

# Unlocking innovation to enable companies to achieve the SDGs

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## Introduction.

This note sets out a framework for exploring company level perspectives on innovation and the Sustainable Development Goals (SDGs). In particular, it seeks to identify:

- (i) current examples of business-led SDG relevant innovation
- (ii) emerging opportunities for innovation, and
- (iii) bottlenecks to innovation that companies could tackle with other private, public and civil society partners.

## Innovation and the SDG agenda

The Sustainable Development Goals (SDGs) present a vision for a world in which individuals, businesses and nations can all prosper and look forward to a sustainable and equitable future. Many companies are recognising the opportunities of this global shift because of the close correlation between social impact, environmental protection and business growth. These opportunities may take various forms: more sustainable production systems that reduce cost; new markets for healthier foods; packaging and processing that reduces waste and also reduces environmental damage; profitable business models that share value with customers and suppliers; market information systems that provide efficiencies, and make costs and prices transparent to low income consumers and suppliers, to name but a few.

To seize these opportunities, innovation is going to be a critical motive force for change. What could companies and their partners do to make this happen? To explore this question it is first necessary to unpack the term innovation, understand what it actually entails beyond technology, and identify some of the common bottlenecks that need to be overcome to make it a reality.

## What is innovation?

A useful way to think about innovation is not as technology alone, but as the process by which ideas (from any source, old or new) are used in new ways and combinations for economic, social and or environmental gain. Thinking about innovation in this way points to a number of types of innovation that have relevance to the SDGs and the business community.

**Technological innovation.** Technological breakthroughs and applications that companies can use to deliver new products and services that address specific SDGs. This is often where most

attention is given, but for this to deliver to the SDG it inevitably needs to be coupled and supported by the types of innovations outlined below.

**Organisational innovation.** New organisational or production processes (which may be enabled by technological innovation) that allow existing products and services to be created in ways that address specific SDGs.

**Business innovation.** New business models that create new value for a company and its customers. Of particular relevance to the SDG are business models creating shared social or environmental value. This may involve technological and organisational innovations (as above) or social innovations (as below). This can take the form of new types of inclusive, ethical businesses or involve the mainstreaming of these values in existing businesses.

**Social innovations.** New relationships or social contracts between companies, value players (farmers, consumers, SME suppliers and partners) and employees that create shared value, mutual support and collective decision making. These are increasingly common in agri-food value chains where primary producers are smallholder farmers. They can also take the form of new governance arrangements in sub sectors, and value chains that allow greater representation of different stakeholder groups.

**Policy innovations.** Strategic choices and investments that specifically address SDGs. These can happen at the company level where 'Good Growth' strategies are adopted (operationalised by some of the innovations above). It could also take place at the national policy level through regulation, incentives and investments that in turn encourage the private sector to invest in innovation aligned to the SDGs.

## What do innovations look like?

Emerging from the recognition of the multiple types of innovation discussed above it becomes clear that while technology has a critical role in innovation, it rarely acts alone. It is only when it is deployed within an individual company's business model, wider value chain or even at a national system or society level that it can deliver social, economic and environmental value relevant to the SDGs. This means that examples of SDG relevant innovation and emerging opportunities cannot be explored from a purely technological perspective. More useful is to describe SDG innovation and innovation opportunities in terms of **suites of integrated changes**.

## Where does innovation come from?

While it is easy to see the role of individual entrepreneurs as being critical innovation players, in reality, innovation is a team sport requiring collaboration between companies, their business partners and with wider civil society, public sector and policy players. This means that opportunities need to be explored through innovation networks rather than just focusing on individual nodes. This is particularly important in relation to the SDGs where the social and environmental agenda will require deep system changes that can not necessarily be achieved by individual companies alone, but require a more coordinated approach to

innovation. In practice this means that while it is useful to explore innovation opportunities from the perspective of an individual company 'spearheading' a change, it is also important to understand **the wider network in which that company is embedded**.

## What is the scale of the impact of innovation?

It is apparent from the points above that innovation operates at multiple levels: at the company level, at the value chain level, at the policy level and at the level of society as a whole. Again, this suggests that innovation opportunities need to be explored both at the level of individual company activities, but also in terms of the actions and behaviours across scales, where coherence across these scales is critical. This is important in understanding whether **the scale of impact of the innovation is going to be restricted to the supplier or customer base of a company or group of companies or whether there are going to be more pervasive impacts**.

