

Adelaide 3R Declaration¹
towards
the Promotion of Circular Economy in Achieving Resource Efficient Societies
in Asia and the Pacific
under
the 2030 Agenda for Sustainable Development

Preamble

Asia and the Pacific is the most rapidly urbanizing and industrializing region in the world. The unprecedented scale and speed of the urban industrial transformation coupled with increased production and consumption has lifted millions of people out of poverty. However, this presents challenges for Asia-Pacific countries in the sustainable environmental management of their natural and ecological resources. At the same time, the growing volume and diversification of various waste streams has compounded these challenges. Waste management in many Asia-Pacific countries has to deal with increasingly complex waste streams including industrial waste, electronic waste, plastics in coastal and marine environments, construction and demolition waste, and chemicals that add critical dimensions to the region's sustainability. The sustainability and resilience of the region's cities, rural communities, natural environment and ecological assets has become a top priority of many policies. Future economic growth and human well-being need to be more resilient and regenerative, to phase out negative environmental, economic and social externalities towards natural resource shortages, increasing waste problems, pollution, natural disasters and the increasing frequency and magnitude of climate change impacts such as typhoons, cyclones, wild fires, heat waves, floods, landslides, and droughts, flash floods in mountainous and hilly regions, Glacier Lake Outburst Flood (GLOF), and natural fires due to thunderstorms, lightning, etc.

The Heads of State and Government and High Level Representatives of the 193 Member States of the United Nations adopted the post-2015 development agenda – *Transforming our world: the 2030 Agenda for Sustainable Development*, with 17 Sustainable Development Goals (SDGs) at its core, at the United Nations Sustainable Development Summit held in New York from 25 to 27 September 2015. The post-2015 development agenda represents a plan of action for people, the planet and prosperity and reflects the commitment of all countries to guide the world economy to a socially just and environmentally sustainable and resilient path. Through the adoption of the Agenda, the Member States call for a world in which consumption and production patterns and the use of all natural resources are sustainable. The 2030 Agenda for Sustainable Development, together with the SDGs and the Paris Agreement on Climate Change, provides an important political platform to integrate 3R and resource efficiency plans, programmes and policies into overall policy, planning and development practices at local, provincial and national levels. It is noteworthy that resource efficiency, waste minimization and low-carbon societies are becoming important drivers of economic success in a world where natural resources and landfill capacity are scarce and finite. There is an opportunity to help drive the next economic growth cycle by taking advantage of new industries, business opportunities and innovation in resource efficiency, waste minimization and preserving the value of materials circulating in the economy.

The policy, scientific and business communities in Asia and the Pacific are increasingly recognizing the large challenges of resource supply security, increasing waste and pollution, and climate change which may become impediments to future growth, prosperity and rising material standards of living in the region. There is a growing commitment, reflected in the Paris Agreement on Climate Change, that the region needs to embark on an alternative model of economic growth that is decoupled from increasing resource use, waste and emissions. This will not happen

¹ *Adelaide 3R Declaration is a good-will, voluntary and legally non-binding declaration.*

spontaneously but requires well-designed policies, multi-stakeholder collaboration, and well-functioning institutions and governance mechanisms that enable technological, social and design innovations towards sustainable use of natural resources and the prevention of the unsustainable generation of waste and pollution.

Governments, businesses and households in Asia and the Pacific have a significant potential for increasing resource efficiency and minimizing waste and emissions by devising and implementing 3R policies and programmes as well as strengthening institutions and investing in green infrastructure. The opportunities for decoupling of economic growth and resource use in the region are very large. In the short term there are many cost-effective opportunities for greater resource efficiency and waste minimization that will provide substantial net materials and energy saving opportunities. In the medium to long term, decoupling will generate higher economic growth than would occur under current trends of inefficient resource use, environmental destruction and climate change. The future prosperity of economies in Asia and the Pacific and the ability to achieve the ambitious 2030 Agenda for Sustainable Development will rely on more effective and efficient use and management of natural resources, reduction of emissions and the minimization of waste, in other words, achieving the principles of 3R.

The concepts of circular economy and resource efficiency are gaining momentum worldwide because of the large benefits that can be achieved. Studies show that up to 80% savings in materials, energy use and emissions could be achievable in the energy, building, transport and food sectors as well as in heavy industry and manufacturing². Governments also recognize that their development targets would be hard to achieve unless alternative models of economic development are identified and implemented, noting that commitments on this issue such as the Toyama Framework on Material Cycles have been declared. At the heart of the circular economic development approach is a systemic shift that integrates economic, environmental and social strategies to achieve high resource efficiency, increased employment opportunities, quality of life, economic competitiveness of products, increased use of renewable energy and materials, lower carbon emissions, lower production costs, innovation favouring regenerative industrial processes and business models that maximize asset utilization. Recognizing the importance of entrepreneurship, circular economy strategies include supporting mechanisms for SMEs.

