Sustainability. How to manage the future

Sustainability is the imperative of our time. In a society whose constitutive trust in a better future on earth has been shaken and, on occasion, drowned by fear of imminent collapse, "sustainable development" – so the original, double-name of the current concept – has come to promise both at the same time: continuing change to the better that doesn't make (other) things worse.

It comes as no surprise, then, that "sustainability" has quickly become part of our everyday morality and language. There's almost no realm of life today that's not poised to become (more) sustainable: from our most tangible consumption, mobility and housing patterns to the most abstract concepts of demographic change, ecological footprint and economic growth. The more self-evident and pressing it has become that we be – or at least become – sustainable, however, the more tempting – and indeed fashionable – it seems to cut corners and actually abuse the term to calm down, make believe and feed upon the positive feelings it still conveys (cf. Chapters 3 & 4).

This problem of *hypocrisy* – which comes up whenever norm and reality are hard to match – is a problem that's bound up with the nature of the concept. Sustainability is not only a *normative ideal*, but also a highly abstract *theoretical construct* – which means that, in quite many cases, it's hard to tell exactly what's sustainable, and what not. A good part of the current, often technical discussion – which we will only touch on the surface – turns exactly on the question how to "operationalize" and measure sustainability in the case of products, lifestyles and organizations. In part, this debate intersects with what we heard about efforts to internalize external effects into economic calculation in the chapter on accounting and controlling (cf. Chapter 7).

The debate over sustainability, including its hypocritical abuse, is actually much older – indeed much older than the actual *word,* when we focus on the meaning it conveys, as a *concept*. We will have a short look at this historical debate, as it emerged in medieval and early modern Europe, about the use of wood – before the dawn of the "fossil era". And we will review the more prominent and recent rediscovery of the term, at the oncoming *end* of this era, as we are reaching the global *limits* and *peaks* of about anything, in our natural, social and economic systems.

Then and now, sustainability implied a fundamental critique of one-dimensional *economic* – as opposed to multi-dimensional *ecological* – thinking. Ideally, then, sustainability is at odds with capitalist economic rationality, which boils down to nothing but the sustained – a. k. a. unlimited – accumulation of invested capital (cf. Chapter 7). The idea of sustainability may also be seen to conflict with modern human development in terms of increasingly differentiated and rationalized social "subsystems" that operate, respectively, according to their own, peculiar "codes" or logics. Rather, sustainability is about *re-integrating* these self-referred realms under the integrating imperative of sustained life. No single aspect of this life – such as the protection of the natural environment, social justice, or the growth of material welfare – must be maximized at the expense of all others, in order to be sustainable.

In that latter respect, the idea of sustainability may be traced back even to Aristotelian ethics. Indeed, this chapter includes a short review of his original, critical view of what the ancient Greeks called "chrematistics": economic activity that's primarily concerned with "making money", and which Aristotle deemed an imminent danger for the moral fabric of the *pólis.* Aristotelian ethics not only inspired much of Christian and Islamic "business ethics", esp. their ban on "usury" and interest, but his *practical philosophy* also served as a model for "integrative" approaches to ethics – such as *sustainable development* – that aim to keep different aspects of human life in a sustainable balance. As we will see at the beginning of this chapter, this challenge has been with mankind ever since it had been *driven out of Paradise*, as it were.

The History of Sustainability

The problem of sustained survival under conditions of limited natural environments has been with mankind ever since it became settled. Island dwellers, even if still basically vagrant in their lifestyle, were among the first who had to cope with the close physical limits of their living environments – and who often failed to do so (Diamond 2010, Flannery 2011): The *Maori,* e. g., shortly after their arrival to *Aotearoa*, had hunted the giant *moa* birds and other species to extinction. Much more drastically, though, the Polynesian *Rapa Nui*, in a few centuries, had exploited their native *Easter Islands* (as the Dutch happened to name them) to such a degree that it eventually led to the demise of their own civilization – due to internal warfare, a resource-sapping and potentially distracting cult, and probably also the import of rats. Sacrificing their future for their present, and seemingly not being able to do something about it, in the face of imminent disaster – these supposed failures made the *Rapa Nui's* demise an object of projection for current global affairs.

