

Linking climate and air pollution policy processes at the international scale

L'intégration des politiques en matière de pollution atmosphérique et de changement climatique à l'échelle internationale

Richard MILLS*, Bo KJELLÉN**

Background paper for the Global Atmospheric Pollution Forum Stockholm Conference on "Air Pollution and Climate Change: Developing a Framework for Integrated Co-benefits Strategies". Document préparatoire à la conférence du GAPF à Stockholm sur « Pollution Atmosphérique et changement climatique : développer un cadre pour des stratégies intégrées visant des co-bénéfices ».

1. Introduction

While the potential economic and environmental significance of integrated co-benefit strategies is the focus of the Stockholm meeting, this is part of the more general issue of the relationship of climate and air pollution. As the close links between air pollution and climate become ever more evident and important, a key question is how international policy and negotiating processes can most appropriately take account of it.

As background for this theme, this note suggests some possible issues – and opportunities for progress – which may be relevant.

2. Background

Many of the contributions to the conference highlight the close similarities between climate and air pollution in sources, scientific processes and impacts – and indeed in the sort of abatement and management policies that can be relevant to them. But there are also major differences – perhaps most notably in the temporal and geographical scales at which climate and air pollution operate. The result is that, while climate change and air pollution are closely linked, they have largely been separated in policy discussions and negotiations. Indeed, in recent decades, separate policy frameworks have been developed for air pollution and climate change. In some areas there is also less communication and interaction between the two communities than may now be needed, in spite of the fact that the two communities tend to be peopled by scientists and regulators with background and experience in both fields. Integrated strategies will force changes, but it seems likely there will be initial difficulties.

There is therefore an issue as to how wider integration and communication can be encouraged. For instance, legislation from governments can be critical to dovetailing the two communities and part of the answer may therefore be in getting political bodies and policy makers to understand the linkages.

In some areas, particularly at the urban and national scales, there is evidence of policy or administrative action to reduce separation and encourage co-operation or even integration, but it seems the exception rather than the rule, and the results can be ambiguous. Organizing climate change and air pollution in the same part of the national ministry/department, for example, may increase the possibility for interactions, but that is still no guarantee of effective communication.

Certainly, such convergence as has occurred has so far been mainly at the urban and national level. Such links are clearly very important because it is often essential to take both climate and air pollution effects into account in any specific project or policy decision. By contrast there is less evidence of convergent approaches at the strategic level, particularly at

^{*} IUAPPA.

^{**} Stockholm Environment Institute - wkh1@york.ac.uk

GLOBAL ATMOSPHERIC POLLUTION FORUM

the international scale. Climate negotiations pay less attention to pollution matters than might be expected, and, for the most part, regional air pollution organisations do not involve themselves in climate matters.

This separation in policy and negotiating systems reflects a number of considerations. Perhaps the most fundamental is the contrast in the level and sophistication of policy processes. Because of the nature of the issue, climate is highly organised at the global level. By contrast, air pollution has no global framework, even though some pollutants operate at global scales and the two most significant are important at hemispheric scales. This disparity reflects the different character of the phenomena, but it may be a hindrance to progress in those areas where air pollution and climate policies need to integrate or converge.

Despite such pressures, there are strong grounds for thinking that the time is now ripe for achieving better integration of air pollution and climate policies and systems. Currently, both the air quality and climate "communities" are confronted with difficult challenges: policy makers and air quality managers in industrialized countries are facing increasing costs of achieving remaining necessary air pollution emission reductions; policy makers and air quality managers in developing countries often find it difficult to justify the necessary costs of pollution prevention or reduction programmes based on air pollution alone. And the global, long-term context of climate change negotiations often provides insufficiently convincing arguments to national decision-makers to embark on the required far-reaching and apparently costly actions now, especially in developing countries.

3. Increasing the Role of Air Pollution in International Climate negotiations

One option might be to link climate and pollution more closely in international policy and negotiating processes, perhaps bringing them within the same international negotiating *fora*. There appear conflicting arguments on the merits of this, which need careful balancing.

In the case of climate negotiations, for instance, it can be argued that the range of issues, number of players and diversity of interests are already so great that it is difficult to make progress other than on a focussed agenda. Further, climate negotiations focussed on CO_2 abatement now appear to be moving relatively rapidly, against a very tight timetable. A widening or merging of agendas may therefore be thought likely to diminish opportunities for progress and agreement, or at least put them at risk.

On the other hand, there is the increasing evidence that, in the right circumstances, considering the issues together may offer new "smart" opportunities for making progress; or may bring to light simpler or less costly ways of achieving negotiating objectives than were open when the two issues were considered in isolation.

Perhaps the most important immediate consideration is that – regardless of any formal changes – air pollution may have a critical *indirect* place in current climate negotiations, even if only as part of the negotiating context. This is because the prospect of substantially reducing the long-term costs of achieving climate objectives through co-benefits strategies can remove negotiating obstacles and potentially provide an increased incentive to achieving agreement. The important step now may therefore be to ensure that this is clearly and widely recognised. Any conclusions from the Stockholm meeting on how this could be better done would clearly be valuable.

The position may be different in future stages of climate negotiations. These are likely to have to focus more on the other major climate forcing agents, and the most important of these are major air pollutants already regulated at some scales under air pollution legislation. At that stage, therefore, it may become much more important – indeed essential – to bring climate and air pollution together.

