

The role of SLCPs in achieving the Sustainable Development Goals

The SDG development process arose from the 2012 Rio+20 UN Conference on Sustainable Development and the final text of the SDGs was adopted by all UN Member States on 25 September 2015. The SDGs clearly recognise the significance of the environmental dimension of sustainable development including its interlinkage and contribution to achieving the social and economic dimensions of sustainable development.

The agreed goals and target draw from diverse aspects of human and planetary needs and challenges, and achieving them by 2030 would require coordinated actions on diverse fronts. One of such needed actions is the mitigation of SLCP emissions. This is because SLCP emissions can impact on many of the goals and targets due to their climate-warming and air-polluting properties. The following highlights some, but not all, the interlinkages between SLCPs and some of the SDGs and argues that actions to reduce SLCPs can directly and indirectly support the achievement of many of the proposed SDGs.

GOAL 2



END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE

Target 2.3 of this goal aims to double agricultural productivity and incomes of small-scale food producers while Target 2.4 seeks to ensure sustainable food production systems that increase productivity and production and help maintain the ecosystem. The UNEP/WMO assessment indicates that mitigating SLCPs emissions, in particular tropospheric ozone, can help avoid the loss of 52 million tons of four staple crops – maize, rice, soybean and wheat. Hence reducing SLCP emissions will contribute to increased agricultural productivity. Furthermore, measures aimed at mitigating SLCP emissions, including intermittent aeration of continuously flooded rice paddies and farm-scale anaerobic digestion of manure from cattle and pigs, as well as ban of open field burning of agricultural waste will contribute to achieving sustainable food production systems. Also, reducing SLCP emissions will contribute to improved crop yields through reducing the rate of climate change which is projected to have adverse impacts on crop yields, particularly in low latitude regions.

GOAL 7



ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL

Targets 7.1 of this goal, ensuring universal access to affordable, reliable and modern energy services by 2030 offers major opportunities for integrating SLCP mitigation within the SDGs. SLCP emissions reduction actions can for instance, contribute to improved energy efficiency or vice versa. For example, results from a recent study have show that implementing HFC refrigerant transition and energy efficiency improvement policies in parallel for room air conditioning could save between 340-790 gigawatts (GW) of peak power load globally. This action is also expected to lead to an avoided CO2 emissions of up to approximately 98 billion tonnes of CO2 by 2050, thereby also contributing to Goal 13 on climate change.

GOAL 9



BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION

Measures to reduce SLCP emissions can contribute to achieving Target 9.4 of this goal aimed at upgrading infrastructure and retrofitting industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes by 2030 and therefore offers the potential to integrate SLCP reduction with the SDGs.

GOAL 12



ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS.

Goal 12 seeks to encourage the sustainable management and efficient use of natural resources. Actions on SLCP are interlinked with achieving this goal. For example, Target 12.3 aims to 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 2030. Organic wastes, which are the focus of this target are a major source of SLCP emissions including methane from waste dumps/landfills and black carbon from waste combustion. Policies targeted at mitigating SLCPs from these sources will therefore contribute to achieving this target. Similarly, Target 12.4 aims to achieve environmentally sound management of chemicals and all wastes by 2020 and reduce their release to air, water and soil. HFCs, an SLCP is one of such chemicals; hence, actions geared toward reducing HFCs emission would inevitably contribute to meeting this target. In addition, Target 12.5 hopes to substantially reduce waste generation through prevention, reduction, recycling and reuse by 2030. Success in achieving this target will significantly reduce the emissions of SLCPs from wastes.