On the mainlands, sustainability happened to become a general problem – *avant la lettre* – with what American futurist Alvin Toffler (1981) called the revolutionary "First Wave" of human development: the replacement of primitive hunter-gatherer culture by settled agricultural society. All of a sudden, mankind had to provide its own subsistence, grow and breed its own food – it had, in a very literal sense, been *driven out of Paradise*. Not only did it have to make ends meet, *economically*, but it also had to do this in a way that, *ecologically*, could be supported by the local natural environment and, *socially*, by the way the sedentary, quickly rising population was organized – *in the long run.*

The problem of sustainability, thus, is fairly old and deeply wound up with the history of human civilization. Whole landscapes still bear witness to this legacy. Apart from the mentioned *Easter Islands*, whose forests were, supposedly, in good part sacrificed for the production and lifting up of the gigantic *Mo'ai* statues, the same holds for huge parts of the Mediterranean coast line, such as on the Greek *Peloponnes,* whose deforestation and erosion was already bemoaned by contemporary philosopher Plato, for the Lebanon, home of the famous *Lebanon Cedar*, the now karstified Balkans, southern Italy and parts of North Africa. The hunger for wood – used for buildings, carts, ships and almost anything – had changed the face of great parts of Europe, already in ancient times. Not much is known, however, whether this also changed the ways people back then thought and started to act upon their natural environments.

As an explicit, intellectual and active concern, even if under different names, sustainability did come up – in Europe – not before the late *Middle Ages (Grober 2010)*: One of the earliest sources of "sustainability thinking" probably is St. Francis of Assisi's *Canticle of the Sun*, a strong and lively expression of the Christian imperative to "save the creation" that slowly made its way through monasteries all over Europe. In the secular world, the insatiable hunger for wood, especially in the early capitalist centers of Northern Italy, such as Venice (whole forests went into its stilt buildings, trade and war ships) inspired rationing schemes to secure sustained provision of this material, from huge estates the city state owned in the back country. Even if this was a far cry from the *idea* of sustainability, in any strict sense, it shows the existential need to do something about this *problem* of sustainability: Wood was and – for centuries to come – was to remain the main pillar of material culture: the most important material for building, burning and pulp.

It comes as no surprise, then, that the discourse on sustainability emerged in – and for a long time was limited to – the realm of *forestry*, where it slowly developed into a guiding principle. Even though the idea had been the subject of extended debate all over baroque Europe, the German Hannß Carl von Carlowitz (1645-1714), a forest official working for a Saxon mining company, is usually credited with having introduced the modern concept of sustainability into the discipline, in his 1713 book *Sylvicultura Oeconomica oder Anweisung zur wilden Baumzucht [Instructions for Wild Tree Cultivation].* There, Carlowitz wrote about the basic aim of forestry "that there be a continuous and *sustainable* [*nachhaltende*] use / for it is an indispensable matter / without which the land cannot continue in its *esse* [= cannot survive]." (qtd. in Grober 2010 : 116 – own translation)

Much of the wood, in the times of Carlowitz, and indeed in his immediate area of activity, was actually used for mine timberwork. Ironically, however, the original, sylvicultural problem of sustainability was eventually eased by the very advent of the fossil era. Oil and coal, so it was initially thought, could bridge the most immediate wood shortage and allow the forests to regenerate. So, the use of fossil fuels – initially seen as only low-grade *ersatz* for wood – indeed was meant as a strategy to save the forests.

By tapping these new, supposedly inferior, but also seemingly inexhaustible underground reservoirs – "*resources*" – sustainability did not only lose much of its urgency. The unexpected transition to the fossil era, eventually, entailed a latent *shift of paradigm* as well: What once had been "gifts" were now called "resources", "coal" and "oil" became practically synonymous with fossil fuels, and – probably most importantly – the once ecological, cyclical notion of "growth", in this process, was slowly replaced by a one-dimensional, linear, seemingly infinite, "*cornucopian*" conception – an idea of growth that found its congenial counterpart in the money fetish of emerging capitalism (cf. below).