Taken together this means that innovation opportunities for the SDGs need to be explored through three lenses (i) the suites of innovations involved; (ii) the nature of the network the company is embedded in; and (iii) the scale of impact that the innovation opportunity addresses.

## What drives and shapes opportunities?

Innovation does not happen in a vacuum. It is most often a response to drivers and triggers beyond the company itself. These may include technological breakthroughs, new sources of consumer demand, new policy directions and incentives, new sources of competition, environmental shocks and convergence of agendas of different stakeholder groups. Since drivers and triggers shape the direction of innovation, it is important to understand how these align towards the SDGs. In the same way, understanding current regimes of drivers and triggers helps explain existing dynamics of innovation and change in businesses, markets and in society more generally, and identifying where opportunities might exist for addressing SDGs. **This line of enquiry provides a picture of the emerging shaping context and trends of opportunities now and into the future.**

## What prevents opportunities becoming realities?

The understanding of innovation not as a technology *per se* but as an integrated process of change involving people, processes and policy also helps to identify some of the common bottlenecks that companies face, and that effect innovation for the SDGs more generally. Innovation by definition involves doing things differently and bottlenecks typically arise because long established ways of doing things, create routines and lock-ins, which prevent change. As Albert Einstein said, *"The definition of insanity is doing the same thing over and over again and expecting different results"*. Lock-ins can happen at the company level but also in the wider environment. Unlocking innovation opportunities means identifying these lock-ins and working out how to address them. Common bottlenecks include:

**Public science lock-ins.** Public research organisations can be a critical source of frontier ideas and technology relevant to the SDGs, expertise to trouble shoot the application of these, and a way of translating new ideas from the globalised science community. However, there is usually a poorly developed tradition of working with the private sector, meaning that links, partnerships and associated skills are often missing. This restricts the flow of ideas and makes science unresponsive to the needs of companies and to wider policy agendas. Finding ways to better mobilise public science for SDG relevant innovation will be critical.

**Market lock-ins.** Large companies often have their own R&D capability (or resources to access this), business skills and customer information to continuously and incrementally improve their offering to existing markets in which they are lead or incumbent players. While these companies have scale and reach, it is more difficult for them to innovate with radically new products, services and value propositions relevant to the SDGs as this may involve the creation of new markets that challenge tried and tested business models. Recognising the comparative advantage of these companies as incremental improvers (rather than as disrupters), is important in thinking about different pathways to the SDGs.

**Business capacity lock-ins.** Small- and medium-sized enterprises are critical drivers of innovation in most economies, as they have the flexibility and entrepreneurial drive to try new ideas and challenge existing markets with new products, services and value propositions. These companies could be a critical source of innovation relevant to the SDGs. However, they often lack R&D and business capability, have weak or absent links to public research organisations, industry players and policy, and struggle to access finance to grow their businesses. Finding ways of providing support to these companies and better networking into the wider business and policy landscape will be critical for SDG innovation.

**Network lock-ins.** Business and other linkages and alliances reflect existing markets and historical patterns of innovation networks developed over many years in the pre-SDG era when social and environmental concerns were given less emphasis. The “out of the box”, disruptive innovations needed to address the SDGs will often require a remapping of innovation networks.

