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Embedding the Environment in Strategic Thinking

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Abstract

This chapter addresses the challenges and opportunities for strategic thinking regarding the environment. With decreasing natural resources, extreme weather events, and biodiversity loss, organisations face significant implications that demand urgent responses. Global frameworks like the United Nations Global Compact and Sustainable Development Goals offer new perspectives on addressing these environmental challenges.

Organisations must adapt quickly to foster actions that balance their environmental impact. While the climate crisis presents opportunities for some, others face complex challenges across business units and supply chains. Strategic thinking about the environment raises questions about how organisations meet stakeholder expectations, including those of the planet.

Traditional neoliberal views of competitive advantage often limit systemic thinking that encompasses more than just profit. This chapter explores strategic approaches that emphasise the interconnectedness of economic, social, and ecological impacts, referencing concepts like Circular Economy and Doughnut Economics. It highlights cases demonstrating how strategic thinking can mitigate environmental harm and inspire innovative solutions for sustainable practices.

Chapter Outline

This chapter sets out the challenges and opportunities for strategic thinking in relation to the environment. There is widespread agreement that decreasing natural resources, the destructive outcomes of extreme weather events and the related loss of biodiversity have significant organisational and societal implications. Our response to this is arguably the principal challenge of our time. Global society and international frameworks such as the United Nations Global Compact and Sustainable Development Goals frame the new ways of thinking about how to respond to environmental challenges.

In this context, organisations need to rapidly adapt to consider how they foster collective and personal action that balances, restricts, or compensates for the propensity of organisations to degrade the environment. For some organisations the climate crisis presents opportunity, for others the scope for action is challenging, potentially spanning complex business units and supply chains. Strategic thinking in relation to the environment raises questions about how organisations are navigating and approaching the exhaustive needs and expectations of stakeholders, including the planet. Strategic intervention means rapidly rethinking relationships with the natural environment to secure a sustainable future within a pressing time horizon.

Narrow neo liberal notions of competitive advantage in this context limit the capacity of organisations to think and operate systemically to account for more than wealth creation and financial stability. This chapter highlights the strategic approaches that reimagine value emphasising the interrelated nature of the economic, social and ecological impact of

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organisations, looking at the UN Global Compact, Circular Economy and Doughnut Economics.

We foreground cases that illustrate how strategic thinking is limiting the harmful effects of the environmental impact of business, setting the pace for change and innovative thinking. We highlight initiatives that educate and foster agency to limit the potential for individual and organisational denial or inertia. In doing so we cue how others might catalyse and orient their strategic thinking in a range of organisational systems and contexts.

Key Points

- Climate change is a reality that organisations have contributed to and strategic thinkers in those organisations can have an influence on reducing its impact.
- There are several international agreements and guidelines with which organisations should comply to reduce the impact of climate change.
- Three frameworks or guidelines: UN Global Compact, Circular Economy and Doughnut Economics offer ideas for embedding the environment in Strategic Thinking
- Many organisations have successfully followed approaches that examine and re-model their purpose, networks, governance, ownership and finance to reflect environmental responsibility.

The Context: The Environment, Global Society and International Agreements

As introduced in Chapter 1, sustainability is broadly concerned with meeting 'the needs of the present without compromising the ability of future generations to meet their own needs'(WCED, 1987, p.43). In other words, sustainability is about meeting the needs of all, including future generations, within the limits of the planet (Raworth, 2017). Regrettably, scientists warn that many planetary boundaries have already crossed the limits within which humanity can safely operate (Rockström et al., 2009, Steffen et al., 2015). One of the planetary boundaries that has already overshot its safe operating limits is the concentration of greenhouse gases in the atmosphere, the main driver of climate change.

Climate change is defined as long-term changes in climate patterns resulting from an increase in Earth's average temperature (UN, n.d.). The increase in temperature is caused by the excessive concentration of heat-trapping greenhouse gases (GHG) around the globe. Climate change impacts the environment and global society in many ways. Changes in climate patterns affect the balance of ecosystems that support life on Earth. They cause extreme weather events, resulting in floods in some regions and drought in others. Climate change also impacts on livelihoods and access to health, food, water, and social equity (IPCC, 2018).

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Climate change can be both human and naturally driven. Nonetheless, climate experts agree that human activities have been the main driver of climate change since the 1800s, and the industrial revolution (UN, n.d.) is seen as a major cause. Human activities that contribute to climate change include burning fossil fuels like coal, oil and gas, and are intrinsically linked to organisations. Recognising that environmental degradation is induced by humans means recognising that there is a need to change the way in which humanity (and organisations) operate to reverse that environmental degradation.

International agreements have played a crucial role in placing the environment in the business agenda. An important milestone in this trajectory was the United Nations Framework Convention on Climate Change (UNFCCC), an international treaty signed in 1992 by 154 countries. The UNFCCC can be considered a global recognition that climate change is caused by humanity and requires global cooperation to be tackled. Signatories to the UNFCCC, which by 2024 had been signed by 197 countries, committed to reducing atmospheric concentrations of greenhouse gases. The signatories meet annually to assess progress on these commitments (known as the Conference of the Parties or COP). During the 21st Conference of the Parties (COP-21), held in Paris in 2015, concrete targets for emissions reduction and long-term global temperature levels were agreed. These targets have been adopted by 196 countries in a legally binding treaty which became known as the Paris Agreement. The Paris Agreement sets a goal to keep the rise in mean global temperature to well below 2°C compared to pre-industrial levels, while making significant efforts to limit the increase to 1.5 °C (UNFCC, 2018). By 2024, the increase in Earth's average temperature was nearly 1.3°C compared to the second half of the 19th century (Global Warming Index, n.d.)