This paradigm shift eventually reached back to the sylvicultural debate itself, thinning out the concept of sustainability to include the reforestation with tree monocultures for "sustained maximum net yield" – in monetary terms. This way, so the Prussian forester Bernhard Borggreve, in a very clear-sighted, contemporary critique, "even the most exploitative form of forestry, euphemistically, can be said and defended to be sustainable." (qtd. in Grober 2010 : 177) Instead of an *ecological* perspective on sustainability, which had still been present in Carlowitz's original concept, with the rise of capitalism, the industrial

revolution and a general belief in human progress in terms of an emancipation from nature (actually all based on the belief in a fossil "cornucopia"), the *economic* paradigm slowly had become the dominant one – even in the discourse on sustainability.

However, just as it had slowly ebbed away and indeed been watered down with the *rise* of the fossil era, the debate on sustainability re-emerged with its foreseeable *end* – as a guiding principle for a new "earth politics". Its "key moment", seemingly, was the unity, uniqueness and solitude of the "Spaceship Earth" as it revealed itself to mankind for the first time with the *Apollo* missions in the late 1960's and early 1970's (see figure 1). It was not until the late 1970's – after witnessing the oil shock, the first deep crisis of democratic capitalism after *WW2*, the beginnings of a new, neoliberal globalization and, on the other hand, growing debates on the "limits of growth", environmental degradation, global justice and development – that "sustainability" re-entered center stage.

Figure 1: "View of the Earth as seen by the Apollo 17 crew traveling toward the moon."

The picture, taken on December 7, 1972, on the way to the moon, is one of the most widely distributed photographic images to date. The "Blue Marble", how NASA photograph "AS17-148-22727" is widely known, is displayed here in its original, "upside down" orientation.

Source: NASA

Until today, the seminal report *Our Common Future*, issued by the so-called *Brundtland Commsion,* in 1987, has remained the central point of reference when it comes to debates on sustainability. The *Brundtland Report*, as it is often called, includes what's virtually become the "canonical" definition of the term: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." (WCED 1987 : [41])

Obviously, the *Brundtland definition*, which also inspired the *UN* world summits in Rio (1992) and Johannesburg (2002) and ensuing strategies for sustainable development, aimed to make the concept of sustainability more dynamic, by interlacing it with the concept of *development*. While this implied a statement against narrow, *economic* concepts of "progress" and "growth", just as in earlier debates on global justice, this conjunction of terms also marked a clear shift away from an *ecological* focus on the protection of the environment, to the protection of human *development*.

First of all, then, "sustainable development" (in the following, I will refer to it as "SD") signified a clear *anthropocentric* concern: *human needs,* above all, had to be satisfied in sustainable ways. At the same time, however, this synthesis of terms implied a programmatic *extension* of perspective of modern ethics, in two directions: *towards an integration of different realms of life* and associated normative claims, and *towards the future.* Both these extended perspectives – its *multi-dimensionality* and its *reference to time* – distinguish SD as a characteristic, novel ethical principle, even if it has firm roots in the Western intellectual tradition.

An Integrative Perspective

SD, as we just saw, is the result of two terms that both passed down (part of) their semantic heritage to their conceptual offspring: *Development* is an intrinsically multi-dimensional issue, such as is life – to which the concept essentially relates. As mentioned before, development had been the subject of intensive discussion throughout the 1970's, mainly to distinguish it from narrow capitalist and "modernist" conceptions that used to define it in terms of simply "catching up" on the path of human progress that – in this view – had been chalked out by the West. Indeed, the debate over SD, until the present day, has remained very critical of this perspective.

Not only is it critical about the implicit *ethnocentric bias* of the "Western model", and about the implicit claim to make the division of labour and market exchange a universal principle of decent human life – while the livelihood of millions of people worldwide is still based essentially on subsistent production. Most fundamentally, SD has been critical about the *consequences* of the Western model, while – at the same time – it aims to see these things in a systemic and balanced way: Our lifestyle certainly goes at the cost of others. Poverty, while a bad thing in itself, however, also poses a constant threat to social integration and to the quality of natural environments – when people, e. g., are forced to clear and burn up forests, or when they just can't care about others or their natural environment, just because they are too absorbed with making a living.

