12 RESPONSIBLE CONSUMPTION AND PRODUCTION
How business leadership can advance
Goal 12 on Responsible Consumption & Production

Responsible consumption and production is fundamental to sustainable development. Thus far, economic growth has been deeply connected to unsustainable outcomes including the degradation of natural capital, the advance of climate change, and violations of human rights. For example, unsustainable consumption and production has, to differing extents around the world, caused greenhouse gas emissions to surge, contributed to severe air pollution, decreased agricultural productivity threatening livelihoods and social cohesion, and heightened water scarcity. Waste production has led to burgeoning landfills with large methane emissions and negative health impacts as well as serious plastic pollution in the world’s oceans. Food production and consumption is also one of the primary causes of biodiversity loss through habitat degradation, overexploitation of fish, pollution, and soil loss.

As producers of much of the world’s output, businesses have a central role to play in advancing responsible production and consumption. They can manage sustainability of their own operations by improving efficiencies, look to source more sustainable inputs, improve the sustainability of products and services at the point of use with credible sustainability information, report publicly on their sustainability performance and that of their supply chain, and take steps to ensure their products are not misused to violate human rights.

There is significant scope for business leadership on Goal 12 given the potential for increasing sustainability of production and consumption. Businesses can radically overhaul their existing models by designing and adopting responsible, circular business models. They can significantly narrow or even close the material and energy loops across own and supply chain operations using existing and new technologies and materials. They can shift to a portfolio of goods and services that require, and promote, negligible use of resources and negligible production of waste when used, including developing products and services with extended useful lifetimes, accurate sustainability labelling, and education of consumers on use phase and disposal. There is also scope for leadership in transparency and reporting, particularly by developing, implementing, and sharing solutions for tracing and reporting on sustainability of production and consumption across end-to-end operations and their impact on surrounding communities.

These leading actions can have both significant environmental benefits and major positive impacts through respecting and supporting human rights, as new business models and sustainable products and services find their way to vulnerable populations, supporting human development. Business should, however, ensure that they manage any risk of negative impact on human rights associated with new business models, ways of producing, and product designs; especially where they might impact vulnerable populations in developing countries.

The business case for leadership on Goal 12 includes substantial reductions in production costs for companies with resource intensive production processes. It is estimated that European companies alone could save €600 billion annually. Supplying products and services that are more sustainable in their use enables businesses to compete in markets where government regulations and consumer preferences are becoming oriented towards sustainability. For example, there is increasing evidence that consumers are demanding certified and traceable products. Less dependence on resources also means companies can avoid volatility in raw material prices and availability. And, at a fundamental level, advancing Goal 12 is a necessity for safeguarding long-term productivity, preserving the natural resource base for the future, and ensuring resilience in the face of environmental shocks and disease outbreaks.

Goal 12 ties the people, planet and prosperity goals together. Action on Goal 12 is strongly interconnected with outcomes on other SDGs related to resource use and the environment, as well as those focused on people. Action on Goal 12 can advance SDGs through its connection with life on land and water (Goals 14 and 15), its impact on the use and contamination of water (Goal 6), associated use of energy (Goal 7) and impacts on climate change (Goal 13). Progress on Goal 8 implies that Goal 12 becomes ever more significant, as current production and consumption decisions per unit of income cannot be sustained in the future. Companies that aim to lead on Goal 12 must carefully manage risks that result from this interconnectedness. These include pressures to substitute natural resource use in production with unfair labor practices. Leading companies recognize and take account of these interconnections, especially ensuring that changing production and consumption decisions respect the human rights of potentially affected populations.
**Targets of Goal 12**

12.1 Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries

12.2 By 2030, achieve the sustainable management and efficient use of natural resources

12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses

12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle

12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities

12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

**Business Actions in Support of Goal 12**

1. Design and adopt a responsible, circular business model

2. Significantly narrow or close material and energy loops across own and supply chain operations

3. Shift to a portfolio of goods and services that require and promote negligible use of resources and produce negligible waste

4. Develop, implement, and share solutions for tracing and reporting on sustainability of production and consumption across end-to-end operations and impact on surrounding communities
**Intentional**
- Is your company committed to supporting the achievement of Goal 12? Have you developed a holistic strategy that reflects this commitment, covering end-to-end operations and the wider community?
- Are you committed to learn from your actions and do you have processes in place to improve them accordingly?
- Is your strategy supported by the highest levels of management, including the Board of Directors?

**Ambitious**
- Do your actions achieve long-term outcomes that greatly exceed those resulting from current industry practice?
- Are your actions aligned with what is needed to achieve Goal 12?

**Consistent**
- Is support for Goal 12 embedded across all organizational functions?
- Are staff and board incentives aligned with achieving Goal 12?

**Collaborative**
- Do you proactively look for opportunities to partner with Governments, UN agencies, suppliers, civil society organizations, industry peers and other stakeholders to inform how to advance Goal 12?

**Accountable**
- Do you publicly express your commitment to advance Goal 12?
- Do you identify, monitor, and report on impacts, including potentially adverse impacts?
- Do you mitigate risks associated with your action?
- Do you remediate negative impacts associated with this action?
- Do you engage stakeholders in a meaningful way?