The year 2015 was also marked by the launch of the UN 2030 Agenda, which sets forth 17 Sustainable Development Goals (SDGs) (as shown in Chapter 6) and 169 related targets as a framework for achieving sustainable development. The SDGs stimulate action across the three dimensions of sustainable development: the economic, social, and environmental (UN, n.d.), and provide a shared framework for business as well as civil society, governments and international bodies to work together. The goals more closely aligned to the environmental dimension focus on issues of clean water and sanitation (SDG 6), affordable and clean energy (SDG 7), sustainable cities and communities (SDG 11), responsible production and consumption (SDG 12), climate action (SDG 13) life below water (SDG 14) and life on land (SDG 15).

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Year	Key Events
1987	Publication of the UN World Commission on Environment and Development (WCED) commissioned report known as the Brundtland Report (Brundtland, 1987), which defines that sustainable development meets 'the needs of the present without compromising the ability of future generations to meet their own needs'.
1988	Establishment of the UN Intergovernmental Panel on Climate Change (UNIPCC), which provides objective and comprehensive scientific information on human induced climate change.

1990	Adoption of the Montreal Protocol, which regulates the production and consumption of ozone depleting substances (ODS).
1992	Adoption of the UN Framework Convention on Climate Change (UNFCCC), which recognised that climate change is caused by humanity, and requires global cooperation to be tackled.
1997	Adoption of the Kyoto Protocol, signed by parties agreeing on emission targets (superseded by the 2015 Paris Agreement).
2002	Millennium Development Goals (MDGs), 8 goals set for 2015 agreed to by 189 countries and all the world's leading development institutions. Replaced by the Sustainable Development Goals (SDG).
2015	Sustainable Development Goals (SDG), 17 goals to be achieved by 2030 agreed by 191 countries.
2015	Paris Agreement, signed by 193 countries agreeing on emissions reduction and long-term global temperature targets.

Table 9.1. International Key Events to Tackle Climate Chane

Where Are We Now?

Despite the large-scale adoption of the Paris Agreement, progress made towards achieving its goals has so far been scarce. Since the adoption of the agreement, signatories have continued to meet at the UN Climate Change Conference of the Parties (COP) annually (except for 2020 due to the COVID-19 pandemic) with the aim of reviewing the implementation of the commitments and adopting decisions to advance progress. The first 'global stocktake', concluded in 2023 at the COP28, showed that we are not on track to limit global warming to 1.5 degrees Celsius - if all national targets are fully implemented, we will have limited a predicted increase of 4 degrees to 2.1-2.8 degrees Celsius (UNFCC, n.d.). This means that more ambitious targets and concrete actions are needed to avoid increased temperatures (to note that, as of the time of writing, 2023 was the hottest year on record and 2024 was set to be warmer) and the related issues from floods, fires, and biodiversity loss. The 2023 stocktake showed insufficient progress not only in mitigation efforts (reducing emissions) but also in adaption (increasing resilience), particularly in supporting vulnerable nations, the world's most adversely affected by a changing climate despite being the ones that contribute less to climate change and environmental degradation.

The Relationship Between Environment and Business

There is a perspective that a trade-off exists between sustainability and businesses' interests (i.e. profit making). Another viewpoint is that there is a business case for sustainability, centred around the risks associated with unsustainable business models as well as the opportunities related to embracing sustainability. We argue that organisations depend on a living planet to exist just as much as they need a social license to operate. Businesses and the environment are interdependent, and they cannot be separated.

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Businesses' Impact on the Environment
Businesses impact on the environment in the following ways:

Greenhouse Gas Emissions - Perhaps the most obvious impact and the main driver of climate change. The widespread awareness of international accords such as the Paris Agreement has contributed to society's attentiveness to this issue. Businesses are responsible for most of human-induced greenhouse gas emissions, which can be either direct emissions (those emitted from an organisation's premises or directly associated with their processes) or indirect emissions (those emitted by others when making or consuming products and services purchased or sold by an organisation). Climate change impacts on the balance of ecosystems leading to other environmental issues.

Biodiversity Loss - Biodiversity, short for biological diversity, refers to the variety of life (both animal and plant) on Earth or in a given habitat, and it sustains stability and resilience of ecosystems (Rockström et al., 2009). Through land occupation and associated habitat degradation, organisations contribute to biodiversity loss. Other drivers of biodiversity loss linked to businesses operations include pollution, overexploitation and water overconsumption.

Issues of Water Quality - Through water discharges if these are not treated appropriately (Laine et al., 2021), water quality can be impacted.

Chemical pollution and the release of toxic substances into the biosphere – through poor waste management.

