

Sustainability

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Introduction

Sustainability may be defined as the pursuit of a business growth strategy that creates long-term shareholder value by seizing opportunities and managing risks related to the company's environmental and social impacts. It is about building a more ethical, resilient, sustainable and profitable company.

Our global community has grown to a level where our environment is put at different risks impacting nature resources and our living conditions. The global middleclass will double from 1,5 billion people to 3 billion people from 2015-2030 and thus increase demand of resources and create an increased burden of waste and pollution.

The environmental risks include:

- *Extreme weather events and temperatures*
- *Failures of climate change mitigation*
- *Water shortage*
- *Accelerating biodiversity loss*
- *Pollution of air, soil and water*
- *Waste*

These problems are unevenly distributed across the world.

Many sustainability activities aspiring to mitigate some of the risks have focused on:

- *Energy*
- *Zero carbon footprint*
- *Food and agriculture*
- *Recycling of waste*
- *Sustainable production and supply chains in general*
- *Sustainable cities*

It is being appreciated that we need to establish and run a sustainability agenda. That includes the life science industry.

Companies may take different actions within the sustainability agenda and be characterized as active at different levels within sustainability like:

1: engaging, 2: accelerating, 3: leading & 4: transforming.

The aspiration of companies should be to decouple growth from resource consumption across the full value chain.

Different sustainability scorecards have been suggested to monitor the organisations progress within the sustainability agenda. Different dimensions of the scorecard with key sustainability indicators may be considered, like:

- Governance and leadership
- Strategy and execution
- Environmental stewardship
- Social responsibility

There are different elements of the governance and leadership dimension:

Vision, mission, values

CEO leadership

Board of Directors leadership

Goals and metrics

Culture and organization

Stakeholder engagement

Disclosure, reporting and transparency

A special note on goals is that goals may drive footprint reduction and long-term value creation for the most material issues across the organization value chain. The content, impact and time horizon of the goals are essential.

There are different elements of the strategy and execution dimension:

Strategic planning

Innovation research and development

Customers and markets

Products, services and solutions

A special note on strategic planning is to consider business drivers for sustainability, like cost reduction, risk reduction, revenue growth, brand and reputation.

There are different elements of the environmental stewardship dimension:

Environmental footprint – Operations (including circular economy)

Supply chain environmental impacts (including water-use efficiency)

Environmental footprint – products (including product durability, biodegradability and reusability)

Companies may use a materiality matrix assessment to monitor progress within this dimension.

There are different elements of the social responsibility dimension:

Own operations: workplace

Supply chain social impacts (including human rights, labour relations and animal rights)

Community investments

Sustainability activities are not being regulated to the same extent as the approval of a new pharmaceutical drug, but different organisations provide recommendations, standards etc. One example being United Nations Sustainable Development Goals. In addition, there may be a number of national, country and regional standards.

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership.

The 17 SDGs are: (1) No poverty, (2) Zero hunger, (3) Good health and well-being, (4) Quality education, (5) Gender equality, (6) Clean water and sanitation, (7) Affordable and clean energy, (8) Decent work and economic growth, (9) Industry, innovation and infrastructure, (10) Reduced inequality, (11) Sustainable cities and communities, (12) Responsible consumption and production, (13) Climate action, (14) Life below water, (15) Life on land, (16) Peace, justice and strong institutions, and (17) Partnerships for the goals.

The Greenhouse Gas Protocol (GHGP) provides accounting and reporting standards, sector guidance, calculation tools and trainings for businesses and local and national governments. It has created a comprehensive, global, standardized framework for measuring and managing emissions from private and public sector operations, value chains, products, cities and policies to enable greenhouse gas reductions across the board.

The Sustainable Finance Disclosure Regulation (SFDR) lays down sustainability disclosure obligations for manufacturers of financial products and financial advisers toward end-investors. It does so in relation to the integration of sustainability risks by financial market participants (i.e. asset managers, institutional investors, insurance companies, pension funds, etc., all entities offering financial products where they manage clients' money) and financial advisers in all investment processes and for financial products that pursue the objective of sustainable investment.

EU law requires certain large companies to disclose information on the way they operate and manage social and environmental challenges. This apply to large public-interest companies with more than 500 employees. This covers approximately 11 700 large companies and groups across the EU, including

- listed companies
- banks
- insurance companies
- other companies designated by national authorities as public-interest entities

This helps investors, civil society organisations, consumers, policy makers and other stakeholders to evaluate the non-financial performance of large companies and encourages these companies to develop a responsible approach to business.

Thus, the Non-Financial Reporting Directive (NFRD) – lays down the rules on disclosure of non-financial and diversity information by these large companies.

Different groups like investors referring to the US Environmental Protection Agency and customers can add influence on companies to pursue a sustainability agenda. Regulations and standards play an important role in achieving sustainability by promoting favorable practices or disallowing the use of toxic substances.

Green bonds are designated bonds intended to encourage sustainability and to support climate-related or other types of special environmental projects. More specifically, green bonds finance projects aimed at energy efficiency, pollution prevention, sustainable agriculture, fishery and forestry, the protection of aquatic and terrestrial ecosystems, clean transportation, clean water, and sustainable water management. They also finance the cultivation of environmentally friendly technologies and the mitigation of climate change.

There are number of different technologies being developed in order to support the environment and the sustainability perspective. Some of the technologies are listed below:

- *Carbon capture utilization and storage*
- *Off-grid desalination is expected to have huge impact on the future infrastructure development*
- *Precision agriculture primarily contributes to reducing energy costs and improving the agriculture infrastructure*
- *Transformation of wastewater nutrients into efficient feedstocks creates a stable market for fertilizers globally*
- *Advanced oxidation processes eliminate micropollutants and heavy metals from wastewater*
- *Waste to energy simultaneously reduces waste in landfills and also generates sustainable energy*
- *Micro irrigation accelerates agricultural growth by increasing crop intensity and water savings*
- *Zero liquid discharge technologies check effluent discharge and encourage water reuse*
- *Membrane filtration reduces micropollutants and particulate material from wastewater*

The majority of sustainable technologies are aimed at realizing maximum efficiency, reducing wastage, and ensuring healthy living.