

12

RESPONSIBLE CONSUMPTION AND PRODUCTION



Ensure sustainable consumption
and production patterns

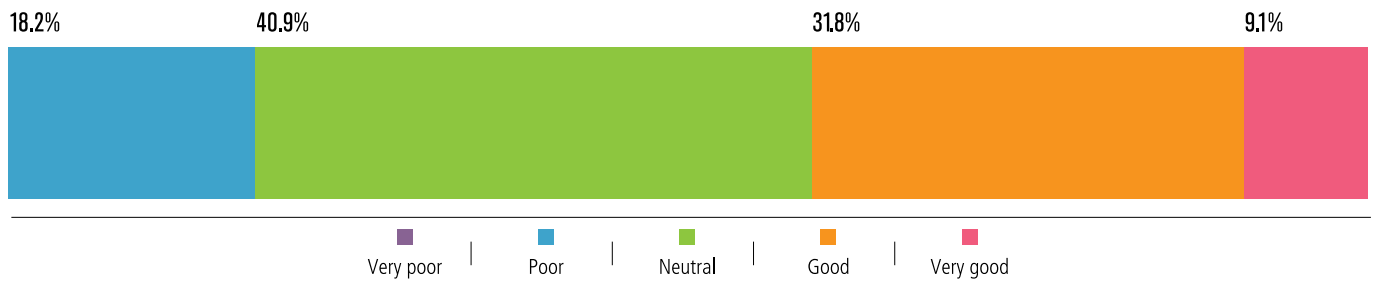
I. SUMMARY

The region has regressed on sustainable consumption and production (SCP) and urgently needs to reverse material consumption and footprint trends to meet the goal, notwithstanding progress on individual targets. Rising incomes and lifestyle changes and continued resource-intensive growth patterns are expected to further exacerbate resource depletion and ecosystem degradation. Concerted public and private action is needed to increase resource efficiency, fundamentally shift consumption patterns and production processes, improve waste management systems, and transition toward a more circular economy approach.



II. CURRENT STATUS

Perception on progress made on **SDG12**, based on a multi-stakeholder ESCAP survey



- Asia and the Pacific is fast becoming the largest market in the world¹ with the strongest economic growth of all regions, driven by increasing domestic private consumption and intraregional trade. However, this growth remains largely founded on unsustainable consumption and production patterns that exacerbate inequality and environmental degradation, intensifying existing risks and vulnerabilities in a changing climate.
- The region plays a central role in global value chains with large opportunities for resource-efficient production practices. The unprecedented growth of product demand in Asia in particular requires an equally strong shift towards sustainable consumption to decouple resource use and growth. The region is at a turning point to prevent industrialization and urbanization leading to irreversible resource depletion and environmental degradation that will endanger economic and social development in the long term.
- While there is some progress toward conducive policies for SCP, the large material footprint and lacking waste recovery and prevention systems in Asia-Pacific are main causes for concern. Opportunities to shift toward circular integrated approaches that can lead to multiple benefits across all three dimensions of sustainable development remain underexplored.

A. AREAS WHERE GOOD PROGRESS IS MADE

National action plans and public procurement (targets 12.1 and 12.7)

At least one quarter of the region's countries has developed SCP-friendly policies such as national action plans. Policy instruments for SCP need to work together towards achieving strategic objectives, but the right 'mix' depends on each country's context and specificity. In the Asia-Pacific region, a conventional emphasis is laid on promoting efficiency, improving value chains or applying improved technology processes, with a strong focus on energy and climate change. Recently, increasing attention is given to developing socially-oriented policies and projects on lifestyle changes. Several Asia-Pacific countries, most with an SCP strategy or integrated policy, have developed sustainable public procurement policies with a focus on environmental issues^{2,3}. National governments increasingly recognize public procurement as a tool to incentivize the development of markets for green products and services in a 'greener' economy. Key considerations include pollution reduction, improved energy and resource efficiency, and the reduction of waste and hazardous materials⁴.