Usually, from such an integrated, systemic perspective, SD is envisioned in terms of three (seldom more) dimensions or requirements and associated human needs and claims:

- *economic requirements*, including the provision of basic needs, opportunities to participate in economic life, to use and develop one's capabilities and to secure and increase one's welfare

- *social requirements*, including political and human rights to participate in society, and issues of social justice

- *ecological requirements*, including access to natural resources as a basic means of production, reproduction and regeneration

Usually, these three dimensions of SD are pictured as three *pillars*, as an isosceles (= equal-sided) *triangle* or – as shown in figure 2 – in the form of intersecting *circles*.

Figure 2: Sustainable Development as a Three-Dimensional Challenge

What this model image shows is the basic claim to *integrate* these different dimensions – a claim that's intrinsically linked to SD, as a normative principle. In an ideal, strict sense, SD implies that none of the three dimensions be maximized at the expense of any other. *Partial* SD (such as "equity", "viability" or "bearableness" in the above figure) may be reached when at least two dimensions and their associated needs and claims already do intersect. *True* SD, however, according to this ideal model, is only reached when the three circles have become one, i.e. when all these needs and requirements do intersect or actually merge.

Even if they are clearly not *identical*, then, it may be said that the different dimensions of SD (in a "strong" interpretation of the term at least) are indeed *analogous*: they are *different*, *not convertible*, and indeed *indispensable* as partial aspects of a common, overarching principle or idea: SD or – in more general terms – a *good life* that's equitable, viable and bearable at the same time.

From this perspective, it may seem that the idea of SD is fundamentally at odds with modern society – a society that's so heavily compartmentalized, split into increasingly specialized and rationalized functional subsystems that follow their own peculiar codes of operation (cf. Chapter 7). The idea of SD, however, may be seen to add a normative "top layer" to that situation, a cross-sectional and integrative perspective that's supposed to give orientation where these different realms of life should be heading – in terms of social justice, economic welfare and quality of environment.

As was mentioned above, however, SD really is at odds with efforts to maximize one of these aspects – either at the expense of others, or by actually *using* them as means to this end. SD, therefore, is hardly consistent with much that's been called "sustainable business cases", if what they imply is to simply "identify" social and environmental "issues" that can easily be turned into money – and eventually improve the bottom line (cf. Chapter 7). So, a narrow, capitalist interpretation of "economic sustainability" in terms of sustained profit maximization certainly hasn't much to do with SD in any strict sense of the term. Yet, as we saw earlier, the temptation to use the term for such things is indeed nothing new.

Even if – for many businesses, notably the smaller ones – SD has become a serious guiding principle, it is still telling how readily the "substantivist" economic dimension of the concept (cf. Chapter 7) has been translated into a formal, capitalist conception of economy. When both – SD and capitalism – are in the end *ideal, theoretical constructs*, it is also true that, *as such*, they do fundamentally contradict each other, as guiding principles for human development.

Actually, when we take the *integrative* perspective of SD and its fundamental opposition to a capitalist and also "colonialist" (meaning that it has a tendency to spread into other realms of life) notion of economy, SD can be seen as a late offspring of Aristotelian thought. Indeed, the *analogous, multi-dimensional* conception of SD very much reminds of the *analogous* relationship of economics, ethics and politics in Aristotle's "practical philosophy". Aristotle's fierce opposition to a one-dimensional and indeed "perverted" form of economics, *chrematistics*, important as it has been as an intellectual barrier against full-blown capitalism thoughout much of European – and also Islamic – history, is likely to have left its mark on SD as well (cf. the box on *Aristotle and the Non-Sustainable Avarice for Money*).

Aristotle and the Non-Sustainable Avarice for Money   Ancient Greek philosopher Aristotle (384-322 B.C.), with his normative views on the *economy* (integral part of the community) and *economics* (integral part of "practical philosophy") may be seen as a forerunner for other "integrative" conceptions of business ethics, such as stakeholder management, Peter Ulrich's *Integrative Economic Ethics* (Ulrich 2005), the *Economy for the Common Good [Gemeinwohlökonomie]* drawn up by Austrian activist writer Christian Felber (Felber 2012), and, of course, the normative principle of *Sustainable Development*.