Businesses' Dependence on the Environment
All organisations are dependent on environmental resources. In addition, some businesses depend on particular resources to operate. The fishing industry relies on freshwater to enable fish to flourish. Freshwater is also the raw material for businesses in the food and beverage industry. Water availability is also crucial for many production processes, such as cooling methods (Laine et al., 2021). These resources rely on resilient ecosystems supported by biodiversity. A multifaceted example would be agriculture, which depends on various resources as well as their interactions. Pollinator loss is in fact an example of interdependency: monocropping, the agricultural practice of growing a single crop in the same land, reduces the natural habitats of many species, leading to the decline of pollinators, on which these same crops and agricultural practices are often dependent (Atkins & Atkins, 2016).

The Risks Associated with Environmental Degradation
Besides resource dependency, businesses also need to consider the risks associated with environmental degradation.

Physical Risks – such as flooding, or droughts caused by extreme weather events. These events may disrupt organisations even if they are not directly impacted by them, as they can impact partners across the supply chain, displace employees and damage essential infrastructure including roads and energy supply (Laine et al., 2021).

Regulatory Risks - in order to meet targets, set in international agreements, governments have been introducing (or considering introducing) new regulations that require companies to change their practices, use more efficient processes, cleaner materials, disclose more information, pay carbon taxes. The increase in environmental cases against organisations is noted in Chapter 8.

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Reputational Risks - accidents leaking harmful substances into freshwater, for example, can lead to a reputational crisis. Being associated with other companies implicated in environmental disasters can also be detrimental. These incidents can lead to loss of legitimacy, an organisation's license to operate conferred by society (Deegan, 2002). A notable example would be BP's accident in the Gulf of Mexico in 2010. A rig operated by BP exploded killing eleven people and causing an oil spill that threatened the lives of animals and plants and the livelihood of local communities. The accident became the largest oil spill in the history of the petroleum industry and it cost BP large sums in fines, cleaning up costs and damage reparations. The company also invested in presenting itself as a sustainable business, setting sustainability objectives and producing sustainability reports stating its sustainability commitments.

Risks and Opportunities

Managing the risks associated to environmental issues discussed above is in the long-term interest of organisations. A case for business sustainability also envisages opportunities that arise from global efforts to adapt and mitigate climate change. For example, the Taskforce on Climate-related Financial Disclosures (TCFD, n.d) presumes that these efforts create cost saving opportunities for organisations through adopting more efficient resources and processes and shifting to clean energy sources. Other opportunities identified include the development of new products and services, access to new markets, and building resilience along the supply chain. These opportunities are discussed further in Chapter 5, where Bottom of the Pyramid approaches and Frugal Innovations are featured.

Embedding the Environment in Strategic Thinking: Transformative Strategy Making

Organisations do not need to be the problem; they can be part of the solution. While the negative impact of businesses on the environment is evident, blaming companies is not productive. Where organisations collaborate with wider society to achieve ethical, responsible and sustainable business, the effect is enhanced. Many initiatives and models have emerged as frameworks for new ways of doing business for a sustainable future and these can be considered 'Transformative Strategy Making'.

Approaches to Transformative Strategy Making demonstrate a shift from the linear to the complex, the competitive to the connected and from a degenerative focus on growth to sufficiency. These ideas shape sustainable environmental strategy making. This goes further than meeting net zero targets or initiating recycling schemes to limit the impact of greenhouse gas levels accumulated through, for example, waste fashion. More radical approaches are needed, and the challenge is to design strategy that regenerates and replenishes, which also means engaging stakeholders to focus on long-term goals as well as (or rather than) short-term wins.

UN Global Compact

The Global Compact, a UN initiative launched in 2000, calls organisations to become part of the solution, changing the narrative from one of culpability to one of cooperation. Companies that sign up to the UN Global Compact (UNGC) commit to aligning their strategy and operations to universal principles on the environment, human rights, labour and anti-corruption, and to report a 'Communication on Progress' report annually. The initiative supports participating companies by providing access to four forms of engagement: connecting (access to events and conferences and local networks), learning (access to guidance and tools, training, peer learning groups and accelerators), leading (through think labs and policy advocacy activities), and communicating (building credibility by communicating progress) (UN Global Compact, 2024). Unfortunately, critics argue that the voluntary nature and the lack of monitoring and enforcement of the UNGC allow companies

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to enjoy the reputational benefits from membership without necessarily making meaningful changes to their human rights and/or environmental practices (e.g. Berliner & Prakash, 2015).

Circular Economy

The Circular Economy is an alternative to the linear "take-make-use-waste" economic model, in which humans extract resources from nature (take), process these resources into products (make), consume and/or use these products (use) and then dispose of them (waste). In contrast, in a Circular Economy, materials are kept in circulation through processes of repairing, reusing, refurbishing, recycling and remanufacturing (Ellen Macarthur Foundation, 2022). A Circular Economy is not just about recycling – it is a model of production and consumption where products are designed to last longer, consumers buy less, reuse, repair, repurpose, resell, share goods and services. At the end of the product's life, materials are reused in manufacturing processes. A linear economy is unsustainable not only because most of the resources that we take are not renewable, but also because nature cannot assimilate all the waste that we produce. Currently, more than 92% of resources extracted from nature are wasted (Circle Economy, 2019). Some economies and businesses have made strides in creating more circular processes.

