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SUSTAINABLE FUTURES AND THE CHANGING ROLE OF BUSINESS IN SOCIETY

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1 A Renewed Sense of Urgency

Since 2007, of the top ten global risks estimated by the World Economic Forum through consultation with expert stakeholders, economic issues have progressively conceded their place to geopolitical, societal, technological, and – largely – environmental issues. Even after the pandemic, failure to act for climate change and the interlinked problem of extreme weather events head the list of short- and medium-term global risks (World Economic Forum, 2022). Climate-related risks, together with biodiversity loss, natural resource crises, and human-caused environmental damage, also dominated the long-term risks, according to the same report. Such risks will eventually materialise as severe disruptions to our existing economic systems, but the changes are only beginning to occur. Moreover, global environmental challenges are recognised as being wickedly intertwined both with each other and with other issues, such as economic conflicts, migration, infrastructure failures, or infamously, infectious diseases (ibid).

Already prior to the pandemic, the world had witnessed major widespread protests calling for more urgent environmental actions from governments, for example, Greta Thunberg and the school strike movement in Europe, the Extinction Rebellion movement, the activist-led lawsuits against the government's climate inactivity in the Netherlands and Canada, or the pipeline protests throughout North America. With global awareness of the climate change crisis gathering momentum, local-level extreme weather events are being extensively discussed in the public and media worldwide, creating a higher level of public awareness of the climate change-induced risks of flooding, forest fires, and extreme droughts.

On the one hand, the pandemic has, in the past two years, shifted some of the focus from the environmental crisis to human health and to the need for economic recoveries – perpetuating an erroneous siloed vision of human prosperity

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and well-being. On the other hand, the health crisis has revealed and exacerbated the soft underbellies of a global society and economy that is experiencing increasingly polarised and conflictual political environments, power concentration and inequalities, new forms of poverty, rapid and unbridled technological changes, and overall, a more insecure and volatile future. For the luckiest, the government-imposed lockdowns and forced inactivity have been a dress rehearsal for a slower-paced lifestyle, with opportunities to work remotely in serene environments, and additional personal time, granted by the pause in local and international travel. The least lucky have been confronted with the harsh realities of fragile and insecure employment, difficult living conditions, and mental health challenges, with little support from weak welfare and health support systems. The pandemic has then overwhelmed parts of the global economy that earlier appeared robust, highlighting the reality that we live in a world connected by international trade, largely based on economic growth and increasing levels of consumption. This system has shown to be vulnerable and unprepared for external shocks.

Despite the increasing media coverage of both environmental problems and the pandemic, however, we are witnessing increasing political polarisation on both issues. In addition, during early 2022, when this chapter was written, geopolitical risks between nations have unexpectedly skyrocketed. Amidst a lot of chaos and fast-paced developments, common lessons can be drawn from the environmental crisis, the pandemic crisis, and the most recent geopolitical crisis. First, the interconnectedness of ecosystem and biodiversity conservation, energy security, supply chain security, national and global security, and human well-being; second, the role of international and regional policy coordination and that of international financial systems in managing crises and steering change; third, the role of information, disinformation, and information war in affecting beliefs, behaviours, and social acceptability of policy decisions or instruments; and fourth, the latent power of courageous leadership, as well as that of global citizens that can pressure and support the action of governments and other actors.

As the world waits in confusion for the pandemic crisis and the renewed geopolitical risks to finally and hopefully come under some sort of control, and in fear of the resulting economic fall-out, an impending, generalised sense of being at a crucial crossroads is palpable, especially as the resulting economic fall-out looms large. Perspective, needs, and perhaps deep leverage points such as human values, have shifted. An Overton window of policies and practices has been opened that would not be acceptable or feasible under 'normal' circumstances. But how will this shift manifest, and will it last in the long run?

