

FAQ 4.1 | What is to be done over and above countries' existing pledges under the Paris Agreement to keep global warming well below 2°C?

Current pledges and efforts under the PA aimed at keeping global warming below 2°C are not enough, falling short by 14 to 23 GtCO₂-eq (Cross-Chapter Box 4 in this Chapter). There is a further shortfall of about 4 to 7 GtCO₂-eq in 2030 if the conditions are not fulfilled for those Parties that have made their pledges with conditions for support (Section 4.2.2.3). To cover up for these shortfalls will require taking actions across all sectors that can substantially reduce GHG emissions. Examples of such actions include shifting to low- or zero-emission power generation, such as renewables; changing food systems, such as diet changes away from land-intensive animal products; electrifying transport and developing 'green infrastructure', such as building green roofs, or improving energy efficiency by smart urban planning, which will change the layout of many cities. Because these different actions are connected, it means all relevant companies, industries and stakeholders would need to be involved to increase the support and chance of successful implementation (Section 4.2.5). The deployment of low-emission technology depends upon economic conditions (e.g., employment generation or capacity to mobilise investment), but also on social/cultural conditions (e.g., awareness and acceptability) and institutional conditions (e.g., political support and understanding), and the provision of relevant enabling conditions (Section 4.4.1). Encouraging stronger and more ambitious climate action by non-government and sub-national stakeholders, as well as international cooperative initiatives (ICIs) could make significant contributions to emissions reduction (Section 4.2.3).

FAQ 4.2 | What is to be done in the near term to accelerate mitigation and shift development pathways?

Increasing speed of implementation, breadth of action across all sectors of the economy, and depth of emission reduction faces important obstacles, that are rooted in the underlying structure of societies (Section 4.2.7). Addressing these obstacles amounts to shifting away from existing developmental trends (i.e., shifting development pathways, Cross-Chapter Box 5). This can be done by strengthening governance and institutional capacity, aligning technology and innovation systems with low-carbon development, facilitating behaviour change and providing adequate finance within the context of multi-objective policy packages and sequences (Section 4.4.1). Shifting development pathways towards sustainability broadens the scope for, and is thus a complement to, accelerated mitigation (Section 4.3).

FAQ 4.3 | Is it possible to accelerate mitigation in the near term while there are so many other development priorities? (Education, health, employment, etc.)

It is possible to accelerate mitigation while addressing other developmental priorities by implementing measures that simultaneously address both climate and development goals. Casting mitigation in the broader context of development pathways provides additional opportunities to articulate both (Section 4.3.1.4). Policies such as progressive taxation, investment in public transport, regulatory transparency, commitment to multilateral environmental governance, fiscal incentives for private investments, international technology development and transfer initiatives, and risk disclosure and efforts to improve underlying enabling conditions (improving governance and institutional capacity, fostering behavioural change and technological innovation, and provision of finance) address multiple objectives beyond mitigation, such as job creation, macroeconomic stability, economic growth, public health and welfare, providing energy access, providing formal housing, and providing mobility. How we manage our land and agriculture, growing cities, transport needs, our industries, and the way people are trained and employed all impact on GHG emissions and the options we have to reduce them. In turn, reducing GHG emissions can also contribute to reducing poverty, preventing hunger, improving health and wellbeing, and providing clean water and clean energy. Implementing right policies and investments can help to address the challenges of how to reduce emissions without constraining development. For example, in land use, widespread planting of a single tree species or crops for bioenergy (organic matter turned into renewable energy) could affect food and water supplies. Therefore, if bioenergy is to be relied upon to offset emissions, the right policies and investments are needed (see also Chapter 17).