Strategic Thinking for Sufficiency

Bocken et al. (2016, p.42) talk about 'a fundamental shift from over-consumption towards a more sufficiency-orientated view of consumption and production described as a 'sufficiency economy'. This means designing, manufacturing and selling products and services for sufficiency: goods that are kept, loved, renewed, and repaired as well as implementing nudging behaviours to encourage consumers to make 'greener' choices (Thaler & Sunstein 2008, p.5).

There are **strategies to slow loops** or slow resource consumption (for example designing long life products) and **strategies to close loops** so that disposal feeds into the creation of a new product (circular design, reuse of goods and recycling of materials) (Bocken et al., 2016)

Strategies to slow loops

- **Sharing** - provide the capability or services to satisfy user needs without needing to own physical products
    - Examples: car sharing, tuxedo hire, clothing rental, leasing phones
- **Long-life Products** – design products that are reliable and durable and that require a low /slow replacement system
    - Example: Miele's products purportedly last 20 years which is more than double the life of other washing machines. In terms of financial sustainability, value creation is supported by product longevity and the associated income from servicing and repair of appliances (Bocken & Short, 2016).
- **Product Life Extension** - products and services designed for durability, upgradability, service, warranties and reparability and a non-consumerist approach to marketing and sales (e.g. no sales commissions)
    - Example: Patagonia's 'Common Threads' campaign, encourages customers to repair or reuse the product they purchase. This is further underpinned by their 2011 marketing campaign "DON'T BUY THIS JACKET' emphasising the environmental 'bankruptcy' caused by overconsumption (Patagonia, 2011).

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Thus, strategic thinking connects with external stakeholders to achieve transformational goals. Marketing and labelling can be exploited by organisations to raise consumer awareness and support the decision to purchase sustainable goods (Singh et al., 2023).

- **Standardisation and Compatibility** – products with parts or interfaces that fit other products.
    - Example: electric charging points demonstrate the need to close loops by limiting the need for car owners to uses multiple chargers and promotes wider use and adoption of electric vehicles, Shared standards across the globe leads to compatibility in the design and manufacturing of charging stations (EEHE, 2024).
- **Dis- and reassembly** – products and or their parts can be dis and reassembled easily to increase future use and component reuse.
    - Example: Cycling helmets are typically made in such a way that complex disassembly sees them in landfill. The Myelin cycling helmet is purposefully designed to use as few components as possible with interlocking parts that hold the helmet in place. Consequently, the materials used can more readily separated and reused / recycled (Museum of Design in Plastics Blog, 2023). Dis- and reassembly fits with strategies for both slow and closed loop product design.

Strategies to close loops

- **Exploit the Residual Value of Resources** - collection and sourcing of otherwise "wasted" materials or resources to turn these into new forms of value.
    - Examples: Interface collects and supplies fishing nets as a raw material for carpets and RecycleBank provides customers with reward points for recycling and other environmentally benign activities. Toast Brewing uses excess bakery bread to replace 25% of the malted barley in their beers. Gazelle and many other companies offer consumers cash for electronics and sell refurbished electronics or cash for DVDs, books, clothing. Clothing return initiatives (e.g. H&M, M&S, Shwopping). Rubies In the Rubble use waste fruit and vegetables to create chutneys and ketchups.
- **Design for a biological cycle** - products of consumption with safe and healthy materials
    - Examples: Some food byproducts such as the shells of nuts can be composted releasing nutrients such as nitrogen into soil and help to regenerate land. In turn, land can be used to grow other renewable products such as cotton (Ellen MacArthur Foundation, 2022).

Doughnut Economics

Another transformative model is Kate Raworth's Doughnut Economics. Raworth (2017) calls for a radical change in the global economic mindset. The concept, introduced in the economist's Oxfam Discussion Paper (Raworth, 2012) and further refined in her

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internationally best-selling book “Doughnut Economics: seven ways to think like a 21st-century economist” (Raworth, 2017), offers a holistic approach for economic thinking in the 21st century. The idea is that, to change the way we do business and achieve a sustainable future, we need to rethink our economies and change the systems within which businesses operate. The Doughnut represents a new framework for economic theory and practice which is aligned with the SDGs and fit for the 21st century. Its name derives from its shape, which contains two concentric rings: the inner ring represents a social foundation (the needs of all, building on the SDGs and universal principles of Human Rights); the outer ring represents an ecological ceiling (the means of the planet, built upon the planetary boundaries described earlier in this chapter). The space between these two rings, shaped like a doughnut, represents a safe operating space for humanity. That is, a space where no one falls short on their basic needs and where no ecological limits are overshot (see Figure 9.1). In response to the wide-ranging interest in her book, Raworth co-founded the Doughnut Economics Action Lab (DEAL) (https://doughnuteconomics.org/). The work of the lab offers guidance and support to organisations, governments, cities, and changemakers at large to implement the Doughnut in practice.