Global and regional changes, tensions, and volatility at political and economic levels impact corporate behaviour and investment decisions, for example, by divesting in activities which are perceived as unethical or risky and/or shifting future emphasis from global to more local and regional supply chains. Throughout global and local pressures, companies in the private sector continue to make vital socio-economic contributions to the world in the forms of goods and employment. Doing business during this era, however, also means

envisioning and developing economic models that can cater to societal needs within the planet's biophysical boundaries. The chapters have leveraged diverse topical cases, a barrage of scientific literature, and multiple practical examples to delineate a perimeter for the potential contribution of the private sector to sustainability. Drawing from the lessons presented by international scholars and practitioners in the 12 chapters following the introduction of this book, we now share our final reflections on the changing roles of business from the perspective of wider society. We focus on the elements that emerge and recur in several chapters, including key theoretical approaches (Section 2) and core areas of tension around the role of business in sustainability transformations (Section 3). We conclude more optimistically by offering a glimmer of hope (Section 4).

2 Sustainability Transitions and Transformations

Two chapters in this book, focusing respectively on sustainability management in the retail sector (see Chapter 6) and on sustainability-driven innovations (see Chapter 11), depart from the well-known theoretical framework of sustainability transitions in socio-technical systems (Geels, 2002, Geels and Schott, 2007; Markard et al., 2016; Rochracher et al., 2019). Materialising this systemic change calls for profound, long-term changes associated with the emergence of novel products, services, business models, organisations, regulations, norms, and user practices, which may either complement or substitute those that already exist. This requires the research community to adopt new practices, new forms of producing knowledge, and more inclusive co-creative approaches towards businesses when building more sustainable, viable solutions.

A transition also means phasing out current non-sustainable practices while simultaneously nurturing and accelerating the adoption of more sustainable ones and actively experimenting with and piloting new solutions. Efficient management of sociotechnical transition calls for a systemic view that emphasises the enforcement of feedback loops (e.g., Meadows, 2008). A field of transition management has emerged, which focuses on the systemic transitional and co-evolutionary changes that are required in both everyday life practices and cultural meanings to 'reconfigure' consumption and production systems for sustainability (Loorbach et al., 2017). This may also call upon new actors or breaking free from the unsustainable habits of old actors, and adopting new roles in making the change towards sustainability happen. For example, in many countries, stimulus packages have been directed toward green recovery (e.g., Allan et al., 2020), especially in the housing and construction sectors, with insulation retrofits and renewable materials, or towards accelerating the renewable energy transition, by building wind turbines or solar power. At the same time, infrastructure investments with less emphasis on the decarbonisation of economies remain prevalent, suggesting inertia in terms of change.

The term sustainability transformations, featuring in the title of this book, is used in the context of socio-ecological or socio-technical-ecological systems to

envision and assess 'pathways of sustainable environmental and societal change within the looming Anthropocene' (Patterson et al., 2017, p. 2). Resilience is a key theoretical element in this context and has been widely applied in the scientific literature as a lens to understand the capacity of socio-ecological systems to reorganise and adapt through multi-scale interactions.

In addition to being related to other forms of resilience, such as purely ecological resilience or engineering resilience, socio-ecological resilience also represents the essential condition for business organisational resilience. In other words, organisational resilience is dependent on the resilience of broader socio-ecological systems in which firms are embedded. Williams et al. (2019) call for a more holistic and dynamic interpretation of multilevel resilience across social, ecological, and organisational boundaries. Evidently, resilient systems are only as strong as their weakest parts. An understanding of the feedback effects across nested systems is needed to discuss business sustainability.

Other notable theoretical perspectives covered in this book include emergent business models for sustainability (Bocken et al., 2014; Schaltegger et al., 2016) presented in Chapters 3, 5, 7, 12, and 13 and the notion of strong and weak sustainability (Munda, 1997) discussed in Chapters 12 and 13.

3 Core Tensions Around the Role of Business as a Transformative Power

Four core tensions emerge from the chapters of this book: the lack of a shared global sustainability vision; the dominance of some solution-oriented sustainability narratives over others; the interdependent roles and responsibilities of multiple societal actors; and the issue of asynchronous time horizons. These four critical tensions are also overlapping and interconnected (Figure 14.1).

