Sustainable consumption and production is about promoting resource and energy efficiency, sustainable infrastructure, and providing access to basic services, green and decent jobs and a better quality of life for all. Its implementation helps to achieve overall development plans, reduce future economic, environmental and social costs, strengthen economic competitiveness and reduce poverty.

At the current time, material consumption of natural resources is increasing, particularly within Eastern Asia. Countries are also continuing to address challenges regarding air, water and soil pollution.

Since sustainable consumption and production aims at “doing more and better with less,” net welfare gains from economic activities can increase by reducing resource use, degradation and pollution along the whole life cycle, while increasing quality of life. There also needs to be significant focus on operating on supply chain, involving everyone from producer to final consumer. This includes educating consumers on sustainable consumption and lifestyles, providing them with adequate information through standards and labels and engaging in sustainable public procurement, among others.

Should the global population reach 9.6 billion by 2050, the equivalent of almost three planets could be required to provide the natural resources needed to sustain current lifestyles.

With rises in the use of non-metallic minerals within infrastructure and construction, there has been significant improvement in the material standard of living. The per capita “material footprint” of developing countries increased from 5 metric tons in 2000 to 9 metric tons in 2017.

93% of the world’s 250 largest companies are now reporting on sustainability.

Water

Less than 3 per cent of the world’s water is fresh (drinkable), of which 2.5 per cent is frozen in the Antarctica, Arctic and glaciers. Humanity must therefore rely on 0.5 per cent for all of man’s ecosystem’s and fresh water needs.

Humankind is polluting water in rivers and lakes faster than nature can recycle and purify

More than 1 billion people still do not have access to fresh water.

Excessive use of water contributes to the global water stress.

Water is free from nature but the infrastructure needed to deliver it is expensive.

Energy

If people worldwide switched to energy efficient lightbulbs, the world would save US$120 billion annually.

Despite technological advances that have promoted energy efficiency gains, energy use in OECD countries will continue to grow another 35 per cent by 2020. Commercial and residential energy use is the second most rapidly growing area of global energy use after transport.

In 2002 the motor vehicle stock in OECD countries was 550 million vehicles (75 per cent of which were personal cars). A 32 per cent increase in vehicle ownership is expected by 2020. At the same time, motor vehicle kilometers are projected to increase by 40 per cent and global air travel is projected to triple in the same period.

Households consume 29 per cent of global energy and consequently contribute to 21 per cent of resultant CO2 emissions.

The share of renewable energy in final energy consumption has reached 17.5% in 2015.

Food

While substantial environmental impacts from food occur in the production phase (agriculture, food processing), households influence these impacts through their dietary choices and habits. This consequently affects the environment through food-related energy consumption and waste generation.

Each year, an estimated 1/3 of all food produced – equivalent to 1.3 billion tons worth around $1 trillion – ends up rotting in the bins of consumers and retailers, or spoiling due to poor transportation and harvesting practices

2 billion people globally are overweight or obese.

Land degradation, declining soil fertility, unsustainable water use, overfishing and marine environment degradation are all lessening the ability of the natural resource base to supply food.

The food sector accounts for around 30 per cent of the world’s total energy consumption and accounts for around 22 per cent of total Greenhouse Gas emissions.

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

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

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

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

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

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

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

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

Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production

Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products

Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities

Worldwide material consumption has expanded rapidly, as has material footprint per capita, seriously jeopardizing the achievement of Sustainable Development Goal 12 and the Goals more broadly. Urgent action is needed to ensure that current material needs do not lead to the overextraction of resources or to the degradation of environmental resources, and should include policies that improve resource efficiency, reduce waste and mainstream sustainability practices across all sectors of the economy.

In 2017, worldwide material consumption reached 92.1 billion tons, up from 87 billion in 2015 and a 254 per cent increase from 27 billion in 1970, with the rate of extraction accelerating every year since 2000. This reflects the increased demand for natural resources that has defined the past decades, resulting in undue burden on environmental resources. Without urgent and concerted political action, it is projected that global resource extraction could grow to 190 billion tons by 2060.

Material footprint per capita has increased considerably as well: in 1990 some 8.1 tons of natural resources were used to satisfy a person’s need, while in 2015, almost 12 tons of resources were extracted per person.

Well-designed national policy frameworks and instruments are necessary to enable the fundamental shift towards sustainable consumption and production patterns. In 2018, 71 countries and the European Union reported on a total of 303 policy instruments.

Parties to the Montreal Protocol and the Basel, Rotterdam and Stockholm Conventions are required to transmit information on the implementation of their obligations under those agreements. However, the rate of transmission varies, with the average compliance rate across these four agreements at approximately 70 per cent.