

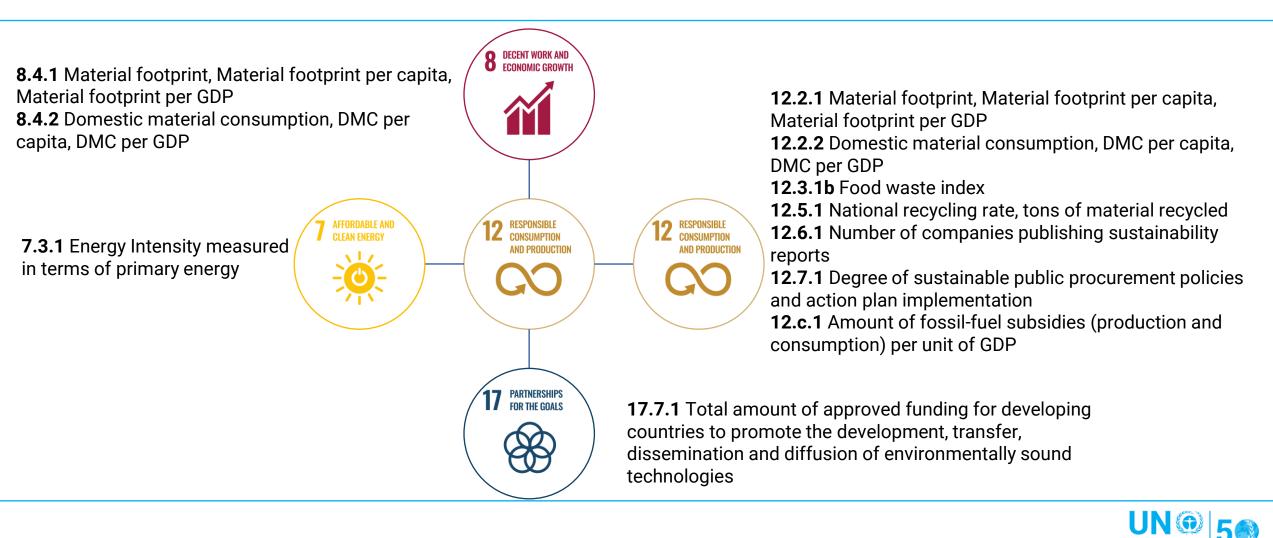
Sustainable Consumption and Production SDG Indicators – Policy instruments

Therese El Gemayel Programme Management Officer Science Division, UNEP

What are SCP SDG indicators?



1972-2022



SDG 7: Affordable and Clean Energy



7.3.1 Energy Intensity measured in terms of primary energy

- Energy intensity level of primary energy (megajoules per constant 2017 purchasing power parity GDP)
- Energy intensity is used to track progress on energy efficiency, meaning using less energy to
 provide the same service, such as providing same products or services at reduced energy cost
- Increasing energy intensity reduces energy use and air pollution
- To reach Target 7.3, global energy intensity must improve by 2.9% annually
- Examples of policy usage of the indicator:
 - Ensuring better use of global energy resources, improving energy efficiency is most economic
 - Reduction of national energy expenditures
 - Attending to climate change through reducing greenhouse gas emissions from energy consumption



SDG 7: Affordable and Clean Energy





- Energy efficiency policies are codes and standards, including minimum energy performance standards, fuel-economy standards, building energy codes and industry targets
- Technological change and advances in energy management also deliver efficiency improvements
- They are complemented by fiscal and financial incentives, such as tax reliefs public financing and the use of marketbased instruments.