3.1 Where Are We Going? A Global Vision of Sustainability

As also emphasised elsewhere in this book (e.g., Chapter 2), striving toward a sustainable society first requires clear objectives and political commitment to sustainability goals and means, and second, supporting the implementation of measures that convert this message about the desired ends to markets. A global vision and the transformative power of global commitments initially formulated with the Brundtlandt Report in 1987 have been refined for decades until the recent adoption of the Sustainable Development Goals by the United Nations.

Despite existing controversies and criticisms, the Sustainable Development Goals have come to represent a reference framework for a more sustainable and just world for national and local administrations, companies, and other societal actors, including scholars and civil society (Scheyvens et al., 2016; Vildåsen et al., 2017). As also emphasised in Chapter 12, however, the current mismatch between the agendas and priorities of most business actors and global sustainable development remains a key tension. Businesses face challenges in dealing with

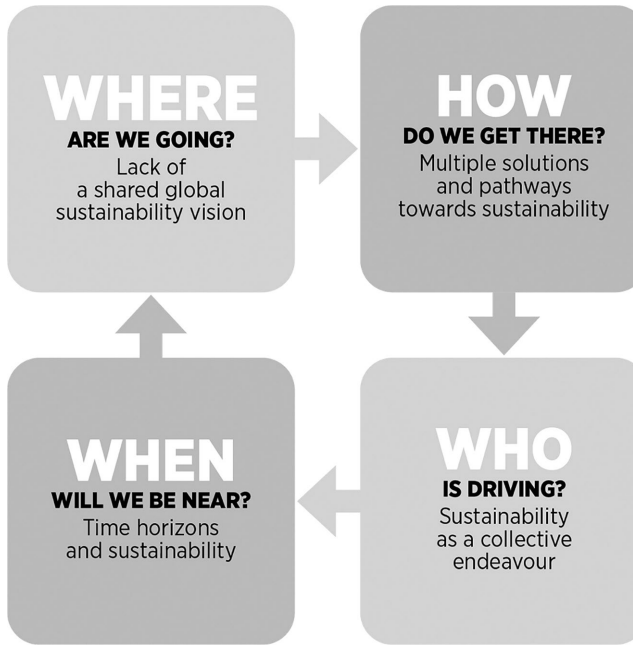

FIGURE 14.1 Four key areas of tension around the role of business in sustainability transformations.

complex, interconnected sustainability goals, and in translating their specific and diverse sets of sustainability activities into measurable impacts. As described in Chapter 2, the risk is 'rainbow washing' corporate responsibility, especially if the Sustainable Development Goals are not addressed as a full set of interdependent elements. At the same time, planetary boundaries, and consequently, biophysical limits to economic growth, are still rarely mentioned, let alone addressed with quantifiable targets, in both public and private decision-making (Whiteman et al., 2013; Bjørn et al., 2016; Haffar and Searcy, 2018). While climate change and resource efficiency dominate corporate reporting, biodiversity, which has also been at the centre of the political agenda for decades now, is still poorly acknowledged in terms of measurable outcomes (Addison et al., 2018). Notably, initiatives such as Capitals Coalition have recently emerged, which promote the integration of natural capital and ecosystem services in business (NCC, 2016).

Overall, better acknowledgment and quantification of the synergies and trade-offs across social and environmental goals seems to be the only way forward, as highlighted by, for example, applications of the Doughnut Economics framework (Fanning et al., 2021). Such a framework places human prosperity between planetary boundaries (e.g., biodiversity loss, climate change, disruption of biogeochemical flows, freshwater use) and social needs (e.g., food, health, housing, education, political voice, equality).

