

Chapter 8:

A Way Forward

The previous chapters have outlined the benefits for health, crop yields and near-term climate protection of taking action, starting now, on short-lived climate forcers (SLCFs). Other chapters discussed the options to promote implementation of identified black carbon and methane emission control measures at national, regional and global scales. The challenge for the international community is to put these measures in place quickly, as effective action must be taken over the next two decades to achieve the full potential for the near-term benefits outlined in this document. This will be influenced by the very diverse starting points of different governments and regional and international organizations. In order for SLCF mitigation to be successful, implementation of the key measures needs to be integrated into national programmes according to national priorities. Fortunately, there is a substantial basis on which to build national strategies. Chapter 5 indicates the need to take full advantage of the wide range of policy measures and instruments which have already been developed to address air pollution, as well as the potential to integrate SLCF mitigation- when appropriate - into sustainable development planning, and sectoral and climate-related policies. The principal instruments available are regulation of emission levels, bans of substances or particular processes, and deployment of cleaner technology (e.g. cookstoves). These approaches can usefully be complemented by a wide range of tools, including economic incentives, technology transfer, awareness raising, capacity enhancement and education.

A suitable starting point is the identification of relevant sources and measures that can achieve the emission reduction goals, are sustainable in the circumstances of the country, can be readily introduced and effectively implemented, and where success can be measured and assessed. It is especially important that the selected measures are cost-effective, generating positive short-term returns on capital expenditure and have low maintenance costs. This work can be consolidated into national action plans or other planning or strategy documents.

Although the principal route for abating SLCFs is through national programmes, cooperative action at regional and global scales will also be required. This is because, like all air pollutants, some SLCFs are also transported at regional, hemispheric or even global scales. For the same reasons, different SLCFs may require different approaches. Measures to reduce black carbon emissions may be motivated by important local health benefits alone, even though they also have regional benefits in ice- and snow-covered areas and limit global temperature increases. Measures to address tropospheric ozone, a regional and hemispheric pollutant, may require cooperation at those scales to effectively reduce concentrations. Methane is globally mixed in the atmosphere, so methane abatement lends itself to global cooperation. Global- and regional-scale efforts will also help widespread implementation of national-level actions and allow the development of a more coordinated and comprehensive approach.

Existing international and regional instruments and policies can provide a useful foundation on which to anchor an SLCF strategy, without having to create costly and time-consuming new ones. SLCF policy development can build on existing processes to promote cross-cutting activities such as awareness raising, agenda setting, policy formulation and monitoring. It is also important to focus on what could be implemented within current sustainable development pathways and existing air quality and climate change programmes, expanding and accelerating those efforts that will have significant development co-benefits.

The above considerations are based on the fundamental premise that addressing near-term climate change by interventions that reduce concentrations of SLCFs is time sensitive. The opportunity to achieve near-term global and regional climate benefits and significantly reduce the rate of climate change needs to be realised within the next two decades if changes already seen in sensitive and at-risk regions, such as the Himalayas and the Arctic, are to

be slowed. This near-term climate strategy complements the long-term climate strategy of reducing long-lived greenhouse gases, especially carbon dioxide. If taken in conjunction with the necessary carbon dioxide reductions, reducing SLCFs increases the chance of remaining below the 2°C temperature increase target during this century.

8.1 The need for awareness raising

Mobilizing political support to address environmental concerns has always depended on raising general awareness of the problem both within government and among the public. It also means seeing the benefits of taking action and the negative impacts of inaction. The attention given to the need for SLCF mitigation, and consequent decision-making, can only derive from a firm grounding in science and knowledge of the impact that these substances have on climate, public health, agricultural crop yields, ecosystems and development. Despite some progress in the understanding of these issues among both governments and the public, there is a need for greater recognition of the urgency of the near-term climate situation and the potential threats of continued rapid temperature increase in the coming two to four decades. In addition, the ready availability of SLCF-reduction measures and their health, environment, climate and development co-benefits need to be emphasised and brought to the attention of the public. This needs to be coupled with efforts to advance scientific and technical knowledge on SLCFs and their potential for achieving near-term climate and air-quality gains.

Awareness-raising efforts should target a broad spectrum of actors across multiple sectors. At the global level, raising political awareness at such suitable international forums as UNEP's Governing Council, the Commission for Sustainable Development and United Nations Framework Convention on Climate Change meetings is an essential aspect of developing a framework for international cooperation on SLCFs. To achieve the scale of intervention needed to rapidly reduce SLCFs, the discussion of the issues must occur beyond air-pollution circles and also be considered together with climate-change policies at global, regional and national levels. This discussion should also move into broader development circles, such as through the United Nations Development Programme, the World Bank, regional development banks, and the Global Environment Facility. The policy challenges resulting from the convergence of climate change and air-quality objectives are complex and the ability of outreach campaigns to influence action at all levels will depend on their ability to highlight the cost-effective, 'win-win' nature of SLCF reduction measures.

Governments could also initiate or support joint activities to promote awareness raising, information exchange and other enabling actions to facilitate implementation of policy measures. Technical meetings and policy dialogues with national and sub-national authorities and stakeholders are essential to raise awareness and facilitate subsequent implementation of mitigation measures in any country. Such meetings would foster an understanding of the available implementation options and mechanisms, highlight available internationally transferrable experience, and facilitate the building of political support and funding. Organizing such meetings would also promote information sharing and greater coordination.

Coordinated awareness-raising efforts at global, regional and national scales involving governments and other key stakeholders, including the public, would increase political support for the implementation of SLCF measures.