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**Key Considerations for Goal 12**
- Explicit, continuous top-level commitment is essential to drive the changes in the way business is done that are necessary to achieve responsible production and consumption, overcoming organizational inertia and risk aversion.
- Ambition on Goal 12 implies inspiring others by taking holistic, replicable action spanning end-to-end operations. Incremental changes are insufficient to realize the necessary changes in production and consumption patterns so that they remain within planetary boundaries.
- All organizational functions need to be fully aligned with the strategic commitment to Goal 12. Many actions on Goal 12 require a holistic approach, which makes active involvement of the entire organization crucial.
- Many innovations are born by cross-fertilisation of ideas between different sectors and stakeholders. Some of the largest gains can be made with systems-level innovations which impact a wide variety of stakeholders. All of this renders collaboration crucial for leading action.
- Monitoring and publicly reporting on sustainable business practices is key for realizing Goal 12. Where action reaches areas with vulnerable populations and ecosystems, social and environmental safeguards must be in place, and risks of negative impacts carefully managed.
How taking action on Goal 12 is interconnected with other Goals

The Global Goals are inherently interconnected. Action taken toward one Goal can support or hinder the achievement of others. Identifying and addressing these interconnections will help business to build holistic and systemic solutions that amplify progress and minimize negative impacts. To help build a greater understanding, we have illustrated some of the ways in which the Goals connect. These are not exhaustive, and we encourage business to consider how they apply in their own operations.

Maximise likelihood of positive impact on:

- Reducing waste and pollution can positively impact human health and well-being (Goal 3). Improving resource efficiency in how goods and services are produced and consumed is likely to reduce industry demands for water and energy inputs, contributing to progress on Goals 6 and 7. Resource efficiency should also reduce emissions from industry, supporting climate commitments (Goal 13). Sustainable production will result in less land and water pollution, with consideration of environmental impacts leading to reduced deforestation and biodiversity loss (Goal 14 and 15).

Minimise risk of negative impact on:

- The use of new or different material and energy inputs could negatively impact health if these are harmful (Goal 3). Resource efficient production focusses on natural resource-related inputs, but may not directly consider labour inputs, which are often substitutes. These dimensions must be managed to avoid negative impacts on work conditions (SDG 8) and ensure complete delivery of the sustainable development agenda.
BUSINESS ACTION 1
Design and implement a responsible, circular business model

Today, most business models are based on significant resource inputs, waste generation, greenhouse gas emissions, and energy losses. Businesses can lead a shift away from this linear economy by designing and adopting circular business models. This goes beyond adopting more efficient technologies and sustainable sourcing practices: it requires a fundamental rethink of systems design and the way in which products and services are produced and used in a manner that produces zero waste and minimum impacts. In product design this may imply a shift to offering services, for example mobility, instead of products, such as a car. Companies can lead on business model innovation by optimally leveraging their technological capabilities and skills, including in information technology, in collaboration with stakeholders across the private and public sector. In doing so, they should ensure they minimise risks of negative impacts on people and planet and harness opportunities to improve the lives of vulnerable parts of global society, especially in developing countries.

Example practice

• A public transport company works with an electric vehicle manufacturer, city and national authorities to introduce a city car concept that is fully integrated with public transport in a metropolitan area. It operates a “free floating” system where customers can pick up their EV and return it anywhere within the area.

• An organic sugarcane grower builds a comprehensive production and harvesting system that applies the principles of regenerative agriculture in conjunction with technical innovation to replicate the resilient, regenerative ecosystem of uncultivated land, powering all operations with biofuels produced form waste sugarcane.

• A developer leads a consortium managing “living buildings” that are adaptable to different uses, using cradle-to-cradle principles for building materials, and technologies to make the buildings energy-positive.

Consider the leadership qualities and interconnectedness of your action, including...

Collaboration: given the complex nature of the systems that must become more circular, development of circular business models often requires collaboration with many different stakeholders.

Accountability: new business models can have significant impacts on people and planet that must be carefully managed. Companies should meaningfully engage with users and affected communities and manage risks of negative impacts, especially in areas with vulnerable populations.

Interconnectedness: circular business models can advance all SDGs. For example, in mobility, they help mitigate climate change (Goal 13), in food systems they help achieve zero hunger (Goal 2).
BUSINESS ACTION 2
Significantly narrow or close material and energy loops across own and supply chain operations

Many companies run inefficient, unsustainable production processes with significant resource inputs, waste generation, greenhouse gas emissions, and energy losses; and also depend on inputs from supply chains with large inefficiencies. Prices do not reflect the real costs of these inefficiencies to society, so companies must act responsibly by steering towards more efficient resource flows and sourcing from sustainable supply chains. There is significant scope for leadership by introducing novel ways to narrow or even close material and energy loops in own operations through a ‘reduce, reuse, and recycle’ approach to inputs such as water, raw materials, non-renewable minerals, energy, and packaging. Leading companies can also take action to close resource loops across the supply chain or switch to sustainable supply chains. Business should further look for opportunities to transfer improved technology for efficiency to developing countries, where the vast majority of energy and resource demand growth is projected to occur.

