		SDG 15 - LIFE ON LAND	SDG 6 - CLEAN WATER AND SANITATION	SDG 7 - AFFORDABLE AND CLEAN ENERGY
CREATION OF VALUE	**2021 (in 1'000)**			
A) REVENUES + OTHER REVENUES	**2.082.825 €**			
A.1. Generating Energy	170.710 €	-(X)	-(X)	+(X)
A.2. Commerce and Trading	113.105 €			-(X)
A.3. Distributing Energy and Gas	1.895.303 €			+(X)
A.4. Heathing and Services	98.607 €			+(X)
A.5. Smart Region	54.500 €			+(X)
- infragroup operations	- 249.400 €			
B) EXTERNALLY ACQUIRED COSTS	**-1.704.597 €**			
B.1. Costs for raw materials, consumables and goods	-1.091.134 €			neutral/ -(X)
B.2. Cost for services	- 613.463 €			
= C) GROSS VALUE ADDED OF PRODUCTION	**378.228 €**			
D) OTHER EXPENSES FROM EXTRAORDINARY OPERATIONS	- 9.290 €			
= E) GROSS GLOBAL VALUE ADDED	**368.938 €**			
F) DEPRECIATION AND AMMORTIZATION	- 106.197 €			
= G) NET VALUE ADDED OF OPERATIONS = Value created	**262.741 €**			
DISTRIBUTED AS FOLLOWS				
TO EMPLOYEES (salaries and benefits)	**71.792 €**			
TO PROVIDERS OF INTEREST BEARING CAPITAL (interests)	**15.210 €**			
TO NATURE/SOCIETY	**2.855 €**			
Environmental funds	707 €	+(X)	+(X)	
Sponsorships to communities	*2.148 €*			
TO THE PUBLIC SECTOR	**83.434 €**			
State (taxes)	*39.129 €*			
Local PAs (royalities, tariffs etc)	*44.305 €*			
TO THE SHAREHOLDERS (dividends)	**n.g.**			
TO THE FIRM (retained earnings)	**89.450 €**			
Net profit	70.309 €			
Retained earnings	*n.g.*			
Provision for risks and other expenses	*19.141 €*			+(X)
Var. in Reserves	*n.g.*			
= Value distributed	**262.741 €**			

To improve the understandability of where tensions might reside, the interviewees suggested to further breakdown 'revenues'. For example, splitting the revenues from the business units further into product lines might be a solution. Within one business unit there might be several different activities, some more sustainable and others not. This is the case of the business unit "Commerce and Trading". One part of the trading activity, for instance, regards the acquisition and selling of non-green energy, which is why a negative impact is expected in terms of contribution to SDG -7.

The SVT assists the strategizing and planning phase of organisations. The Impact manager, for instance, mentioned that, in his view, the value creation part (i.e. revenues and externally acquired costs), requires more extensive changes that are not achieved easily in the short term. The value distribution side, instead, is more malleable also in the shorter term. The Impact Manager argued:

> *"So, it's a bit the question what do I do with that information, especially if we talk about revenues. If we talk about the lower section where we say "OK, where do we invest our money? How do we distribute it there?", I can steer a bit better because it's... [On] the revenues [part instead] ... I can push that product a bit more, I can use it maybe as a marketing guideline but at the end of the day, it's always the consumer who decides and they very often decide on the price side. So, I would actually need to invest more in the production process to decrease the costs and so on and so forth. [...] I think just on a short term it's easier on the lower bit to manipulate, let's put it like this, whereas on the upper bit it's more going in the Business Innovation direction. So, you have to rethink how you actually make money which is a much longer-term process."*

The SVT first and foremost promotes reflection on the current state of value creation. It guides the decision-making process of organisations on their path to becoming fully sustainable. Once gaps are identified, the tool stimulates reflection on "what to do next". It helps to make conscious choices about compensating negative externalities with positive ones. Creating a space of interaction, it reflects how compensation could be improved. Until the sustainable transition of the organisation is completed, the SVT helps optimise short-term adjustments in value distribution to compensate for the impacts of the value creation part.

Being a presentation tool, bound to the development of the strategy, the SVT can generate debates within the organisation, including the Boards of Directors (Management and Supervisory Board). The SVT inspires moments of reflection through mapping exercises, where one can attempt to identify financial values to attribute positive and negative impacts to each link discovered between an item in the value account and an SDG. The CSR Advisor emphasised this potential of the tool:

> *"I would show them [BoD] something like this [...] when they see something that has a financial-economic impact and how this relates to sustainability and how each voice, each different business unit, can contribute differently to each one of those SDGs. So, if they say: "We want to move in some sort of direction", of course, that could mean we have to invest more in one business unit than in the other. So it is something that I would think I would for sure show on that kind of occasion."*

To turn the SVT into a reporting tool, first, a definition of sustainability is needed. The EU taxonomy, for example, shows exactly what is sustainable and what is not rendering the financial valuation more straightforward. In contrast, the Future Fit Benchmark could provide a sustainability definition that relies on restoration as the source of sustainable development. The SVT could promote this latter definition. Secondly, a robust methodology needs to be developed that determines for each financial statement item to which SDGs it may or may not contribute, and that assists organisations in calculating the impact.

Conclusions

- The modified value-added income statement is in line with the stakeholder approach and, in looking at values and their impact on the environment, it endorses double materiality. The addition of 'nature' as a stakeholder allows organisations to adopt a remunerative/restorative approach to compensate for the use of natural resources in day-to-day business activities. This restorative approach if integrated into business models could shape a more sustainable future landscape for organisations.
- To find out how organisations best tackle restoration, the SVT could be implemented. With this table, organisational actors can engage and find strategic solutions about how best to act to drive sustainable development. The SVT offers a space for reflection on the necessary changes to be made in the long and short term. The tool enables decision-making by contemplating both the financial and non-financial dimensions, thereby striking trade-offs to promote sustainable operations without neglecting the financial or non-financial dimension of the organisation.
- In its current guise, the SVT functions as a strategy and planning tool to forge future decision-making and considers the interplay between means (financial values) and ends (non-financial values). For the SVT to become a reporting tool, accounting systems and bookkeeping need to support the classification of income statement items according to their impact on the SDGs.
- **Lessons for management accountants:** Management accountants ought to reconsider how organisations create value in the long term, seeking to modify business plans if current operations have several negative impacts on the environment. In addition, management accountants need to be mindful of the links between the short and the long run and may, in this period of transition from the current business plan to the sustainable business vision, perform actions in the near term to alleviate the negative impact deriving from value creation.
- **Lessons for policymakers:** Greater commitment from policymakers is needed to support organisations in shifting to a more restorative perspective of natural resources consumed. Legislative support from policymakers is crucial to steer organisations towards a more sustainable world.
- Accounting can save the world, but for this to happen accounting regulations and policies have to be redrafted.

Footnotes and Further Reading

1. For further information see: https://www.integratedreporting.org
2. For further information see: https://www.hbs.edu/impact-weighted-accounts/Pages/default.aspx
3. The company name does not correspond to reality. It has been included as the result of a non-disclosure agreement signed
4. For further information see: https://futurefitbusiness.org

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For further information and future developments, please visit: https://www.accounting-saves-the-world.com/

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