

SDG12 – SUSTAINABLE
CONSUMPTION AND
PRODUCTION

CONCISE GUIDES TO THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

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SDG12 – SUSTAINABLE CONSUMPTION AND PRODUCTION

A Revolutionary Challenge
for the 21st Century

BY

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INVESTOR IN PEOPLE

We dedicate this book to our children – Ava S. Irmischer, Dylan E. Irmischer, and Wesley O. Vos – in hopes that they may inherit a world where human and biophysical life thrive and are protected with a greater passion than material wealth.

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NEOLIBERALISM AND ITS DISCONTENTS

The consideration of sustainable production and consumption goes back at least as far as the view that “overconsumption” is the root cause of environmental problems, exhausting Earth’s biophysical systems. This view, sometimes decried for its neo-Malthusianism, has roots in [Meadows et al. \(1972\)](#) limits to growth modeling and [Daly’s \(1996\)](#) tome that set the foundation for ecological economics. While the outright critics of consumption remain (e.g., proponents of degrowth), competing schools of thought vary in their emphasis on design, technological innovation, and the inscription of technical accounting or measurement of impacts in financial and consumer markets (for examples of these broad schools of thought, see [Nisbet, 2014](#)).

This volume evaluates Sustainable Development Goal 12 (SDG12), Sustainable Consumption and Production (SCP), considering a wide range of competing approaches in theories and practice that aim to reduce impacts from the making and purchasing of commodities, intermediaries, and consumer products. In this regard, the volume assesses both progress

toward the goals and indicators put forward for SDG12, as well as the goals and indicators themselves.

This volume argues that progress toward sustainable production and consumption is hamstrung primarily by neoliberal approaches to environmental governance that fail to manage issues comprehensively across spatial scales. There are important efforts and examples of progress in managing global waste flows and creating commodity chains less damaging to the environment. However, progress is limited because of inadequate regulation of global trade flows, lack of technology transfer in frameworks of common but differentiated responsibilities (CBDR), and inadequate research linking the development of global production technologies and consumer markets to local environmental impacts. Thus, within the neoliberal framework, consumption and production remains unsustainable.

The ways in which neoliberal approaches to governance limit and at times undermine progress on SCP can be viewed in a series of contradictions that are seen throughout this volume. In terms of production, extended global commodity chains built over several decades of falling trade barriers have lowered the costs of products in the developed world and have lifted millions out of poverty in the developing world. However, attempts by both private companies and nongovernmental organizations (NGOs) to govern production are overwhelmed by the complexity of the systems. No overall governing model exists today that demonstrates how to reap the advantages of low-cost production and lift people out of poverty, protect human health, and sustain ecological resources. While there are some examples of frameworks and efforts that address specific sectors (e.g., Forest Stewardship Council for wood and paper products) or products (e.g., cradle-to-cradle manufacturing for one or another specific niche product), many sectors and the overall production system

remain fundamentally extractive, dirty, and wasteful, with no clear path toward sustainability.

The targets for SDG12 specify several objectives meant to be carried out by a variety of actors (individuals, governments, private companies, etc.) (See [Table 1](#)). Some of these targets are vague (e.g., “By 2030, achieve the sustainable management and efficient use of natural resources”) while others are specific (“halve per capital global food waste at the retail and consumer level”) ([United Nations Development Program, n.d.](#)). Prescriptions that affect consumption include increased monitoring of the transition away from fossil fuels, the de incentivizing of externalities, the correct pricing of ecosystem services, and, for individuals, the education necessary to make informed consumer choices. These are consistent with a neoliberal approach to achieving pro-environmental outcomes, which will be discussed later in the chapter.