<Figure 9.1 here>

Figure 9.1. The Doughnut of Social and Planetary Boundaries (Kate Raworth and Christian Guthier. CC-BY-SA 4.0)

Raworth’s (2017) doughnut encourages a shift in economics thinking to a model that pursues human prosperity rather than economic growth. For organisations, this means embodying value creation to meet the needs and expectations of all stakeholders, including the planet, as opposed to wealth accumulation. This view resonates with the notion of Corporate Social Responsibility (CSR) evolved in the 1960s and further explored by Carroll (1979, 1991). In his seminal work, Carroll (1991) questions early views that a corporation's sole responsibility was to provide a maximum financial return to shareholders and argues that corporations hold not only economical but also legal, ethical and philanthropical responsibilities, which are presented as a CSR Pyramid. Thirty years on, Carroll (2021) reflects on the developments of CSR and the shift towards the use of the term sustainability, which seemed to better encapsulate the idea that businesses have social and environmental responsibilities for both the present and the future. Carroll (2021) ponders that we are moving to an era that transcends greed and toward an age of collective responsibility. Carroll’s CSR Pyramid is used as the basis to develop a new sustainable framework for business in Chapter 8.

The Seven Principles of Doughnut Economics

Doughnut Economics offers an holistic framework which is grounded on seven underlying principles of economic thinking.

Changing ‘the goal’ is the first of these seven (new) ways of thinking. In a broad sense, this principle refers to pursuing economies that thrive whether or not they grow, instead of pursuing an ever-growing national output, the infamous Gross Domestic Product (GDP). Economic growth does not necessarily lead to prosperity to all, thus a holistic framework indicating that an economy (whether local or global) meets the needs of all without overshooting planetary boundaries would be a more appropriate measure of progress and development. Raworth (2017) proposes that the new goal should be to move into the Doughnut’s safe and just space, to thrive in balance between social foundation and the

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ecological ceiling. *For strategic thinkers, this principle calls for performance measurement that encompasses financial, environmental and social performance.*

The second principle underlying the Doughnut requires **a change in 'the big picture' of the economy**. Raworth (2017) proposes the notion of an embedded economy, moving away from the idea of a self-contained market. An embedded economic model recognises that the economy is embedded in society, while human society is embedded in the living world, dependent upon the planetary boundaries. Within the economy itself, an embedded economy recognises that there are four ways in which we provision for our needs and wants: the market (price-based exchange), the state, the household (including unpaid but essential work), and the commons (where communities co-produce goods and services). Finally, an embedded economy recognises that there are financial flows moving across all these different forms of provisions. *For strategic thinkers, this principle calls for societal needs and wants to be equally valued.*

The third principle refers **to nurturing human nature**. Raworth (2017) calls for a move away from an economic model that assumes that human beings are a rational economic man to one that acknowledges humans as social and adaptable beings. Existing economic models assume that human beings are self-interested, with fixed preferences (i.e. are not influenced by advertising, only informed by it), isolated (i.e. independent from preferences and actions of others), calculating, and dominant (over nature and the rest of the living world). Raworth (2017) calls for models that recognise that human beings exhibit social reciprocity, have fluid values, are interdependent (upon one another), approximating rather than calculating, and dependent upon the environment. A rational economic man values competition over collaboration, but collaboration is essential if we are to build a sustainable future. *For strategic thinkers, the third principle of the Doughnut recognises the need to nurture the best of human nature so that we can collaborate and develop the skills and values that will enable us to live well together over 8 billion people in the 21st century.* As an example of such strategic thinking, Rethink Glasgow is a purpose-oriented organisation working to create a green and connected city, with co-created digital forums to contribute ideas to a climate action plan. Towards the end of 2023, some 1300 suggestions have been integrated into the city's plan. Such initiatives chime with Liedtka's (1998) collaboration through dialogue and Nonaka & Zhu's (2012) multiple perspectives.

The fourth principle of Doughnut Economics is concerned with **systems thinking**. It calls for refuting the ideas rooted on 19th century mechanical equilibrium, such as the notion of equilibrium of supply and demand. Instead, 21st century economic thinking opens up to a dynamic and ever-evolving complex system. *For strategic thinkers, this means recognising the inter-relatedness of all things and the need to reach and adapt. This is considered in Chapter 1, and Chapter 10.*

The fifth and sixth principles of the Doughnut urge us to **design economies and business models that are distributive rather than divisive, and regenerative rather than degenerative**. Raworth (2017) refers to the 20th century Kuznets Curve, which implies that as countries get richer first inequality will increase but then it will decrease. This notion, which has underpinned 20th century economic thinking, results in a web of institutions that concentrate wealth and power in the hands of few. In the 21st century we should design models that are distributive instead. *For strategic thinkers, this means rethinking ownership models.* Different models that rethink the traditional profit-maximizing shareholder logic have emerged over the past few decades. One example is Lush, a UK based cosmetics company, which embarked on an Employee Ownership model in 2017. The company is 10% owned by employees through the Employee Benefit Trust, whose board is composed of two company

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appointed trustees, two employee-elected trustees and one independent trustee (Lush, n.d.). This distributive ownership model is reflected across all aspects of the organisation – with a stated ethos of “happy people making happy soap” the company’s ethical standards include using vegetarian and animal testing free ingredients, a stated pledge to equity and fair wages for staff, and a stated commitment to transparency and to paying the right amount of taxes in all countries they operate. Lush also has targets and policies around environmental impact, including fair trading with suppliers, making naked products minimising use of packaging and using recycled materials and renewable energy.