3.2 How Do We Get There? Multiple Solutions and Pathways Towards Sustainability

Many alternative pathways (all value-laden) are possible to reach ambitious climate and biodiversity targets, ranging from incremental to more radical ones (Leach et al., 2013). Narratives are the storylines used to frame sustainability problems and thus legitimise specific sets of solutions as the main interventions needed (D'Amato, 2021; D'Amato and Korhonen, 2021). Various societal actors, ranging from governmental institutions to businesses, think tanks, consultancies, and NGOs, adopt one or more narratives in their strategies and operations (D'Amato et al., 2017, 2019a, 2019b). Depending on the realm of society, certain sustainability narratives dominate others (Taherzadeh, 2021).

In this book, two worldwide mainstreamed narratives, the green economy and the (circular) bioeconomy, are examined in Chapters 4 and 5, respectively. Chapter 4 introduces the green economy as a United Nations-driven concept, largely founded on the centrality of biodiversity and natural capital in human social and economic well-being. The chapter showcases green economy business models and critically mobilising resources for monitoring progress towards the green economy. Chapter 5 describes the development of the circular bioeconomy in policymaking and academia and discusses, from a strategic management perspective, the potential challenges and opportunities for companies in the context of a new economy based on biomass resources and the circularity of production and consumption systems, as opposed to a linear fossil-based economy. The bioeconomy is also a recurrent element in Chapters 2, 3, 6, and 11.

Servitisation is presented as a third narrative, which is not as political as the other two, but is driven by market competitiveness forces (Chapter 7). Chapter 7 discusses the potential of servitisation, with particular reference to the forest industry and the circular bioeconomy, to help companies gain market competitiveness by including sustainability aspects in their supply of product–service systems and enabling the co-creation of value with customers and other actors. Coupled competitiveness and sustainability benefits may materialise by, for example, the company offering services that extend the lifecycle of products or materials (e.g., modularity, maintenance, refurbishment, and re-use), that improve waste management and recycling for customers, or that otherwise dematerialise the economy, decoupling it from resource consumption.

Clearly, companies are more likely to align with politically mainstreamed narratives or with narratives that offer visible economic or strategic benefits in the short term (e.g. compliance with legislation, efficiency of resource use), than with, for instance, narratives emerging from academia or bottom-up, citizen-led initiatives. However, increasingly solidifying and legitimising selected narratives may hamper the emergence and development of alternative ideas and paradigms (Taherzadeh, 2021). This relates to, for instance, the difficulty of mainstreaming sufficiency-based thinking in business model realms (Chapter 3).

Adopting specific narratives also bring about risks such as industry path dependency and lock-in, as pointed out in Chapter 5. For example, in the context of the forest bioeconomy (a thorough examination of the topic in a recent volume by Hetemäki et al., 2022), industry path dependence means that efforts are channelled towards incremental development rather than more radical changes (Luhas et al., 2021).

3.3 Who Is Driving? Sustainability as a Collective Endeavour

Key aspects enabling possibilities and potential towards sustainability are the scale and geographical scope of companies, including their sizes. A handful of transnational corporations dealing with food, forestry, construction, minerals, and fossil energy represent a major force that impacts intertwined ecological and social systems, while possessing sophisticated resources and a capability pool to implement positive change (Folke et al., 2019). However, another common view is that limited transformative potential lies within incumbent firms, whereas more is embedded in start-ups and SMEs, which having more agility, can adopt radically sustainable business models, and foster sustainability-oriented innovation (Chapters 3 and 11), although the scale of the impact may remain small. Aside from size, Chapter 13 proposes that core changes are needed in the DNA of business, with hybrid forms of business fostering sustainability by placing a stronger emphasis on social and environmental rather than commercial logics. As also explained by Bocken et al. (2020) '[o]rganizations of all types and sizes are pursuing such [sustainable] innovations. However, it should be noted that sustainability-oriented system-based innovations strongly benefit from hybrid forms of businesses (e.g., benefit corporations and social enterprises) that are emerging where the profit motive is less dominant, while social and environmental motives come to the foreground'.