In the times of Aristotle, "economy" still referred basically to what the households (οἶκος, in ancient Greek) produced and consumed in mostly subsistent ways – not a market economy based on a developed division of labour, in which production and consumption have fallen apart to a considerable degree (cf. Chapter 5). So, production for a market, wage labour and trade were still rare. For Aristotle, then, "economics" (οἰκονομική), being the "art of householding", was meant to secure material needs, welfare and economic self-reliance of the community. This "natural art of gaining a livelihood" Aristotle clearly distinguished from what he saw as an utterly "unnatural" or even "perverted" kind of economic activity: "chrematistics" (χρηματιστική), referring to the "art of money making", i. e. the accumulation of riches (or of capital) *for its own sake*. This kind of one-dimensional, self-referred and "disembedded" economic activity would eventually threaten the political and moral order of the *pólis* (Polanyi 1957).

While modern economists – notably followers of a substantivist and a formalist conception of economy (cf. Chapter 7) – disagreed on Aristotle's "discovery" (ibid., Hayek 1996), his critical view of economic activity emancipating itself from the moral and political order of society and following its own, peculiar rationality, had inspired European and Islamic "business ethics" (before the word) for many centuries to come. Indeed, Aristotle's views on chrematistics, on "infertile" money and "usury" – mainly through the canonical ban on interest – is likely to have had at least *put back* the development of capitalism for some time.

Indeed, money-lending did exist in medieval Europe. However, the "usurer" – the medieval money lender – was a moral pariah, facing hell for his "avaricious" practice of taking money for the mere *time* (God's own property) that he gave it to somebody else. So, additionally, money-lending had been outsourced to other confessions, notably Jews, who repeatedly became the object of religious hatred and violence, not least for that reason. Also, monasteries lent money for some fee that wasn't to be misconceived as interest. At some point in time, however, the Church's moral views on usury and interests did so much contradict the growing economic need for capital that – in the course of many decades – the canonical ban on interest was continually softened. Eventually, the "usurer" didn't have to fear eternal perdition in hell any more, but only transitory, cathartic punishment in the "purgatory", which the church fathers had just recently invented as a place for atoning for the venial sins (and in order to cash in on the selling of indulgences). "Only the hope to get away from hell", so French historian Jacques Le Goff, "allowed the usurer to push economy and society of the 13th century ahead on its way to capitalism." (Le Goff 2008 : 131 – own translation)

No more than 200 years later, *avaritia*, for which the church had condemned the usurer, was becoming the centerpiece of a new, revolutionary bourgeois ethos. The ethical legitimation of self-interest and money-making as being utterly "natural" and, above all, "useful" – so essential for the development of the "capitalist spirit" (cf. Chapter 7) – first appeared in the early capitalist centers of Northern Italy (Ebbersmeyer, Keßler, und Schmeisser 2007), centuries before liberals and utilitarians eventually canonized it (Hirschman 1987).

The integrative perspective of SD basically means just that: A system that grows more wealthy, in terms of money, at the cost of its natural environment and social integration, is not sustainable. Equally, a system that denies basic needs and rights, for the protection of natural resources, isn't sustainable. For a system to be called "sustainable", it has to achieve

all of these objectives – economic welfare, social justice, and a healthy natural environment – at the same time. What's more, it has to do this not only in the here and now, as it were, but also in view of future generations.

The Future and Intergenerational Justice

A second characteristic feature of SD that we identified is its intrinsic reference to time, more specifically to the *future*. Most traditional ethical theories and principles didn't really bother much about the future. For religious morality, of course, the *netherworld* always had to be reckoned with, for it was there that deeds (and sometimes even thoughts) in the here and now were to be judged. And the fear of perdition, or the hope for salvation, indeed, may have provided a sufficient incentive to behave according to the moral principles laid down in the religious texts. Still, this future was *not of this world*, as it were.

Secular morality – such as notably ancient Epicurean philosophy – did sometimes question these religious believes in an afterlife. They did not, however, offer anything in exchange. Rather, they sometimes focused exclusively on the here and now, where the good life was to be had – and to be led. So, the future, from this perspective, wasn't something one had to care about at all.