SDG 8: Decent Work and Economic Growth SDG 12 Responsible Consumption and Production

8.4.1/12.2.1 Material footprint, Material footprint per capita, Material footprint per GDP

- Material footprint per capita, by type of raw material (tonnes)
- Material footprint per unit of GDP, by type of raw material (kilograms per constant 2010 United States dollar)
- Material footprint, by type of raw material (tonnes)
- Material Footprint (MF) is the attribution of global material extraction to the domestic final demand of a country
- Understanding the "teleconnections" between distant places of production and consumption is paramount
- The indicator corrects the national material balance for international trade, accounting for both domestic and foreign material extraction
- Examples of policy usage:
 - Assess country's international trade flows volumes
 - Understand environmental pressures of natural resource extraction
 - Assess country's domestic needs from natural resources
 - Assess the efficiency of usages of natural material extracted
 - Reduction in national expenditures on natural material supplied to national economy



DECENT WORK AND ECONOMIC GROWTH SDG 8: Decent Work and Economic Growth SDG 12 Responsible Consumption and Production 8.4.1/12.2.1 Material featurint Material featuring featuring





 It is important to decrease the extraction of raw materials while enhancing the efficiency of using and reusing through recycling and circular economy to reduce environmental pressures and impacts.

8 DECENT WORK AND FCONOMIC GROWTH

 Few countries can satisfy their material needs with domestic resources, indicating constant rising international trade rates and exchange of raw materials requiring adequate policies and collaboration among countries



SDG 8: Decent Work and Economic Growth SDG 12 Responsible Consumption and Production



8.4.2/12.2.2 Domestic material consumption, Domestic material consumption per capita, Domestic material consumption per GDP

- Domestic material consumption per capita, by type of raw material (tonnes)
- Domestic material consumption per unit of GDP, by type of raw material (kilograms per constant 2010 United States dollars)
- Domestic material consumption, by type of raw material (tonnes)
- DMC indicates the total amount of materials directly used by an economy for its production processes
- Proxy for pressures of natural resource use in domestic territories which are eventually emitted back to the environment as waste and emissions
- Examples of policy usage:
 - Assess country's international trade flows volumes
 - Understand environmental pressures of natural resource consumption
 - Assess country's domestic needs from natural resources
 - Assess the efficiency of natural material consumed domestically
 - Reduction of national expenditures through more efficient use of raw materials or through recycling and re-introduction in the economy



SDG 8: Decent Work and Economic Growth SDG 12 Responsible Consumption and Production

8.4.2/12.2.2 Domestic material consumption, Domestic material consumption per capita, Domestic material consumption per GDP



 Increasing DMCs in almost all regions is not sustainable and puts ecosystems, the environment and human health at risk

B DECENT WORK AND ECONOMIC GROWTH

- It is paramount to change current consumption trends
- DMC does not consider the upstream resources in the supply chain only the actual weight of imported goods



12.3.1b Food waste index

- Food waste (Tonnes)
- Food waste per capita (KG)
- It complements 12.3.1 (a) Food loss index which is under the custodianship of FAO.
- Food waste is a waste of resources, time and money.
- Food waste is formed of edible and inedible parts. The disaggregation by edible and inedible parts is valuable to guide policy interventions to make the best possible use of food resources, supporting a circular food system and the application of the waste hierarchy.
- Examples of policy usages:
 - Guide the development of food waste prevention policies
 - Attend to increased food security
 - Understand preventable organic waste generation and disposal



12 RESPONSIBLE CONSUMPTION

12.3.1b Food waste index



 Food waste results in economic losses and increasing pressures on food systems by efforts to sustain economic viability and global consumption demands, but also on ecosystems and biodiversity

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

 Reducing food waste is critical to maximize the value of agricultural land and limit environmental burdens



12.5.1 National recycling rate, tons of material recycled

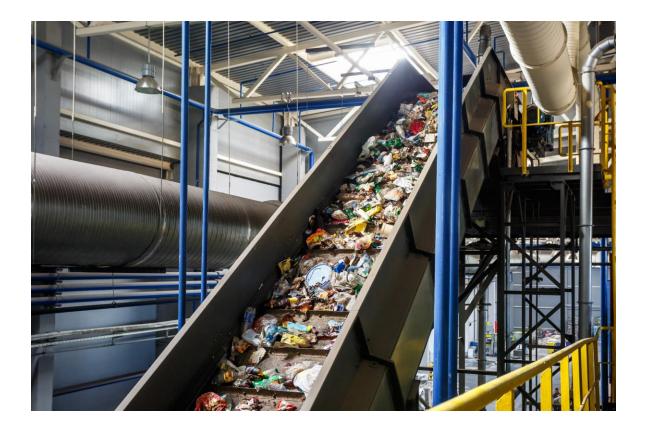
- Electronic waste recycling, per capita (Kg)
- Electronic waste recycling, rate (%)
- Electronic waste recycling (Tonnes)
- Municipal waste recycled (Tonnes)