In a 3R (reduce, reuse, recycle) context, the circular economic principles encourage countries to pursue a whole-of-value-chain approach, and upstream strategies to move away from strictly consumptive resource use and rising waste, and to aim for a higher level of circularity at the business and whole economy level. By reducing dependence on finite resources, businesses and economies can capture an added benefit of lower costs and enhance their social licence. Governments and businesses in Asia and the Pacific are encouraged to take note of the relevant international experience, knowledge and technical know-how in areas of circular economy, extended producer responsibility (EPR), environmentally friendly design and eco-products, eco-industrial parks, and green energy, which will be beneficial for creating sustainable business opportunities for both domestic and foreign enterprises.

Declaration

We, the representatives of Asia-Pacific countries (Afghanistan, Australia, Bangladesh, Bhutan, Cambodia, the People's Republic of China, India, Indonesia, Japan, Kazakhstan, Kiribati, Kyrgyzstan, the Republic of Korea, Lao People's Democratic Republic, Malaysia, Maldives, Marshall Islands, Mongolia, Myanmar, Nepal, Niue, Pakistan, Palau, the Russian Federation, Samoa, Singapore, Solomon Island, Sri Lanka, Thailand, the Philippines, Timor-Leste, Tonga, Tuvalu, Vanuatu and Viet Nam), city government representatives, international organizations,

² Von Weizsäcker, E, K Hargroves, MH Smith, C Desha and P Stasinopoulos (2009). *Factor 5. Transforming the Global Economy through 80% Improvements in Resource Productivity*. Earthscan, London.

non-government organizations, private sector and industry groups, and professionals in the field of 3Rs and waste management and other stakeholders, having met at the Seventh Regional 3R Forum in Asia and the Pacific, held in Adelaide, South Australia, Australia, from 2 to 4 November 2016,

Reaffirming the importance of careful planning and coordinated execution of various 3R policies and programme instruments (such as regulatory, economic and financial, information-based, voluntary initiatives, partnerships and technology transfer) to achieve the Sustainable 3R Goals of the Ha Noi 3R Declaration (2013–2023) adopted at the Fourth Regional 3R Forum in Asia and the Pacific, held in Ha Noi, Viet Nam from 18 to 20 March 2013,

Noting the fact that the Asia and the Pacific region has become a net importer of primary materials and natural resources, and that there is a need to explore sustainable business opportunities based on 3R principles to reduce import dependency and pursue sustainable development; sustainable business opportunities exist, among others, in resource recovery, remanufacturing using waste as a resource, green buildings and infrastructure, green chemistry, sustainable transportation, energy and water efficiency, sustainable farming, bio-economy (bio-products, bio-energy, bio-engineering), and wastewater reuse for urban green spaces and urban agriculture,

Recognizing the importance of multi-sector partnerships such as public-private-people partnerships and triangular cooperation as critical to realizing sustainable business opportunities which enable countries, cities and businesses to move from a linear throughput economy to a resource-efficient, closed-loop and circular economy in which economic benefits can take various forms such as savings in waste disposal costs, revenue from the reuse, recycling and energy recovery of previously wasted materials, saving foreign currency by reducing imports of materials, job and livelihood creation, and creating opportunities for carbon credits,

Reaffirming our commitments to the 2030 Agenda for Sustainable Development and the underlying Sustainable Development Goals (SDGs), and thereby **recognizing** the important complementary benefits of 3R policy implementation in achieving the SDGs, in particular SDG 11, SDG 12 and SDG 8 and related targets,

Building on the success of the Paris Agreement on Climate Change and further **recognizing** the need to limit global warming to less than 2 degrees Celsius and transition our economies to net zero emissions, as well as the potential contribution the improved resource efficiency will play in achieving sustainable economic growth, meeting intended nationally determined contributions (INDCs) and decoupling growth and emissions,

Recognizing the important role of the Technology Facilitation Mechanism (TFM), established by the Addis Ababa Action Agenda and subsequently launched at the United Nations Sustainable Development Summit held in New York in 2015, as facilitating access to information, knowledge, experience, best practices and lessons learned as well as in promoting science, technology and innovation cooperation around areas important to the implementation of the SDGs, and thereby **underscoring** its relevance in the areas of 3R science, technology and innovation in support of circular economic development,