We argue that none of the targets fundamentally question the ability of the market, whether through technological innovation or by reshaping the behavior of individuals, to achieve the changes necessary to address threats like climate change and biodiversity loss. Pro-environmental attitudes are only one of many variables that contribute to pro-environmental behavior ([Dietz et al., 1998](#)). Individual intentions can only be actualized when there are structural systems in place to do so. Successful tactics establish systems that make choices for SCP more accessible, but they require funding and other resources. Progress on SCP has been spotty – for example, electronic waste increased by 38% from 2010 to 2019, with only 20% of it being recycled ([United Nations Development Program, n.d.](#)). There is little focus in SDG12 on reducing consumption or elemental changes to the market or society itself, which, given the size of the problem and limited progress to date, need to be considered. Instead, most solutions focus on better accounting and improved efficiencies in

Table 1. SDG12 and Sustainable Development Goals.

Target	Target Description	Cross-Cutting Goals
12.1	Implement national frameworks for programs on sustainable consumption and production	Climate Action; Reducing Inequality; Sustainable Cities and Communities
12.2	Sustainable management and efficient use of natural resources	Climate Action; Clean Water and Sanitation; Affordable and Clean Energy; Industry, Innovation and Infrastructure; Sustainable Cities and Communities; Life On Land
12.3	Reduce global food waste	Climate Action; Zero Hunger; Life On Land
12.4	Environmentally sound management of chemicals and wastes	Climate Action; Clean Water and Sanitation; Industry, Innovation and Infrastructure; Sustainable Cities and Communities; Life On Land
12.5	Reduce waste generation	Climate Action; Clean Water and Sanitation; Life On Land
12.6	Adoption of sustainable practices by companies	Climate Action; Sustainable Cities and Communities
12.7	Promote sustainable public procurement practices	Climate Action; Sustainable Cities and Communities; Industry, Innovation, and Infrastructure
12.8	Inform the global public about sustainable lifestyles	Climate Action; Sustainable Cities and Communities
12.a	Support the scientific and technological capacity of developing countries	Climate Action; Reducing Inequality; Industry, Innovation and Infrastructure
12.b	Develop and implement tools to monitor sustainable tourism	Reducing Inequality; Decent Work and Economic Growth; No Poverty; Sustainable Cities and Communities
12.c	Remove market distortions for fossil-fuel subsidies	Climate Action; Reducing Inequality; Affordable and Clean Energy

market systems, as well as consumers, investors, and corporations making voluntary choices.

SDG12 OVERVIEW AND RELATION TO OTHER SUSTAINABLE DEVELOPMENT GOALS

The entire set of UN Sustainable Development Goals (SDGs) includes 17 goals, each of which contains specific targets to reach and indicators to measure progress. Although the specific deadline for each target within each SDG varies, the UN aims to achieve all 17 goals by 2030. The SDGs were adopted by a consensus resolution of the UN General Assembly (i.e., without a vote) on September 25, 2015 (United Nations, 2021). The SDGs are a follow-on effort to the Millennium Development Goals (MDGs), which were established at the Millennium Summit of the United Nations in 2000 and retired in 2016 ([Sustainable Development Goals Fund, 2018](#)). The SDGs, in addition to addressing issues of global poverty per the MDGs, incorporated rising awareness of the importance of environmental sustainability into broader objectives which enable humans to thrive. The UN website describes SDG12 this way: “Sustainable consumption and production is about doing more and better with less. It is also about decoupling economic growth from environmental degradation, increasing resource efficiency and promoting sustainable lifestyles” ([UNEP, 2012](#)).

All 17 of the goals interconnect to form a collective suite of ways in which to improve human well-being and the biophysical environment, both locally and globally (See [Table 1](#)). When implementing the SDGs, priority is given to initiatives that address more than one goal simultaneously. For example, a project targeting 12.b, which focuses on the promotion of sustainable tourism, could also address SDGs 1 (No Poverty),

8 (Decent Work and Economic Growth), 10 (Reducing Inequality), and 11 (Sustainable Cities and Communities). Addressing multiple SDGs simultaneously makes for a more efficient use of time and economic resources. [Table 1](#) begins to cover only the ways in which enacting SDG12 could be mutually compatible with a suite of other SDGs. One goal that intersects with many of the targets of SDG12 is climate action, as reducing carbon emissions is often integrated in initiatives to make production more sustainable. However, there are gaps. There is not explicit connection between SDG12 and many other goals, such as 1 (No Poverty), 2 (Zero Hunger), 3 (Human Health and Well Being), 6 (Clean Water and Sanitation), and more. Given that SDG12 is global in scope and addresses many aspects of human prosperity and environmental degradation, these connections could be made more explicit.