- Waste recycled data is the treatment of municipal waste and hazardous waste with an overlap in between.
- Significant benefits from recycling waste:
 - Less amounts going to landfills/open dumps
 - Less natural resources required to attend to domestic demand
 - Economic benefits
- Examples of policy usages:
 - Waste management policies, specially in relation to final disposal/treatment of waste
 - Reduction of raw resources supply, such as aluminum, steel, precious metals from e-waste
 - Reduction in environmental impact/pollution (waste, air, marine, freshwater, soil)



12.5.1 National recycling rate, tons of material recycled



- Minimizing waste generation and maximizing the recycling of waste is a central concept of circular economy
- Dumpsites around the world are sources of complex pollution mixtures
- Toxic pollutants originating from inadequate recycling methods deteriorate human and environmental health
- Consumerism and frequent upgrading of products increases the quantity of electronic waste dramatically, highlighting the necessity for sound recycling methods







12.6.1 Number of companies publishing sustainability reports

- Number of companies publishing sustainability reports with disclosure by dimension, by level of requirement (Number)
- The indicator methodology focuses on the sustainability information published by a company, whether in the form of a stand-alone sustainability reports, or integrated within other company reports, such as the annual report.
- Sustainability reports indicate how national companies are aware of their environmental, economic, social and governance impact on societies
- Examples of policy usage:
 - Assess corporate social and environmental responsibility by sector
 - Reduce corporate impact on national natural and human resources
 - Understand society's environmental awareness



12.6.1 Number of companies publishing sustainability reports



- Corporate sustainability reporting is important for encouraging companies to adopt sustainable practices and to integrate sustainability information into their reporting cycle
- Sustainability reporting improves corporate reputation, builds consumer confidence, and increases innovation
- It thereby also improves stakeholder and investor confidence





12.7.1 Degree of sustainable public procurement policies and action plan implementation

- Number of countries implementing sustainable public procurement policies and action plans
- Number of countries implementing sustainable public procurement policies and action plans at higher subnational level by level
 of implementation (1 = YES; 0 = NO)

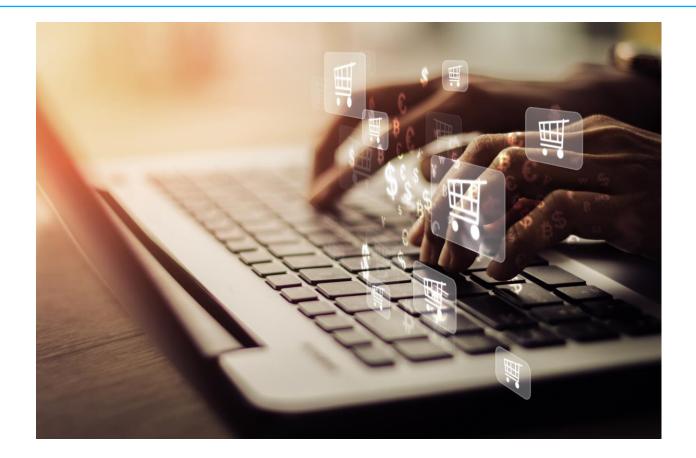
RESPONSIBLE CONSUMPTION

AND PRODUCTION

- Number of countries implementing sustainable public procurement policies and action plans at lower subnational level by level
 of implementation (1 = YES; 0 = NO)
- A Sustainable Public Procurement (SPP) action plan is a policy document articulating the priorities and actions a public authority will adopt to support the implementation of SPP.
- Plans usually/should address the environmental, social and economic dimensions of SPP, and recognize the potential for SPP to realize the SDGs.
- Examples of policy usage:
 - How far the country is from reaching sustainable public procurement
 - Targeted policies formulated to achieve sustainable public procurement in specified sectors
 - Targeted policies formulated to achieve sustainable public procurement at sub-national levels



12.7.1 Degree of sustainable public procurement policies and action plan implementation



 Public procurement accounts for an average of 12 percent GDP in OECD countries, and up to 30 percent of GDP in many developing countries.