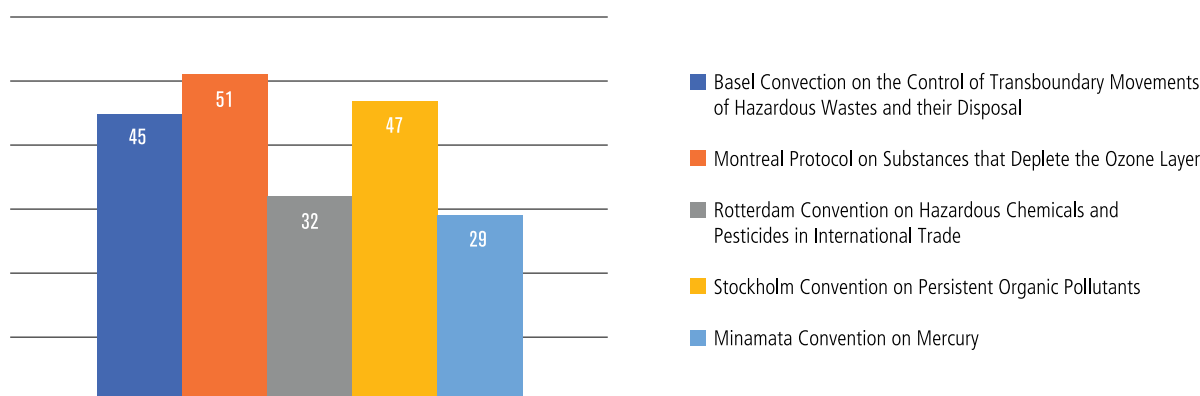
Environmentally sound management of chemicals and waste (target 12.4)

Chemical production in the region is projected to increase by 46 per cent from 2012-2020⁵. Rapid industrialization, rising consumer demand and population growth in the region demand improved chemicals and hazardous waste management and regulation of industrial and consumer chemicals and pesticides.



In recent years, a number of countries⁶ have started to improve chemical regulation by creating national inventories (such as in Viet Nam and Thailand), implementing regulations for the registration, evaluation, authorisation and restriction of chemicals (REACH, such as in the Republic of Korea), or revising existing chemical regulations (such as in China, Japan, Indonesia and Australia). China has become the world's largest producer and consumer of pesticides and while developing countries in the region continue to use toxic broad-spectrum pesticides, the ban and phase out of highly hazardous pesticides continues in the region (such as in Viet Nam, Lao PDR and China)⁷. The ASEAN Working Group on Chemicals and Wastes created in 2015 further strengthens regional coordination and cooperation to address chemicals-related issues under relevant multilateral environmental agreements (MEAs). An increasing number of countries in the region commit to at least one MEA on hazardous waste and other chemicals, which has, inter alia, led to the phasing out of ozone-depleting gases from consumption and production and improved regulation of chemicals⁸. Stricter enforcement of regulations and agreements will provide opportunities for low-cost solutions in the region's hazardous waste management market.

Figure 1: Number of Asia-Pacific Countries Party to international agreements on hazardous waste and other chemicals



Corporate sustainability reporting (target 12.6)

The region produces around one-third of the world's corporate sustainability reports that demonstrate companies' progress in adopting sustainable practices. National regulations and policy instruments to encourage sustainability reporting in the region have increased by about 75 per cent since 2013⁹. For instance, many stock exchanges in Asian countries, including India, Malaysia, Hong Kong, Taiwan, Thailand, China and Singapore, have made sustainability reporting mandatory for listed companies¹⁰. The Global Reporting Initiative Live Tracker recorded 5,114 corporate sustainability reports published from 2015-2017 in Asia-Pacific¹¹.

B. AREAS REQUIRING SPECIFIC ATTENTION AND ASSOCIATED KEY CHALLENGES

Material footprint and resource use (target 12.2)

The material footprint per unit of GDP in Asia-Pacific remains twice as intensive as the world average. Between 2005 and 2015, per capita consumption of natural resources increased by 53 per cent and domestic material consumption¹² rose to 11.6 Mt of materials per person, remaining highest in upper middleincome economies and doubling in East and North-East Asia since 2005. The construction and manufacturing sectors have the largest material footprint, followed by the services and agricultural sectors. Resource efficiency has been declining in the region since the beginning of the century and there seems to be an alarming rate of recoupling of resource use and economic growth for the period from 2010 to 2015¹³. Purchasing power of the growing middle class in Asia is estimated to increase to USD 32.6 trillion by 2030 (from 4.95 billion in 2005), accounting for over 80 per cent of global growth in demand¹⁴. This



unprecedented growth in demand requires an equally rapid transition to SCP to decouple resource use and growth for sustainable development. Resource efficiency can help to reframe environmental challenges and resource constraints into opportunities for technical innovation and industrial competitiveness.