With modern, secular philosophy, this changed somewhat. Not so much with ethics based on pure reason, such as Kantian ethics, which, in its universal stance, could ignore time and place as relevant categories to be considered. With liberal ethics and utilitarianism, however, the very consequences of actions, for the first time, came to the fore of ethical deliberation (cf. Chapter 1). So, even if these were more or less immediate consequences, this – from today's perspective – can be considered a true "paradigmatic turn" in the development of modern ethics. Interestingly, the concept of *responsibility*, in that respect, didn't come up as an ethical category until the 19th century. The ethical – and also the practical – problem that "responsibility" was to solve was the problem of attributing the consequences of actions that weren't easily understood in terms of guilt or even cause: a typical problem in a complex modern society marked by a developed division of labour (Bayertz 1995).

With other *Enlightenment* philosophy, of course, the not-so-immediate future became the stage of fantastic imagination: utopias, promises of gradual progress, or of revolution abounded throughout 18th and 19th century Europe. The loss of religious belief in *kingdom come*, obviously, had created an insatiable need to create this paradise on earth, and the belief that it could be done – even if in a far away future. These "secular eschatologies" (stories of salvation in the future here and now), however, didn't quite serve to "improve" present behaviour in order for this promised future to happen. Rather, quite often, they even justified what would be – by all other measures – considered immoral behaviour, based on its supposed contribution to reach the desired end: *The end justifies the means.*

The "end of history" that American political scientist and economist Francis Fukuyama (*1952) declared in the early 1990's, however, implied that human illusion of revolutionary change and secular salvation had finally come to an end, and that peace and evolutionary progress – based on liberal democracy and market economy – were around the corner for the whole of mankind (Fukuyama 1992). However, what had already creeped over mankind

Sustainable development is concerned with the future: a future on this world, and one that allows us to stay.

The claim for sustainability confronts a future that holds less promise than threat.

– notably that portion living in the West – was an inkling that, while it still might have its future in its own hand (who else, after all), this was to be seen as a threat rather than a promise. The imminent danger of nuclear warfare, environmental degradation, disappointed hopes about rising quality of life with rising affluence, and not least a yawning spiritual abyss that had opened up along the way – all this brought up the question how things could be moved into a different direction, or how at least to avoid the worst.

It was in this situation – as already mentioned earlier – that the idea of SD re-entered center stage, this time as a concept that was supposed to tackle all of these problems at once, and to win the future. Interestingly, the "imperative of responsibility" – a term that was coined by German philosopher Hans Jonas in his book by the same title – gained popularity at the same time, focusing on our shared responsibility for future generations, as an ethical imperative (Jonas 1986).

What distinguishes SD from all these other ethical theories, principles and imperatives, however, is its *systematic inclusion of future generations into the very ethical reasoning*. The crucial term in that respect is "intergenerational justice" – not to be mixed up with "*intra*generational justice" which pertains to the relationships among presently living, fully accountable human persons (what formerly and in other theories just had been called "justice"). Intergenerational justice, on the other hand, implies – according to the *Brundtland definition* – that our way of life "meets the needs of the present without compromising the ability of future generations to meet their own needs." First, this implies that we don't "use up" our common heritage, such as scarce resources, good institutions, assets, areas of astounding natural beauty, our cultural heritage, biodiversity and so on. This "human heritage" is supposed to allow future generations to lead worthy human lives.

Secondly, it implies that we don't burden future generations with *inherited liabilities*, such as hazardous waste sites, nuclear power plants, genetically modified organisms and other things that actually carry an incalculable risk. At least, what needs to be done is to provide the means to handle these risks, and to search for ways to avoid or at least minimize them in the future.

Sustainability as a Theoretical Construct

The two dimensions that were just discussed – the principled integration of *multiple dimensions and the future* into ethical reasoning – mark out SD as probably the most challenging and urgent normative principle of our time. On top of that, they provide the arguments for *why* it is essential to be sustainable. This ethical discussion, however, still didn't say much about what sustainability is, and what it means for individual companies. For the remainder of this chapter, we will turn to these issues.