HISTORY OF SDG12

The rising awareness of the importance of sustainable development cannot be isolated from the emergence of environmentalism more generally. The early conservation movement focused on the preservation of landscapes and largely did not address the consequences of production and consumption. What is understood as the contemporary environmental movement was established after World War 2 as American's basic needs were increasingly met. One tome central to the movement was Rachel Carson's "Silent Spring," which recognized the interconnections between human behavior and ecological health. As awareness of the damage caused by Chlorofluorocarbons (CFCs) become more widely recognized, the global interconnectedness of environmental problems was increasingly realized. There was also a growing understanding that the developed world and the developing

world harbored different levels of responsibility for environmental degradation. Over the century, concern for the environment slowly morphed from a focus on pristine landscapes to a focus on how human growth and development could be occur without damaging the ecological systems on which they rely, bringing an increased emphasis on sustainability.

Following the identification of a rapidly expanding global population and consumption as a key sustainability issue in the 1970s, the [Brundtland Commission report *Our Common Future* \(1987\)](#) focused its definition of sustainability on the idea of meeting needs rather than wants. Although it embraced the idea of furthering economic development – and by incorporation increasing both population and consumption – as a fundamental principle, it saw the need to profoundly change consumption patterns (Gasper et al., 2019). The Brundtland Commission’s report focused additional economic development on reducing global inequality between high-income countries where needs are often met and low-income countries where basic needs went unmet.

Our Common Future employed a now ubiquitous three pillars framework for conceptualizing sustainability. Typically presented as a set of trade-offs or synergies for sustainable development, the three pillars framework is now variously labeled with terms like “environment, equity, and economy” or “planet, people, and profit.” The three pillars framework emerged as a way to reconcile the concepts of limits to growth and development, but its emergence from historically diverse schools of thought has frustrated attempts to operationalize the idea of sustainable development ([Purvis et al., 2019](#)). This has left ample space for a drift in definitions and measurement of sustainability from its limits to growth origins.

Since the Brundtland Report, there has been a marked shift in the discourse on SCP, from limits on consumption itself to a focus on cleaner production or eco-efficiency. Discussion

of SCP at the 1992 Rio Conference led to the formation of the World Business Council on Sustainable Development (WBCSD) (Gasper et al., 2019). Fuchs and Lorek (2005) document how corporate-funded NGOs like the WBCSD developed power in the discourse over sustainable production and consumption relative to weak international governmental organizations. This power was demonstrated at key international conferences leading up to SDG12, including the Marrakech Process in 2003 and the 10-year Framework of Programmes on SCP Patterns at the 2012 Rio+20 Conference (Gasper et al., 2019). As reflected in the language of SDG12, the discourse of SCP consistently narrowed to the technical aspects of production. The volume of consumption itself all but disappeared in life cycle assessments built around functional units of production. In this narrowing, it is technological innovation alone that will allow for further growth in the global economy.

THE THEORETICAL UNDERPINNINGS OF SDG12

Neoliberalism and Sustainability

One cannot understand aspects of SDG12, such as the greening of supply chains or the accounting principles of life cycle analysis, without breaking down the ideological foundations on which those actionable solutions are predicated. Before we dig into the larger project of this text, we must grasp where this approach lies with respect to a key philosophical framework – neoliberalism. At the core, there is a division between those who argue that neoliberalism can accommodate environmental concerns with minor modifications versus those who believe that sustainability is fundamentally incapable of addressing environmental priorities.