2 RESPONSIBLE CONSUMPTION AND PRODUCTION

- Leveraging this purchasing power by buying more sustainable goods and services can help drive markets in the direction of sustainability, reduce negative impacts of organizations, and produce positive benefits for the environment and society.
- The advancement of sustainable public procurement practices is recognized as a key strategic component of the global efforts towards achieving more sustainable consumption and production patterns



12.c.1 Amount of fossil-fuel subsidies (production and consumption) per unit of GDP

- Fossil-fuel subsidies (consumption and production) (millions of constant United States dollars)
- Fossil-fuel subsidies (consumption and production) as a proportion of total GDP (%)
- Fossil-fuel subsidies (consumption and production) per capita (constant United States dollars)
- The scale and impact of fossil fuel subsidies present both challenges and opportunities for sustainable development
- Reporting against a global indicator measuring consumer and producer fossil fuel subsidies provides a global picture that encompasses both consumer and producer subsidies. It allows for tracking of national and global trends and serve as an important guide for policy-making.
- Examples of policy usages:
 - Ensuring better use of global energy resources, improving energy efficiency is most economic
 - Reduction of national energy expenditures
 - Attending to climate change through responsible consumption of energy and reduction of greenhouse gas emissions





12.c.1 Amount of fossil-fuel subsidies (production and consumption) per unit of GDP



 Reducing fossil fuel subsidies is essential for promoting a green economy, reducing carbon emissions and facilitating the transition to a circular economy.

2 RESPONSIBLE CONSUMPTION AND PRODUCTION

- Fossil fuel subsidy schemes encourage inefficient use of energy while discouraging investment in low-carbon technologies and energy-efficient equipment.
- Fossil fuel subsidies damage the environment by increasing GHG emissions and exacerbating natural resource exploitation



SDG 17 Partnerships for the Goals



17.7.1 Total amount of approved funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies

- Environmentally Sound Technologies (ESTs) are technologies that have the potential for significantly improved environmental performance relative to other technologies.
- They can also be defined as total systems that include know-how, procedures, goods and services, and equipment, as well as organizational and managerial procedures for promoting environmental sustainability.
- Examples of policy usage:
 - Assessment of level of transfer to environmentally sound technologies
 - Assessment of funds needed to transfer to environmentally sound technologies
 - Assess funds needed to develop environmentally sound technologies



SDG 17 Partnerships for the Goals



17.7.1 Total amount of approved funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies



- Trade can scale up the use of clean technologies by opening markets and stimulating innovation.
- The development, promotion and dissemination reduces the cost and makes clean technologies more accessible to developed countries.
- ESTs protect the environment, are less polluting, use resources in a sustainable manner, recycle more of their wastes and products.
- Trade policy instruments can serve as effective vehicles to the development and application of environmentally sound technologies.



Why is Sustainable Consumption and Production important?



- Global material footprint and DMC is estimated to be 70% higher than it was in 2000
- Double the extraction of materials in 2060, and this goes far beyond the planetary boundaries.
- Finite natural resources, significant amount of waste and pollution
- 2.01 billion tonnes of waste generated annually, with e-waste generation expected to grow to 9 kg/ca/yr by 2030
- Food waste is estimated at 74 kg/ca/yr
- Fossil fuel subsidies were estimated at \$431.6 billion in 2019



What can we do about it?





- Aims to keep products, materials and resources as long as possible in the economy
- Circular economy leads to:
 - Reduction in material extraction and consumption
 - Reduction in waste generation and management
 - Reduction in emissions
- Develop policies promoting circular economy
 - Improve efficiency
 - Reduce material use, waste and emissions
 - Promote recycling
 - Changing processes
- Decoupling economic growth



United Nations Avenue, Gigiri PO Box 30552 – 00100 GPO Nairobi, Kenya