Noting the outcome of the Maldives 3R Forum that 3R as an economic industry offers competitive solutions to many urban environment and development issues, provided 3Rs and resource efficiency are integrated into macroeconomic and development policies,

Express our commitments to:

1. **Strengthen** coordination among countries and within countries to progressively adopt and implement circular economy plans, a whole-of-value chain approach, strategies and tools to reduce, reuse, and recycle natural resources in production, consumption and other life cycle stages, enabled by extended producer responsibility (EPR), environmentally friendly design, low emissions

technology, ecological budgeting, financial incentives and investments, taking into account the prevailing economic conditions;

2. *Promote* policies, programmes and institutions that will help integrate and forge collaboration among industrial firms, including SMEs, eco-industrial parks and regional infrastructure to support resource optimization and efficiency;

3. *Promote* sustainable urban planning and practices which can lead to highly profitable and employment generating business opportunities; create enabling policies, institutions, multi-stakeholder partnerships and an investment atmosphere to expand markets for environmental goods (equipment, technologies, eco-products, green energy, rainwater harvesting, green city development, green construction materials etc.) and services;

4. *Discourage* all forms of end-of-pipe waste disposal which is a sunk cost with no financial return; encourage diversion of waste from landfill to recycling and recovery facilities; encourage energy recovery and sound management when such diversion is impossible with the current technology available and situation;

5. *Support* science and evidence-based policymaking to improve economic prosperity and human well-being enabled by resource efficiency, waste minimization and sustainable natural resource management; promote networks of innovation and national innovation centres for resource efficiency, waste and emission minimization in order to drive a science, innovation and technology based culture in overall policy-setting and development agendas;

6. *Take* full benefit of the Technology Facilitation Mechanism (TFM)³ led by the United Nations system to tap relevant information, knowledge, experience and best practices in the areas of 3R science, technology and innovation in support of circular economic development;

7. *Develop* institutional capacity as well as promoting government and international collaborative research projects in the areas of strengthening basic statistics, material flow and waste accounting and analysis, and material and waste footprint analysis and resource productivity analysis with a broad objective to reduce wastage of natural resources, promote optimal use of resources, to preserve natural capital and encourage renewable resource flows towards circular economic development, and disseminate results of such projects widely;

8. *Promote* research and development (R&D) oriented industrial structures to address resource efficiency related problems in the industry sector as the basis for scaling up new and innovative business models and circular economy activities and opportunities, including low emissions technology and renewable energy;

9. *Promote* 3Rs-related science, technology and infrastructure, industry-industry cooperation (so that by-products circulate fully in local production systems), encourage green products and green consumerism, renewable energy programmes, including residual waste-to-energy, and enabling conditions for multi-stakeholder partnerships to enhance resilience of industrial systems, cities and the overall economy in support of the 2030 Agenda for Sustainable Development and its SDGs;

10. *Promote* inter-municipal or city-city cooperation to integrate different production and consumption systems in the region so that resources or by-products circulate among the industries and urban systems within the same region creating circular economic opportunities,

³ The TFM is an initiative to widen access to science, technology and innovation to advance progress towards the Sustainable Development Goals (SDGs), and comprises:

- i) a UN inter-agency task team on science, technology and innovation (STI) for the SDGs;
- ii) a collaborative annual multi-stakeholder forum on STI for the SDGs; and
- iii) an online platform as a gateway for information on existing STI initiatives, mechanisms and programmes.

entrepreneurial spirit and new employment opportunities, ultimately contributing to the well-being of local communities;

11. *Facilitate* environmentally sound management of disaster waste in order to better respond to the increasing frequency and magnitude of natural disasters and the resulting large amounts of disaster waste through setting up appropriate treatment facilities, reuse of demolished waste materials from earthquake-devastated areas, and putting recycling programmes and infrastructure in place;

12. Call upon multilateral development banks, bilateral and multilateral donors, development agencies and partners and United Nations organizations to provide necessary capacity-building and support (human resource development, financing, knowledge and technical know-how) for instituting circular economic development approaches in overall policy, planning and development to achieve significant benefits for the 2030 Agenda for Sustainable Development; and also note the commitment of G7 Environmental Ministers in assisting developing countries to build the capacity needed for effective resource efficiency and resource circulation policies.