A regenerative design is aligned with the concept of Circular Economy discussed earlier in this chapter. Raworth (2017) refers to the 1990s Kuznets Environment Curve, which implies that, as countries get richer, first pollution will increase but then it will decrease. Alluding to global systems breakdowns, Raworth (2017) shows that these dynamics do not hold. Financial meltdowns are a result of financial systems designed to endlessly expand. Climate and ecological breakdown are a result of a system of energy and material use of endless expansion. *For strategic thinkers, this means designing economies and models that are regenerative rather than degenerative, running economies on solar and other renewable energy; adopting models where waste from one process is input for another.*

Meyer-Emerick (2012) highlights the city of Cleveland Ohio where in 2009, following a protracted period of industrial decline linked to the demise of steel and heavy industry, action was taken to involve around 700 stakeholders – representative citizens - in participatory summits using Appreciative Inquiry (see Chapter 6). These structured forums created the questions and context, often focusing on set themes such as local food, transportation, water, and engaged citizens in envisioning a new sustainable economy and environment (Bartuneck & Balogun, 2022). Underpinned by the United Nations Sustainable Development Goals, “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” a non-profit body was formed to create a large number of sustainability initiatives. (Meyer-Emerick, 2012, p.53). Amongst other initiatives spawned by the project was the emergence of local farming initiatives supported by the collaborative efforts of statutory services, business, government leaders and volunteers (Bartuneck & Balogun, 2022). Such efforts to convene citizens are not responsible for change, it is citizens and organisations that deliver on the ideas generated. Nonetheless, they provide a forum to set the context and provide a catalyst for change.

The Doughnut Economics Lab shares insights around other regenerative practice. In Europe, Amsterdam and Brussels are cities actively applying the "Doughnut Economics" framework with coalitions from government, industry and other partners shaping sustainable urban development, supported by teams of government, industry, and research partner initiatives.

- **Amsterdam Donut Coalitie**: Funded by Amsterdam University of Applied Sciences until the end of 2021. The team involved one full-time and one part-time member, collaborating with researchers, students, and freelancers. It has strong support from Marieke van Doorninck, Amsterdam’s Deputy Mayor for Spatial Development and Sustainability.

- **Brussels Donut**: Managed by the association Confluences, this consortium includes the Doughnut Economics Action Lab (DEAL) as a formal member. The project, supported by Brussels’ regional government and Economic Transition Minister Barbara Trachte, is funded for nine months. The six-member team includes a project manager, economic researchers, co-creation specialists, and participation experts, all focused on creating collaborative, sustainable economic models.

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These projects illustrate how Doughnut Economics can be adapted to local contexts, with multi-sector teams advancing sustainability and economic resilience in their cities. For interested strategic thinkers, a participative toolkit for urban regeneration designed by the Doughnut Action Lab can be found here: https://doughnuteconomics.org/tools/doughnut-for-urban-development-a-toolkit and here: https://doughnuteconomics.org/tools/doughnut-for-urban-development-manual-and-tools

The seventh principle refers to **rethinking economic growth**, recognising that ever rising growth is unsustainable. In the same way that economies strive for ever growing GDP, companies are under constant pressure to deliver growth in sales, market share, profits. The idea of becoming agnostic about growth may be one of the most challenging for strategic thinking. This principle points to the limitations of natural resources. There is a general understanding that society would need three earths to sustain life as we know it. In other words, we cannot sustain the use of resources at the rates we currently do. *For strategic thinkers, this means examining their value proposition to decide when something is enough.*

Raworth's (2017) seven principles are conceptually seen as a catalyst for new approaches, cues for strategic thinking that underpin strategy making at an international, global, and regional level.

The Doughnut Economics Action Lab

The Doughnut Economics Action Lab sets out a tool to transform business and embed the environment in strategy. Doughnut Design encourages business to suspend practicality and the concept of business as usual by exploring ambitious ideas, broader stakeholder, long term focus and a culture of courage (see Figure 9.2).

<Figure 9.2. here>

Figure 9.2. Doughnut Design for Business (Derived from DEAL - doughnuteconomics.org)

The tool consists of five key themes oriented around purpose, networks, governance, ownership and finance.

Purpose

- Is the business for consumption at scale or do quality and values matter?
- Freudenreich et al. (2020) stress the need to consider multiple stakeholders and the mutual relationships between them and businesses. They argue that 'stakeholders are both recipients and (co-)creators of value in joint value creation processes' (p. 4).

Example: Manos Del Uruguay (https://manos.uy/our-story 2024), was set up by friends in 1968 responding to the challenges and lack of opportunities faced by women. Their business began by selling items made and produced by women across the country to empower and develop. Moreover, inherent in their purpose and the items they create are the traditions where makers respect the use of their land and craft as opposed to making goods en masse and as cheaply as possible.

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Example: German Business El Puente (https://www.el-puente.de/) is a leading fair-trade advocate working with small producers offering financial flexibility, board seats and co-ownership. In partnership with co-owners, the organisation adopts five standards that underpin business design including purposes, operations, revenue, the reinvestment of surplus revenue and legal structures / financing driven by a long-term purpose.