A great part of this, actually, has already been addressed in the chapter on *Accounting and Controlling*, more specifically in the discussion of an *extended* ethical perspective on these fields (cf. Chapter 7). Indeed social and environmental accounting, controlling and reporting, in the context of an appropriate corporate code of conduct, culture and structure, are among the main *technical* ingredients for successful sustainability management.

Apart from these technical prerequisites, what's at the core of sustainability is actually the question what's supposed to be sustainable in the first place. SD – besides being a normative principle – is a *theoretical construct*, and indeed a rather abstract one. This means that – as mentioned earlier – SD doesn't have any real expression or "equivalent" in the empirical world. This it has in common with equally abstract notions, such as capitalism, welfare, democracy or even – to take an example from a different field – a mathematical point. Other than a point, however, complex theoretical constructs are based on a long list of components and relationships that, ideally, they are supposed to contain.
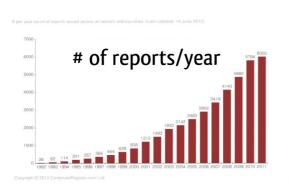
Most basically, the *Brundtland definition* serves quite well as a starting point to determine what SD is supposed to mean – in terms that may be put to a reality test. So, basically, pinning down what SD is, in any concrete case, involves two distinct steps:

First, the task is to *determine what's relevant*. Apart from general definitions, what can help here are models, such as the ones discussed earlier, that help to break down the construct into different dimensions or aspects. Additionally, when it comes to companies or other organizations, it is good to start with what these actually do: With what and how do they earn their money? Also, who is involved in and affected by this process of value creation? Retracing the value chain, identifying and integrating stakeholders (cf. Chapter 5) can help to determine the "hot spots" of SD that need most urgent attention. Indeed, while many guidelines for sustainability management and reporting have been the result of multi-stakeholder dialogues, the contact with one's own stakeholders is no less important for a successful sustainability management. SD doesn't only consist of *material aspects* or norms, it also implies a *process* that's supposed to be sustainable: What SD is or is supposed to be should, ideally, be the subject of a broad democratic debate – so much the more since SD (most of the time) cannot be defined in any objective sense. Indeed, while science may only be able to draw up often vague "load limits" or potential irreversibilities, integrating those that are actually affected may improve the process of implementation, but it may also assure that, ideally, no relevant aspects are forgotten.

Secondly, the task is to *measure actual performance*. To that end, the categorical definition of what's relevant or salient has to be complemented with an "*operational*" definition of what could be valid and reliable indicators for this sustainability. In other words, the task is to determine the measures and operations necessary to link the abstract, theoretical construct to the real world – to "pin it down", render it visible and measurable. Actually, this is the very same challenge that we identified for an ethically extended approach to accounting and controlling in the last chapter, when it comes to define, monitor, promote and report figures on the social and environmental performance of a business (cf. Chapter 7).

Communicating Sustainability

Sustainability management, for most companies today, still means primarily sustainability reporting. Indeed, the number of reports has increased impressively over the last 30 years, notably among relatively big companies which, as it seems, have more reason and resources to issue such a report (see figure 3).
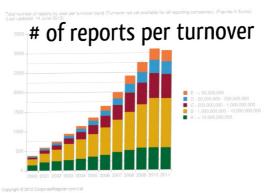
Figure 3: Sustainability reports on the rise, in big companies

To be sure, sustainability reports can play an important role as a means of transparent communications, but also as a means to make binding commitments concerning planned future performance in different areas – that's how some companies already use it in relatively ambitious and effective ways. In many other cases, however, sustainability reporting has become fairly routine, and often it is already being outsourced to external agencies that take up everything, from the collection of data, the communication with stakeholders, to the writing, layout, distribution and communication of a report. At minimum, a sustainability report, then, is merely meant to *signal* that a company is aware of the problem and does something about it – if only by issuing a sustainability report.

However, there's also been critical voices claiming that companies would actually cheat on their reports: not even on the facts, which are hardly ever checked by any independent external party anyway. What recent research showed is that sustainability reports quite commonly overstate even the *quantity* of information in their reports. Indeed, this used to be a core criterion for reports that were written based on the *The Global Reporting Initiative's Sustainability Reporting Guidelines* (cf. the box below).