Waste reduction and management (target 12.4)

Urban areas in the region generate about 1.21 million Mt of municipal solid waste a day. By 2025, this amount will more than double¹⁵. The majority of growing Asian towns and cities use open dump sites and only approximately 10 per cent of solid waste ends up in properly engineered and managed landfill sites. Five countries with fast growing markets and underdeveloped waste management systems in Asia may be responsible for as much as 60 per cent of plastic waste leakage into the environment and oceans¹⁶. 42 per cent of global demand for polyethylene terephthalate (PET) bottles comes from AsiaPacific¹⁷ and will surge by more than 140 per cent, accounting for one-third of the global total by 2020¹⁸. Percentage of treated wastewater in Asian cities is particularly low, ranging from 14 per cent in Indonesia, to 10 per cent in the Philippines, 9 per cent in India and only 4 per cent in Viet Nam¹⁹. The region generates 1 million Mt of hazardous waste daily²⁰. Asia generated 18.2 million Mt of e-waste in 2016, growing by 63 per cent in 5 years in East and Southeast Asia (2010 to 2015) with the highest quantity of global e-waste generated in China (7.2 million Mt)²¹. While some countries have passed respective legislation, the official collection rate across the region lies at around 15 per cent and as low as 6 per cent in Pacific island states²². The majority of hazardous e-waste in the region is managed by the informal sector. The incidence of food waste in industrialized Asia exceeds European levels and is high in cities across the region²³. In low-income countries where rice is the dominant crop, as in South and Southeast Asia, agricultural production and post-harvest handling and storage yield high food losses, while around 40 per cent of food losses in industrialized countries occur at retail and consumer levels²⁴. It is estimated that 15–50 per cent of fruits and vegetables, and 12–30 per cent of grains are lost between the producer and the consumer²⁵.

Consumer information and education (target 12.8)

The lack of recognized labels and standards is a key barrier to enabling consumers and public administration to make informed decisions when choosing goods or services. However, countries in Asia are increasingly developing national eco-labels and other consumer information tools. Cooperation and harmonization of eco-labels must be strengthened, inter alia through mutual recognition agreements, as in the case of Japanese and Thai eco-labels. Efforts to mainstream SDGs into education must be intensified to increase consumer awareness and ensure behavioural change in the long term. In India, the first higher education course on SCP taught in a developing country was launched in 2016 as part of a study programme on Public Policy²⁶.

Sustainable tourism (target 12.B)

Asia-Pacific is the second most visited registered region (324 million international tourist arrivals in 2017)²⁷, with tourism is forecast to grow, calling for accelerated SCP patterns in the sector. While tourism can drive environmental sustainability, heritage protection and poverty reduction, poor tourism governance threatens ecosystems and biodiversity, drives pollution and unsustainable resource consumption²⁸. Concrete environmental measures and monitoring instruments towards resource efficiency, reducing waste and emissions and protecting biodiversity, are largely absent and detailed only in approximately half of the tourism policies in the region.

Fossil fuel subsidies (target 12.C)

Developing Asian countries accounted for close to a third of global subsidies on fossil fuel consumption in 2012, equivalent to about 2.5 per cent of GDP²⁹. Removal of such subsidies would result in the decrease of demand and use of fossil fuels, which can lead to considerable financial savings for reinvestment. For example, in the Islamic Republic of Iran, fossil fuel use reductions led to a savings of USD 5.3 billion, and Indonesia saved USD 10 billion in a year³⁰. Fossil fuel subsidies support the production of cheap chemicals, and the carbon footprint of chemicals is substantial given that virtually all chemicals are sourced from fossil fuels. In addition, the use of fossil fuels has a major impact on climate change.



III. PROMISING INNOVATIONS AND BEST PRACTICES

Circular economy approaches

As a major global production centre, the region has the potential to be a model for sustainable manufacturing, consumption, and takeback system. A number of Asian countries are beginning to address SCP from a circular economy or 3Rs perspective (reduce, reuse, recycle): Japan's Food Recycling Law sets recycling targets for food product manufacturers, wholesalers, retailers, and restaurants, and promotes the use of food waste as livestock feeds and fertilizers³¹. Despite a traditional focus on production and value-chains, an emerging prominence of socially oriented approaches can be observed in Asia-Pacific. PACE (Platform for Accelerating the Circular Economy)³² is delivering concrete initiatives on the ground, covering plastics and marine litter, electronics and e-waste, and sustainable procurement practices. Radically increasing impact requires novel approaches such as these, with shared ownership, common goals and commitment to coordinated action.