Networks

- Strategy making with networks recognises the significance of relations and commitment to consumers, suppliers and governments. Freudenreich et al., (2020) set out the importance of working across multiple relationships and organisations with a view to reciprocity to create joint value. Trust, relationships and collaborative exchange are emphasised.
- Relationships matter, children for example are arguably key moderators influencing parent and carers either through direct communication or simply their presence making parents more conscious or mindful (Singh at al., 2023). The ripple effect of a child's school plastic recycling project can provide a catalyst to shaping the mindset of a parent in their role in packing or manufacturing products.
- The theme of relationships and networks also foregrounds the importance of business as an advocate and activist, challenging governments rather than seeking favourable tax arrangements (see Chapter 3 for the Strategic Thinker's Guide to Politics).
- For strategy makers, collaboration within and amongst networks of educators, public and private sector organisations and consumers can understand habits and the factors that influence environmental protection and action (Bamburg, 2003; Momberg at al., 2017)
- There is an issue with involving consumers though! Notably, consumers tend to be blinkered to the effects of their consumption. Typically, consumers underestimate the environmental consequences of meat consumption whilst overestimating the impact of plastic reuse and recycling. Meat consumption in the industrialised world, is argued to be crucial to meeting environmental targets (Kwansy et al., 2022). Combining messages that couple environmental and personal health appeals to consumers seems to be a more effective way of communicating impact in order to shift consumption habits (Cordts et al., 2014; Verain et al., 2017).

Example: Although the company faces current challenges, the Body Shop provides a strong exemplar of business activism in the late 1980s and early 1990s. The company sought to raise awareness with their 'Stop the Burning Campaign' as they engaged with consumers and suppliers - https://www.thebodyshop.com/en-gb/about-us/activism/our-activist-foundations/a/a00065.

Example: In the city of Sheffield, local universities have partnered with households across the city and the local council to raise awareness of food waste. Through the scheme, consumers were provided with resources such as compost bins and biodegradable food collection bags to collect and dispose of food waste. Through collaboration, the pilot highlighted the messiness of food waste collection to underscore the challenges for some

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households in collecting the waste and for the council, the opportunities and limitations of a large-scale roll out of the scheme (Jones, Singh & Dean, 2023).

Governance

- which stakeholders should be represented at the board?
- how should decisions map social, environmental and financial goals?

Example: Riversimple, a hydrocarbon car company based in Wales is not only innovative in product design, but also in the configuration of their governance model. The business corporate structure is deigned to include the environment, customers, the community, staff and commercial partners who represent the perspectives of stakeholders to inform business goals, priorities and decision making it delivers who hold representative shares.

Example: Faith in Nature, a UK cosmetics company has appointed two external board members representing environmental groups the Earth Centre and Lawyers for nature to shape the business agenda as part of legal structure and board.

Ownership

- Ownership reflects the concentration of power across business and organisations. From the perspective of the doughnut, the notion of ownership challenges organisations to share power more equally amongst those who contribute or co-create value.
- Deep design concentrates on ownership and financial structure amongst stakeholders including clients, suppliers and stakeholders involving the whole system in decision making structures as well as setting organisational purpose.
- This can help to bring humanity within the realms of the Doughnut. Focusing attention on issues of regeneration including environmental sustainability.

Example: Gripple, a manufacturing company operating in Sheffield, the UK, has introduced employee ownership models not only to gain employee commitment to shape the direction and focus of the business.

Example: At Patagonia shares are divided between two classes of shareholders. One class holds the dividend rights but not voting rights. The other class get the voting rights but none of the dividends. In this way the unique ownership model avoids conflating profit with purpose.

Finance

- what is expected in terms of demand, transformation, reinvestment and investors' expectations of return on investment
- a short-term view around growth can limit regenerative and distributive strategies.

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Example: The Eden Project invests back into the Eden Trust to support strategy making through collaboration that supports communication and activism in science, arts, technology and commerce as part of a 'constituency for change'.

The following case studies show application of the Doughnut Economics Lab factors of Purpose, Networks, Governance, Ownership and Finance.

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Case study: FoodCycle

(https://foodcycle.org.uk/)

Purpose: FoodCycle was established by Kevin Cheung a former LSE student who was concerned about food waste. FoodCycle was an adapted model of a similar project in the United States, Campus Kitchen, cooking waste food for local communities. The initial aim of the project was to bring together volunteers, surplus food and free kitchen space to create nutritious food for people affected by food poverty and social isolation. The organisation's listed purpose now is to connect people, support mental wellbeing and reduce loneliness, nourish the hungry, promote sustainably, and inspire change. The project delivers on six of the UN SDGS: No Poverty, Zero Hunger, Good Health and Wellbeing, Reduced Inequalities, Responsible Consumption and Climate action.

Networks: As well as addressing issues of food waste and food poverty, FoodCycle worked with industry, large retailers such as Sainsburys and government to raise awareness and engage business in action. according to Cheung this was difficult at the start of the project, but he persistently highlighted to the food industry that it would be more cost effective to keep surplus food overnight and have volunteers collect it for free the following morning. As well as building networks with governments and business the projects also created communities amongst volunteers and dinners. Corporate partners include financial institutions, retailers, other non-profit organisations, R&D business.

Governance: As a charity, FoodCycle is governed by the CEO in partnership with a trustee board responsible for the assets and activities of the organisation and who hold the management to account in their leadership. They bring skills and expertise in areas such as food waste and surplus food redistribution, equality and diversity and social justice. As well as trustees, patrons and ambassadors share their influence and support to the project. These include restauranteurs, television personalities media professionals. The project creates an annual impact report to highlight their yearly achievements and set out future strategic plans.