Despite a company's size or motives, Waddock (2020, p. 1) suggests that 'while it is occasionally possible for leaders and companies to transform in the direction of sustainability or flourishing for all, it is unlikely that enough individual businesses can transform sufficiently while relying on an individual basis to achieve transformation. The context that constitutes the ecosystem in which businesses operate needs to change so that businesses themselves can change'. This means the discussion on the purpose of business in society (currently identified by the maximisation of profits or continual growth) must also account for changes in people's mind-sets and perceptions, power dynamics across stakeholders, businesses' performance criteria, and of course technical, legal, and normative frameworks.

In other words, in addition to understanding that the possibilities for business development may vary greatly between different companies and value networks, as also pointed out in Chapter 5, the orchestration of more radical changes requires bold actions from policymakers and legislators, value-chain actors (ranging from raw material suppliers to consumers), scientists, activists, and civil society (Luhas et al., 2021).

On the political (and partly the social) level, some 'taboos' are held in place (mostly by over-emphasising the power of incremental and relative sustainability improvements) in order to avoid the destabilisation of existing regimes and the related social and economic costs; in addition to postgrowth as an alternative paradigm to unsustainable economic growth (for more on this, see Chapter 12), examples of taboos include carbon taxation on internationally traded commodities, as well as policies and infrastructures favouring low-carbon alternatives to the *status quo*, such as plant-based diets, public transport, and non-fossil energy, while subsidies are still granted to unsustainable industries or activities. In their chapters, both Chapters 6 and 11 touch upon the role of governmental commitments, regulations, subsidies, and divestments to support the circular bioeconomy and, in general, sustainability-oriented innovations.

Going beyond the range of government actions, however, three chapters focus on opening up the role of private-led voluntary or 'soft' instruments. Chapter 8 examines how the growing emphasis on finance- and market-driven mechanisms in co-governing environmental challenges in the past three decades has not led to significant progress, despite being celebrated and supported by some intergovernmental processes, governments, and experts. Chapter 9 presents an overview of the mechanisms enabling cooperation between non-government organisations and businesses, based on the Forest Stewardship Council (FSC), a well-established certification scheme in the forest sector. Chapter 10 presents the potential of networked digital surveillance and open data, drawing from the case of pest management in forest ecosystems. The case offers reflections on how corporations, governmental institutions, and environmental organisations can co-govern grand challenges.

Chapters 6, 11, and 12 also highlight the role of consumers and how purchasing behaviour even at the household level is a key driver of changes. For example, according to a recent study by Moran et al. (2020), changes in consumer practices and consumption patterns could reduce carbon footprints further beyond business as usual by roughly one-fourth in Europe, with the primary actions targeting transport, food, and buildings. The question remains whether and how businesses in these fields can respond to the sensitivities and needs emerging from the demand side.

One final note is on the role of intermediary actors in aligning developments at niche and regime levels (Köhler et al., 2019). Effective involvement of intermediaries (such as championing public service organisations or industry associations) could offer the missing link between company and industry boundaries. The roles of intermediaries in sustainability transitions have been studied in urban development, especially in the building and energy sectors (Kivimaa et al., 2019). Intermediaries position themselves between other actors and may be able to facilitate or speed up transition processes or act as knowledge brokers by connecting actors when high transaction costs or communication challenges make direct interaction difficult. The roles of intermediaries in niche management, such as 'nurturing' or 'empowering' innovative niches, have been widely

recognised. Previous studies have also attempted to identify potential complementarities and gaps across intermediaries to influence the diffusion of new technologies (e.g., Kivimaa et al., 2019). Fragmented structures and a low degree of coordination between intermediaries have been observed as weaknesses in terms of the efficiency of their role in accelerating transition processes (Vihemäki et al., 2020).