8.2 Setting the agenda

While raising awareness is the first step required to put SLCFs on to governments' agendas, the widespread adoption and implementation of policies at global, regional and national levels will depend to a large extent on a willingness to set an agenda that clearly identifies priorities for the course of action. Policy development at all levels needs to be based on the science and understanding of SLCFs. Government officials also require cost-benefit analyses to define the most cost-effective measures for their country's circumstances, as well as the means to measure and evaluate the success of implementation. The natural way to achieve this is through national action plans as discussed in Chapter 5.

The knowledge represented by *Integrated Assessment of Black Carbon and Tropospheric Ozone* (UNEP/WMO, 2011), together with this and other recent reports, provide a concrete basis for policy-making and action to mitigate SLCFs. The involvement of key governments in developing these reports, and high-level policy dialogues in different regions, will further the development of an effective agenda at national, regional and global levels.

At the global level, SLCF mitigation needs to be placed on the international agenda so that governments can address this issue in a coordinated manner. This requires wider acceptance of the problem and an appreciation of how the mitigation of SLCFs can assist countries to meet their immediate air-quality and development goals, as well as helping to solve their short- and medium-term climate change challenges. A key point at this stage is to enhance understanding of the need to act quickly and build on existing policies and processes.

Agenda setting at the regional level could build on the existing regional initiatives, agreements and networks already responsible for addressing air quality. Incorporating SLCFs into regional agendas will require that the issues are elevated to the level where the authority exists to address them, for example at ministerial meetings. Due to its convening power, the United Nations Environment Programme (UNEP) and its regional offices can play an important role here because many of the existing instruments were originally promoted through UNEP cooperation and awareness-raising projects.

Setting priorities at the regional level will face underlying challenges, related to the fact that the development of transboundary air pollution agreements is still a work-in-progress in many regions. There may be resistance to move away from traditional air pollution approaches, as closer association with climate issues might be perceived as adding further complexity; similar challenges may also be faced at the national level. Near-term and regional benefits, and opportunities to realise co-benefits, may however remove part of that reluctance. To achieve this, it will be important to have a clear understanding of the costs and benefits of SLCF mitigation, and financial and other forms of support that could assist implementation of SLCF mitigation activities. Therefore, successful agenda setting will require early engagement with stakeholders active in air pollution, climate and development policy, to enhance understanding of the added value of linking air pollution with near-term climate mitigation in the context of development. At the national level, policy makers need to be aware that national efforts are not only possible, but implementable at marginally increased costs to existing efforts.

8.3 Establishing an effective governance framework

An adequate governance framework is important for ensuring coordinated efforts among governments and international agencies. It is also important to ensure the delivery of the required enabling activities and financing, and for monitoring progress.

The challenge for SLCF mitigation is that while specific policies can be initiated by building on existing policies and processes, it still is a cross-cutting issue that falls outside the scope of any single existing regime or governance framework that would specifically address this problem in a dedicated and cohesive manner. An international governance framework is required that can coordinate and collaborate with existing initiatives, and be recognized by them as the primary framework. However, the framework must be flexible and framed in

a way that will allow it to take quick and effective action working through the entire United Nations system, as well as at regional and national levels. Because of these requirements, an *ad hoc* arrangement might be best suited for moving forward on SLCFs.

One important role for a global initiative would be to provide a menu of policies and measures that countries could use to develop national actions on SLCFs. Such a menu, along with some understanding of best practices, could be an important tool for assisting countries in developing their own national strategy and could become part of an action plan on near-term climate protection and clean-air benefits.

International organizations with relevant mandates could individually or jointly facilitate a global initiative on SLCFs, or provide secretariat functions, in addition to other roles they can play as outlined in chapter 7. An organization like UNEP could provide a platform for cooperation under such an initiative as a global organization that deals with environmental issues across different levels and sectors, including those most relevant to an effective SLCF strategy – climate change, ecosystems management, and transboundary air pollution, and due to its regional presence.

A model for a global initiative could be a voluntary partnership of committed governments and other major stakeholders, led by a small steering committee of country champions working together with a small secretariat. The initiative could:

- identify opportunities for enhanced international coordination and outreach;
- report on domestic activities;
- identify knowledge gaps and human and financial resource requirements;
- raise public awareness of the problem and opportunities, and discuss common approaches to taking new action or promoting and reinforcing action in other organizations;
- serve as a forum for increasing awareness of, and participation in, existing efforts;
- promote the development of national or regional action plans, tracking progress of programmes and commitments, and mobilizing funding commitments for SLCF mitigation;
- aim to provide up-front finance to help create the necessary enabling environments for action, as well as to provide funds to leverage private sector investments in SLCF mitigation.

The initiative could further task relevant international organizations to work through regional ministerial forums to develop awareness, set agendas and facilitate regional and national actions or promote the establishment of

regional structures where they are missing. The initiative could include an inter-agency mechanism for collaborative activities, a system-wide strategy and governance arrangements that would allow the types of partnerships that are needed to instigate and enable policies.

When establishing such a governance framework it would be important to achieve:

- a critical mass of countries across regions that will take leadership;
- recognition of the legitimacy of the global initiative by key actors and organizations in the climate and air-pollution arenas;
- access to funding to kick-start early actions, e.g. pilot projects; and
- implementable and realistic action to achieve the agreed global agenda.

With these elements, the opportunities that SLCF mitigation presents for near-term climate change mitigation and for air-quality benefits can be utilized to their fullest extent and not be lost.

The imperative for early action seems clear. The co-benefits to human development and environmental health, and avoidance of risks associated with existing rapid climate change demand an effective response by the global community.

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