Ownership: Not for Profit

Finance: The project was developed with funding from UnLtd UK (https://www.unltd.org.uk/), a foundation for social entrepreneurs and free office space from MyBnk (https://www.mybnk.org/). This helped support the development of organisational structures

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and secure the long-term financial sufficiency models based on a blend of funding and fundraising. Recent awards include a top prize $75,000 dollar charity challenge award from the Janus Henderson foundation

Social Impact Report 2023. https://foodcycle.org.uk/wp-content/uploads/2024/05/Foodcycle-Impact-Report-2023-FINAL-medium.pdf

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Box 9.1. Case Study: FoodCycle

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Case study: Toast Brewing

(www.toastale.com/about-us)

Purpose: Toast Brewing's mission is to "brew great beers and spread big ideas that can change the world". The company was founded in 2016 with the purpose of brewing beer using surplus bread that would otherwise go to waste. Toast Brewing buys excess bakery bread and use it to replace 25% of the malted barley in their beers.

Networks: The company works in partnership with established breweries, but under their own license and using their own ingredients and recipes. Toast Brewing supports charities such as Feedback (www.feedbackglobal.org) who work with governments, businesses, and society to promote behavioural change and to create innovative solutions to tackle food waste. Other charities include Rainforest Trust UK, Soil Heroes Foundation and various food redistribution groups such as Food For All and Alchemic Kitchen.

Governance: Designed to create a positive impact, the company's decision making is guided by their people-centred values. The company has become a certified B Corp in 2018 and their commitment to employees and other stakeholders is written into their Articles of Association.

Ownership: Social enterprise with employee ownership.

Finance: All distributable profits go to charities, particularly those dedicated to the food system.

Impact Report. 2022 - https://www.toastbrewing.com/uploads/files/1680220058TOASTALEIMPACTREPORT2022.pdf

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Box 9.2. Case Study: Toast Brewing

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Case Study: Hockerton Housing Project

(https://www.hockertonhousingproject.org.uk)

Purpose: Hockerton Housing Project, based in Nottinghamshire, is a community of sustainable homes. They combine a business based on a co-operative model which offers business advice on sustainable living with a self-sufficient housing community. The overarching aim of the project is to live by example and operate as a catalyst for change towards ecologically sound and sustainable ways of living. The houses were designed by green architect's professor Brenda Vale and Dr Robert Vale. The focus of the housing was to practice low carbon living through renewable energy, the water system, food grown on site and the communities transport practices.

Networks: The network originally comprised of Nick Martin, a landowner and builder along with family members and friends. The project has links with Suma Wholefoods who provide food to the community, as well as education networks to shape knowledge around sustainable housing projects and, communities and educational establishments. The project has acted as a 'focal point for policy makers' as exemplars of sustainable innovation 'cited in policy documents as recommending change to UK energy building regulations because of climate change' (Lovell, 2013 p.18).

Governance: Hockerton Housing Project is and Industrial and Provident Society for the benefit of the community. Run by a group of directors, elected by shareholders, each of whom has one vote, regardless of the number of shares they hold. This governance structure reflects a lack of hierarchy around wealth generation. Governance is set out in planning agreements and a 999 year lease. There are conditions associated with governance such as limited use of fossil fuelled cars and a commitment from each adult that they will engage in 300 hours per year towards the project.

Ownership: Hockerton operates a shared ownership /co-operative model. Families own their own homes but share resources such as food, water.

Finance: The project initially struggled with financing as traditional lenders are unwilling to finance self-funded ecological schemes. However, two institutions who specifically focus on unique sustainably projects were able to help with the startup of the project. The Co-operative bank provided early loans; these were later transformed into mortgages with the Ecology Building Society. Members of the group also invested in the project through personal financial means. A finance subgroup was also established, providing reports for

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members of the cooperative about the position of equity. This was supported by internal contracts and shared funding to complete the work.

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Box 9.3. Case Study: Hockerton Housing Project

Chapter Summary

This chapter has shown that environmental degradation and the threat of climate change are challenging issues that require global cooperation to be tackled. Despite large scale adoption of international agreements committing to limiting global warming, evidence shows that we are not on track to achieve global targets and more needs to be done. While this task can seem daunting, businesses and organisations are questioning their purpose and actions using several criteria to redesign for a more sustainable future. Strategic thinkers are invited to:

- Recognise the inter-dependent relationship between the environment and their organisation
- Recognise that environmentally sustainable action offers opportunities such as cost saving opportunities for organisations through adopting more efficient resources and processes and shifting to clean energy sources, and the development of new products and services.
- Use the tools and guidance that are available (UN Global Impact, Circular Economy, Strategic Thinking for Sufficiency and Doughnut Economics), and that have been used by others to think differently and reexamine and guide their business or organisation's strategic direction.

If everyone does something, the intentions of the international agreements may be achieved.

Recommended Reading

Explore the intention and resources of The Doughnut Economics Lab (https://doughnuteconomics.org/)

Explore the Ellen Mac Arthur Foundation site for resources (https://www.ellenmacarthurfoundation.org/)

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