3.4 When Will We Be Near? Time Horizons and Sustainability

Related to the rate of change towards sustainability transformations, a prominent issue is that of perceived time horizons and perspectives across different actors. International agendas tend to be oriented towards the medium to the long term, aiming for 2030, 2050, or even beyond, whereas the political realities occur within four- to six-year timeframes (i.e., government election periods). The implementation of political processes tends to move slowly and lag behind visionary statements, at any level, from global to local. These different timeframes can lead to further tensions and difficulties in achieving realistically functioning programmes that would effectively also incorporate private-sector actors. For example, Chapter 11 concludes that sustainability-oriented innovations inevitably have their place in fostering sustainability, but – because of the long time-lags between the introduction of an innovation, its eventual large-scale adoption, and the expected sustainability benefits – an excessively innovation-centric approach to sustainability limits rather than facilitates the desired transitions, especially if return is expected in the short term.

At the business level, firm-specific benefits emerging from sustainability practices and measurement of the so-called business case of sustainability have been a topic of high research interest for decades. However, this field has been dominated by short-term, financial orientation, which may compromise longer-term resilience goals. According to Ortiz-de-Mandojana and Bansal (2016), firm-level sustainability practices significantly contribute to the long-term resilience of the organisation, even in the absence of short-term effects. This kind of thinking is slowly gaining ground, with a growing managerial awareness of the perils of climate change and the loss of valuable natural systems, which requires climate change adaptation, and natural capital valuation and preservation instead of short-term profit maximisation. The private sector is gradually awakening to the idea of developing a stronger capacity for opportunity and risk recognition by, for example, means of corporate foresight (see e.g., Rohrbeck et al., 2015). Indeed, this is one way to strengthen firm-level future awareness and organisational resilience[1] and is potentially beneficial for capturing salient business opportunities. Detecting discontinuous market and demand changes early and interpreting their consequences for the firm may effectively inform actors of future courses of action to ensure the firm's survival and value capture. In practice, however, these foresight tools are used with the mainstream mind-set and are still more financially and threat adaptation oriented than sustainability driven

and proactive. Evidently, the temporality of sustainability practices and outcomes (or impacts) is an aspect that still needs abundant consideration, and the difficult struggle for reaching sufficient long-termism is ongoing.

4 Cynicism Is Not an Option

After presenting several areas of core tensions and sources of inertia in transformative change, we wish to end by offering a glimpse of hope. Long-term thinking has often emerged from times of crisis, and humanity is certainly living through exceptionally turbulent changes. As frightening and serious as these are, they may represent a window of opportunity to steer development within a safe operating space in ways that will allow humanity to prosper in the long term. Krznaric (2020) has recently suggested a potential S-curve inflection for humanity, inspired by the works of virologist Jonas Salk, responsible for the polio vaccine. According to Krznaric, after an early regime, dominated by short-termism, consumption, and their related aspects in the past two centuries, humanity can now proceed towards the twenty-first century seeking higher values in sustainability, mutual interdependence, and long-term planning. This calls for a so-called seventh generation or cathedral thinking, that is, envisioning decision-making in terms of multiple generations, rather than a few decades.

We also echo Goldin (2020, p. 9) in saying that 'Building a resilient and sustainable future requires action by all of us, from the individual level up to the global level. The networked problems of our time are amenable to networked solutions'. We re-iterate the importance of the context in which businesses operate, the need to exert strong pressure on business laggards to change, and sufficient support for frontrunners to thrive, the neglected role of the systemic approaches, and the need to strengthen future awareness and improve organisational resilience towards sustainability, along with moral consciousness. Capitalising on these opportunities remains the obligation of the current generation, especially of political decision-makers, at all levels and in all geographical areas; and of business management across sectoral boundaries. It is essentially the obligation of us all as consumers, citizens, and ultimately the guardians of nature, to preserve the Earth for unborn generations.

Note

1 That said, we must also bear in mind what Kates et al. once wrote (2012, p. 7156) '…anticipatory transformational adaptation may be difficult to implement because of uncertainties about climate change risks and adaptation benefits, the high costs of transformational actions, and institutional and behavioral actions that tend to maintain existing resource systems and policies'.

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