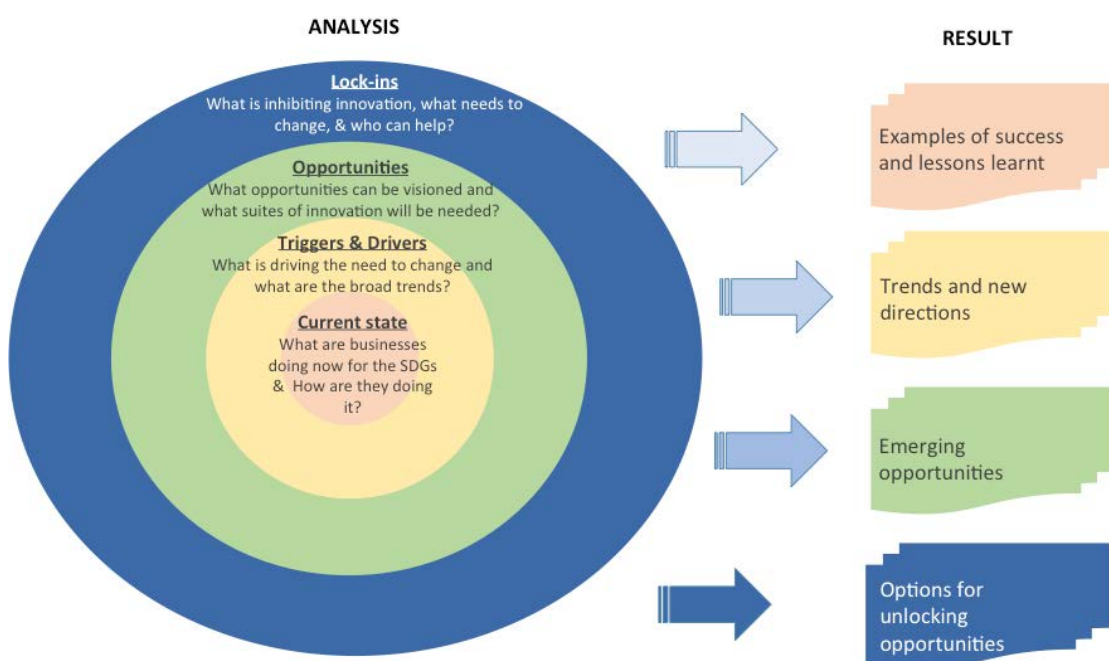
**Governance lock-ins.** Innovation has a pace, but also a direction and this is largely determined by the agenda of dominant stakeholders. Representation of different stakeholders in sector and industry level decision making, and strategic choices vary from country to country and between different industrial sectors. While consultation and foresighting mechanisms increasingly include private players, for historical and logistical reasons this tends to be dominated by large incumbent actors. Expanding representation in governance arrangements is important to develop cross-society buy-in, diversity of perspectives and expertise, and collaboration in the deep systems innovations needed for the SDGs.

**Public policy lock-ins.** The respective roles of public and private sectors are often framed by market failure arguments. However, innovation is typified by uncertainty. This means that it is important for the public sector to bear the risk of driving innovation even in domains where the private sector will later invest and reap rewards. A challenge for innovation in many industrial sectors is that investment risks and uncertainty are too great for individual

companies, yet the public sector discounts its own investment because of closeness to market. Unlocking private sector innovation for the SDGs will require more clarity on these respective roles and a more proactive investment by the public sector in areas of transformative innovation that the private sector can invest in. Examples include science and technology, new technology infrastructure, coordination and stakeholder alignment mechanism, and infant industry incubation facilities and policies.

## Scope of an enquiry into businesses unlocking innovation for the SDGs.

The framing of innovation outlined above highlights a series of broad clusters of questions that can be targeted at a company level survey. This is illustrated in figure 1. It also highlights that there is likely to be a broad stratification in innovation perspectives depending on the nature of the company. This stratification involves two dimensions: (i) the size of company (large vs SME); and (ii) industrial sector (relevance for different SDGs and the implications for company vs value chain vs policy level vs societal level change).



## Broad questions include.

**What are companies currently doing for the SDGs?** What innovations have been introduced by the company that explicitly address the SDGs? Why and how were these developed and implemented? What external resources/ partners / networks were used to develop and implement these? Are these spreading to other companies and did it require collective action to deploy these innovations across a value or supply chain or wider? Which SDG(s) were addressed – one or multiple goals?

**What are the current innovation triggers and drivers relevant to the SDGs?** What changes are taking place in the business environment (markets, technology, policy, competition, environmental constraints etc.) that are encouraging innovation relevant to the SDGs. What are the new changes, and which changes are likely to remain important in the years ahead? What is becoming less important? Are trends leading to new or missed opportunities to contribute to the SDGs?

**What SDG innovation opportunities can companies envision but not realise?** What are the near term and longer term SDG innovation opportunities that companies can imagine for their business or sector? What suites of innovation (technological, organisational, business model, policy, etc.) will be required to realise these opportunities? Who will need to be involved and will these innovations lead to impact at the company, sector or wider levels?

**What are the current bottlenecks to realising opportunities?** What lock-ins effect the realisation of the identified opportunity and of the company's ability to innovate for the SDGs? What are the priority issues, how could these be tackled and who would need to be involved and how?

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