National Sustainable Consumption and Production Blueprint in Malaysia

Malaysia has placed sustainable consumption production at the core of its national planning process, with the development of its National Sustainable Consumption and Production Blueprint 2016-2030. This strategy was designed through a broad consultative process and identifies ten complementary pathways: public procurement, households; industry; circular economy; buildings; mobility; food; tourism; communication, education and public awareness; and coordination and monitoring. An analysis of the current situation, and a clear description of how obstacles can be overcome, and targets achieved, has been developed³³.

Green public procurement to leverage sustainable development in Korea

The Ministry of Environment, in collaboration with the Korea Environmental Industry and Technology Institute and the Korean Public Procurement Services, introduced several initiatives including: the development of green public procurement guidelines, the introduction of the Korea Eco-label, the establishment of a Green Products Information Platform for purchasers, and a nation-wide online monitoring system. State organizations are required to submit a yearly implementation plan on green purchase and annual performance records to stimulate public demand and a green market. In 12 months, the total public expenditure in green purchase more than tripled to KRW 787 billion (USD 787 million) in 2005. The number of products certified by the Korea Eco-Label nearly quadrupled in 2012 since 2004³⁴.

Improving information and communication on product sustainability

Guidelines for Providing Product Sustainability Information³⁵ of the Consumer Information Programme of the 10-Year Framework of Programmes on SCP and the SDG Goals (10YFP) were launched for the Asian region during the India Sustainability Standards Conference 2017. The Guidelines are a tool for companies and other stakeholders to contribute to SDG target 12.8. The Guidelines are undergoing testing in India and China to assess and improve sustainability communications. Powered by the 30 SCP Youth Ambassadors from 22 countries, the 4 Billion Dreams sustainable lifestyle project was launched to create conversation and provide insight into current lifestyle patterns, working towards SDG 12.8.

IV. PRIORITIES FOR ACTION

- **Unifications of approaches:** The unification of approaches under the Sustainable Development Goals is essential, either through national plans on SCP or SCP integration into other core national strategies and more holistic approaches to SCP policies that address production as well as lifestyles and consumption in essential sectors such as food, mobility, housing, or education.



- **Integrated circular economy approach:** The region must transition toward a more circular model that strengthens resource efficiency (SDG 12.2), improves waste management (SDG 12.3, 12.4, 12.5) and embeds environmental impacts in employment and economic growth policies. A shift toward circular production and consumption pathways can reduce pollution on land and in water (SDG 14, 15), lead to innovation in industry and energy infrastructure and reduce greenhouse gas emissions (SDG 7, 9, 13), and provide decent jobs to reduce poverty and inequality (SDG 1, 8, 5, 10).
- **Strengthen capacity building, technical and financial support:** SCP is significantly externally driven with many processes requiring technical assistance from and funding of external actors. Strengthening domestic support and the development of financial instruments at national level is needed.
- **Enhance stakeholder involvement:** Greater engagement of a range of stakeholders involved in production and consumption processes is needed to make shifts towards SCP. This includes especially sub-national actors, the private sector and changing consumption behaviour of societies.
- **Monitoring systems and indicators:** To measure progress and prioritize action, monitoring systems and indicators need to be developed that integrate natural resources, socio-economic development, and policies, from process to impact.
- **Develop 10YFP programmes:** With a rapidly urbanizing population and a growing middle-class, the 10YFP programmes on consumer information, sustainable tourism and sustainable lifestyles and education will become more important.
- **Unify the framework of the SDGs:** A sound foundation for SCP exists in Asia-Pacific, through multiple and complementary approaches, and can be advanced through the unifying framework of the SDGs, supported by the 10YFP on SCP.
- **Encourage corporate change through policy tools:** Eco-innovations (eco-products and eco-process innovations) have significantly gained attention with business and manufacturers. Appropriate policy tools including regulations, taxes and subsidies will trigger corporate decisions on green innovation investments, and encourage green consumption³⁶.

TARGETS

12.1 Implement the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead and 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

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

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

12.c 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

END NOTES

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