Example practice

• A brewery partners with businesses, government, and research institutions to build a zero-waste brewery that aims to extract high-value products such as bread, biogas, mushrooms, and nutrients used in aquaculture from biomass residues from beer production

• An agriculture company develops innovative vertical farming products using closed-loop irrigation systems to provide access to local, fresh vegetables in urban areas throughout the year

• An IT equipment company develops a system to responsibly separate and dismantle e-waste, including domestic appliances, computers and mobile phones, so that it does not harm human health and local environment

Consider the leadership qualities and interconnectedness of your action, including...

Ambition: for many companies, resource inputs and waste are greatest in the supply chain. Leading companies recognize this and take a reduce, reuse and recycle approach to both own operations and the supply chain

Collaboration: the extensive value chain of many products and services implies that leading companies must collaborate with many different stakeholders, including supply chain members and those in other sectors that are ahead of them in implementing new technology and building skills

Interconnectedness: closing material and energy loops can reduce waste and protect natural resources, providing benefits for health (Goal 3), water resources (Goal 8), the climate (Goal 13), and biodiversity (Goals 14 and 15)
BUSINESS ACTION 3
Shift to a portfolio of goods and services that require, and promote, negligible use of resources and produce negligible waste

Today, the use of products and services including food, cars, buildings, appliances, and information technology are associated with unsustainable levels of pollution, use of resources, and production of waste at the point of use. As providers of most products and services, businesses have an important role and responsibility to make their use as sustainable as possible and provide reliable information on their sustainability to buyers. To support this, leading businesses can deploy product and services innovations throughout the product life cycle, for example by designing for minimal resource requirement in use, appropriate lifetimes including through offering maintenance services, and providing for easy dissembling for reuse or recycling. Business should adhere to strict standards of what sustainability means, educate consumers on sustainable use, and aim to make sustainable products better accessible to vulnerable populations and the global poor, to positively impact on human rights and development. Consumer education includes raising awareness with regard to their consumption choices and behavior. Consumer education also includes responsible engagement of government buyers in the case of public procurement, which constitutes a large share of GDP in many countries.

Example practice

• A home appliance company designs smart consumer products which lower energy use by recognizing consumption patterns and automatically turning off, supporting state-of-the-art energy efficiency

• An international food company engages in eco-design, responsible sourcing, effective packaging, recycling, and improvements in operational efficiency with the aim of zero waste for disposal by 2020

• An automobile manufacturer develops high-performance, affordable electric vehicles; makes its technology publicly available to enable an industry-wide switch to EVs; and partners with a rooftop solar company to provide solutions for allowing EVs to run on electricity from renewables

• A zero-waste grocery shop chain makes its stores completely free of packaging, requiring customers to bring their own recycled packaging materials

• A financial institution offers mortgage packages at reduced costs tailored to new-build homes and offices that have high energy efficiency performance and satisfy the passive house standard

Consider the leadership qualities and interconnectedness of your action, including...

Ambition: ambition implies that a company develops novel solutions for reducing consumption at point of use that are replicable and inspire others to adopt the same, or similar solutions. They also adhere to the highest standard of labelling to properly inform consumers on sustainability.

Collaboration: good solutions for increasing the sustainability of product and services often flow from cross-sectoral partnerships that facilitate exchange of ideas and technologies.

Interconnectedness: leading action on enabling sustainable consumption can help improve water resources (Goal 6), the climate (Goal 13), the environment and biodiversity (Goal 14 and 15).
BUSINESS ACTION 4
Develop, implement, and share solutions for tracing and reporting on sustainability of production and consumption across end-to-end operations and impact on surrounding communities

To allow for global investment to flow to sustainable businesses, and for all stakeholders to understand how they might be impacted by business practices, companies must integrate sustainability information into their reporting cycle. This includes reporting information on environmental, social and governance indicators and the results of due diligence processes related to human rights. These are also essential tools for risk identification and management as well as long-term social, environmental, and financial performance. There is scope for leading companies to develop comprehensive tools for tracing and reporting on the sustainability of end-to-end operations, including impacts on communities surrounding business activities, including through the development of replicable digital tools and processes for inclusive stakeholder engagement and collaboration.

Example practice

• A shoe manufacturer implement a stacked traceability system to establish sustainable practices for its various supply chain stages and identify environmental and social breaches in its factories, and implements a plan for addressing any breaches. It communicates the sustainability of its production processes by publishing and regularly updating a green index

• A restaurant chain deploys a cloud-based software tracking system to document pathways for all agricultural inputs, inform quality assessments and guarantee sustainable practices throughout its supply chain

Consider the leadership qualities and interconnectedness of your action, including...

Ambition: sustainability reporting is good practice for all companies. To be ambitious, a company must step up its practices and develop tools and methods for tracing and reporting on end-to-end operations

Accountability: transparency on sustainability performance allows society to hold companies to account for their impacts. Traceability is a key element in this, but not a substitute for due diligence or the broader scope of the corporate responsibility to respect human rights

Interconnectedness: action on tracing and reporting on sustainability is fundamental to advancing all SDGs
References

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