The case of ozone and aerosols may make this a pressing issue. The UNFCCC and Kyoto Protocol do not include tropospheric ozone and aerosols in the basket of radiative forcing agents and there is no policy forum through which the local, regional and global-scale impacts of tropospheric ozone and aerosol precursor emissions can be addressed. There is therefore no mechanism to ensure that the steps taken to reduce local and regional air pollution problems will not exacerbate global climate change by increasing tropospheric ozone formation and the rate of growth of methane emissions, and by reducing radiative forcing by aerosols.

One option might be to build on the agreement of UNFCCC in Bali to establish an *Ad Hoc* Working Group on Long-Term Co-operative Action. This potentially provides a framework within which helpful links with air pollution policies can be established.

Clearly a variety of contrasting processes could be envisaged for dealing with this. In some cases the impacts of a pollutant on climate, and on pollutionrelated impacts, may be so great that it will over time be difficult to contemplate anything other than an integrated policy and negotiating process. Alternatively, it may be possible to envisage a position where it may be reasonable for the climate and air pollution impacts of a particular pollutant to be considered separately. Even in these circumstances, however, it may, at the very least, be necessary to ensure that negotiators in each *fora* leave sufficient flexibility to ensure that the other's negotiating objectives can be separately secured.

So far as the *Ad Hoc* Working Group is concerned, it may be too soon to try to anticipate what course it might take, but it may be timely for the conference to consider whether there are useful suggestions it could put forward.



4. Strengthening the Role of Climate Considerations in Air Pollution Negotiations

The global scale

There is at present no comprehensive international negotiating framework for air pollution of the kind that necessarily operates for climate. There are global mechanisms on certain pollutants (for instance POPs and CFCs) and these have arguably so far been sufficient. It is doubtful if that can much longer continue, for two reasons. One is the increasing evidence of the importance of hemispheric and global scales for some other major pollutants, most notably ozone and aerosols. The other is the close linkage between climate and air pollution. Some stronger development of international air pollution machinery may be necessary to ensure that balanced outcomes are achieved as integrated consideration of air pollution/climate issues develops.

The hemispheric and potentially global reach of some pollutants and the increasingly evident link to climate may therefore point to the need for some new institutions or processes. The Forum has been encouraging discussion of possible ways forward over the last year or two. While consideration of this issue may be at its early stage, it is already clear that a number of opportunities may be open.

These might include, for instance, expanding the remit of one of the existing negotiating conventions that currently deals with a specific pollutant, such as those dealing with POPs or CFCs, or widening the Convention on Long-Range Transboundary Air Pollution. With the LRTAP Convention, for instance, even though the current protocols have application specifically to the UNECE area, much of the governing Convention is drafted in terms that make it relevant globally. Although widening any such Convention may involve significant legal challenges, it may in due course prove a worthwhile possibility for consideration as a simpler alternative to a new instrument if, in due course, new global instruments for air pollution become appropriate.

Evolution at the hemispheric and regional scales

Other opportunities may arise through the evolution of the LRTAP Convention and other regional air pollution agreements. As LRTAP completes the framework for managing conventional air pollutants within the UNECE region, and particularly as it is inevitably drawn into wider hemispheric issues, there may be scope to move to develop a more integrated approach and more explicit co-benefits strategies.

The more recent emergence of air pollution networks in other regions, largely with the support of UNEP, may offer more substantial opportunities for progressing the global consideration of air pollution and for pursuing co-benefits. For the most part, their focus at present is firmly on air pollution issues and they do not consider climate issues to any significant degree. Unlike the UNECE, new regional air pollution regulatory systems are now being designed afresh in these regions and are not constrained by a heavy inherited agenda. As they develop policy-making and negotiating structures there may be the opportunity to avoid some of the stages through which air pollution policy has had to evolve in Europe, and move straight to consideration of more cost-effective joint air pollution/climate strategies at the regional scale. This may allow them to achieve their air pollution objectives more quickly and cheaply.

"Internationalizing" the urban scale

A further important path forward is to recognize the importance of the urban scale. In much of Asia, and many other developing regions, cities are the primary source of greenhouse gas emissions, the area where impacts may be greatest, and the scale at which policy innovation is most rapidly developing. At the urban and national scale there is an evident need to look at issues jointly when deciding how to implement policies.

However, urban initiatives tend to be over-lapping and sometimes arbitrary in coverage, and there may be a need for more coherent approaches and mechanisms at the national and regional scale to support action at the urban scale. At the same time as it may be possible for international processes and policies to build on practical progress at the urban scale.

5. Summary and Conclusions

This brief review thus points to a number of issues, focussing around the following questions:

• The possibility that the availability of co-benefits may encourage agreement on climate targets, and what might therefore be done to ensure they are widely recognised;

• The likelihood that the need to consider ozone and aerosols in future stages of negotiations may require a much closer relation between climate and air pollution policy processes and systems; and the ways in which this might be best secured;

• How international air pollution policy processes and systems might better reflect the increasing recognition of the hemispheric and global scale in air pollution; and to help ensure balanced outcomes as joint consideration of climate and air pollution increases;

• How far there might be benefits from regional air pollution networks beginning to address related regional climate issues and providing a framework for securing co-benefits at the regional scales;

• The scope for 'scaling-up' regional solutions; and

• In more general terms, how far there would be benefits from closer links between the air pollution and climate communities, and how this might be promoted.