The Global Reporting Initiative's Sustainability Reporting Guidelines The "GRI guidelines", as they are commonly called, were among the first instruments for organizations to report on their "sustainability performance" – and they are by now far the most popular one: According to a recent *KPMG* study, 80% of all sustainability reports done by the global big players in 2011 were based on the GRI guidelines – as were close to 50% of all reports (including environmental and social reports, by companies of all sizes) published on the popular platform "The Corporate Register", in 2011. So, it is justified to say that the GRI guidelines today present a *de facto standard* for sustainability reporting.

The *Global Reporting Initiative (GRI)* that issues the guidelines was founded in 1997, by two Boston-based environmental organizations (*Ceres & Tellus*), and it evolved in close cooperation with organizations such as the *UNEP* (*UN Environment Programme*). Since 2002, the GRI is located in Amsterdam. Still today, it is a private non-profit organization firmly based in an extensive transnational network of experts collaborating in the development and constant improvement of the guidelines. The goal is to reflect the broadest possible stakeholder input, make due reference to international standards and developments and to provide a sufficiently comprehensive and comparable guidance standard for sustainability reporting.

To date, the GRI guidelines have experienced four major revisions. The first version of the guidelines was issued in 2000, followed by version "G2" in 2002 and "G3" in 2006. In May 2013, after a two-year

development period and nearly 1000 drafts, the current "G4" version was issued. With this latest version, GRI aimed to curb a recent trend in sustainability reporting: it had been criticized for losing focus and valuing breadth over depth. The introduction with G3 of so-called "application levels", in particular, had provided an adverse incentive for companies to disclose high levels of indiscriminate information: information of questionable relevance and quality whose mere quantity – awarded with an "A" for high levels of disclosure – could be too easily mistaken for good sustainability performance.

Thus, the new G4 guidelines were supposed to put the brakes on these developments – or at least to signal that less is often more, also in sustainability reporting. G4 provides more focus on aspects that really matter – which is supposed to benefit both a company's strategy and its credibility with stakeholders. "Materiality" is the new catchword that requires companies to list and define those aspects they deem most critical in view of their core business ("Aspects") and supply chains ("Boundaries"). Instead of application levels, G4 only checks whether the report is "in accordance" with this "materiality process" – on a "core" or "comprehensive" level. On top of that, the new guidelines require separate disclosures on management approach (DMA) for each "Aspect level", i. e. companies need to report on how they manage a particular material area, and how they measure and evaluate their impact and performance. Finally, G4 places more emphasis on the supply chain, introducing new standard disclosures that require companies to describe their supply chains and procurement practices, and to assess their suppliers and specify their grievance mechanisms.

Apart from these changes in focus and direction, the GRI guidelines still consist of three major parts: "reporting principles" (such as materiality, balance, exactness …) to define the reach an assure the quality of the report; "reporting guidance" in particularly technical aspects of the reporting process; and "standard disclosures" that provide numerous key performance indicators for several social, environmental and economic aspects of a company's sustainability performance. The guidelines are available in many different languages. Specific "sector supplements" are provided to cover the "hotspots" of particular industries.

In sum, the GRI provides probably the most developed framework for sustainability reporting available today – certainly it is the most popular one. The G4 is generally seen to make sustainability reporting even more straightforward and easy for newcomers and small businesses. Whether a voluntary initiative such as the GRI reporting scheme, which only provides a guideline for self-inspection – no external verification of information and data, no sanctions involved – can be an effective tool for making companies more sustainable, remains yet doubtful. *Source: Global Reporting Initiative*

So, then, even if the GRI guidelines have become something like a "de facto standard" in terms of sustainability reporting, and even if the indicator sets it specifies have been well founded, tried and tested: What they certainly lack is an effective way to make sure that the information provided is correct, both in terms of quantity and quality of the information provided. Unless the reporting process is well integrated in a credible corporate policy for sustainability, it won't be worth the paper it's written on. Only if there are sufficient incentives provided for companies to make that right (and also sanctions not to make them cheat) will sustainability be upgraded from a thing that's "nice to have" to *a matter of course* – you could then also call it a *business case.*

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