



International Union of Air Pollution Prevention and Environmental Protection Associations

CLOSING DECLARATION OF THE XVIth WORLD CLEAN AIR CONGRESS

Cape Town - September 2013

ONE ATMOSPHERE From Vision to Action

Introduction

At the 15th World Clean Air Congress in 2010 in Vancouver the Union set out its vision of 'One Atmosphere', in the form of global priorities for securing the long-term health of the atmospheric environment. At the 16th World Clean Air Congress, held in Cape Town September 30th - October 4th under the title 'Many Nations: One Atmosphere', the task was to try to identify pathways and measures that could help translate that vision into reality.

The main elements of the vision as it emerged in Vancouver were clear: a coherent framework for global atmospheric policy and management, ultimately embodied in a Law of the Atmosphere, which could enhance and protect the health of the global atmosphere by integrating climate and air pollution policy; balancing the immediate need to mitigate pollution impacts on health with effective long-term protection of the ecosystems on which we depend; and providing defences to prevent the atmosphere breaching dangerous global boundaries and thresholds such as exceeding the 2 degree warming threshold.

Identifying effective measures and pathways to such an objective is inevitably complex and difficult. However the papers presented in both Vancouver and Cape Town demonstrated clearly that rapid progress is being made in all aspects of the atmospheric sciences and policy. The challenge in Cape Town was to identify how this progress could be used to help make the priorities identified in Vancouver concrete and actionable in ways which could help move the world to some significant degree closer to the One Atmosphere goal by the time the Congress next meets in Korea in 2016.

In the light of the results of the Congress this Statement sets out the steps that the Union considers should now be taken to meet that challenge.

Ecosystems and Food Security

The impact of atmospheric pollutants on crop damage and hence on food security is well-known and has been a focus of the Union's attention for some time. But the 16th Congress made clear that the issue had to be seen in a wider and more fundamental perspective than had previously appeared the case.

While hunger and malnutrition remain prevalent in many areas of the world, there is little doubt that the world - including Africa - can potentially feed itself. However this requires a significant contribution from atmospheric policy. Artificial fertilisers have become an intrinsic part of high production agriculture but their widespread manufacture and use has created an unbalanced "nitrogen environment" globally, with excess nitrogen leaking to air

and water courses and producing detrimental effects. Some parts of the world at present have reactive nitrogen in the environment in excess of thresholds for healthy ecosystems and vegetation, whilst other parts of the World, notably Africa, have insufficient nitrogen available for optimal crop yields. Long-term action is therefore needed to secure a better Nitrogen Balance around the world

As a first step the Congress welcomed the development of the International Nitrogen Initiative (INI) and the recent publication of the European Nitrogen Assessment. But Europe is not the limit or epicentre of the Nitrogen problem, and the Union urges relevant funders to ensure that a Global Nitrogen Assessment can be quickly undertaken. The UNEP/WMO Global Integrated Assessment of Black Carbon and Tropospheric Ozone, first recommended by the 2008 Stockholm Conference on 'Air Pollution and Climate Change: Developing a Framework for Integrated Co-benefits Strategies', organised by IUAPPA and the Stockholm Environment Institute (SEI), played a key role in generating necessary action on what are now known as Short-Lived Climate Pollutants (SLCPs). A Global Nitrogen Assessment could now play a similar role and the Union urges support INI's plans.

There are other steps that would be timely and appropriate. More visibility of the nitrogen issue could be encouraged in environmental debates, negotiations and agreements. In particular, the work of the UNECE Task Force on Reactive Nitrogen (TFRN) could be disseminated more widely through UNEP.

On a regional basis, the development of specific solutions, tailored to local needs is urgently required. As a first step a series of regional workshops could explore regional issues, the availability of knowledge and the research required to fill gaps. Such workshops, perhaps under UNEP/IUAPPA sponsorship, could be encouraged to develop outline action plans, which could be discussed and compared at the next World Clean Air Congress

The current work plan of the Intergovernmental Platform for Biodiversity and Ecosystem Services (IPBES) included nitrogen assessment, with the example of an assessment in California, USA. Such local initiatives could be encouraged and the wider implications assimilated into regional level agreements on use of agricultural chemicals.

Meanwhile IUAPPA members are urged to incorporate the issues of reactive nitrogen in their work and the International Board is asked to consider the topic as a major focus for future regional meetings.

Climate and Air Pollution

Building upon its work since the 2004 London Congress, and particularly the seminal recommendations of its 2008 Stockholm Conference, the Union in its 2010 Vancouver Declaration urged the need for early action on Short-Lived Climate Pollutants - pollutants such as Black Carbon, Ozone, Methane and some HFCs, which globally impose an enormous burden in terms of health and crop damage as well as exacerbating climate change.

The Congress therefore welcomed the initiative of Bangladesh, Canada, Ghana, Mexico, Sweden and the United States in founding the Climate and Clean Air Coalition (CCAC). The Union was pleased to be among the first non-governmental partners in the Coalition, which now includes some 70 partners, including over 30 state partners.

The establishment of the Coalition is the most significant event in atmospheric policy in the last triennium. The Union warmly supports its fundamental approaches - in particular a

commitment to voluntary rather than mandatory obligations for partners, and a diversity of potential 'entry points' that encourages support for its objectives from countries with diverse priorities.

The Union now sees a number of priorities if the Coalition is to develop further and achieve its full potential:

- The Coalition should remain open and inclusive, with other countries encouraged to join. It can be argued that a small group of activist countries might be able to achieve action more quickly, but this is offset by the benefits that would accrue from general international consensus.
- IUAPPA member organisations should therefore take every opportunity to encourage their governments to join and support the Coalition. In doing this they can emphasise national self-interest as well as international altruism since the benefits of mitigation will accrue mainly to the countries taking action.
- It is encouraging that the Coalition is now supporting major mitigation initiatives in almost all the sectors important for SLCP emissions. It will be important to ensure that these initiatives are geared closely to SLCP objectives. Presentations at the Congress also made clear the importance of having close regard for the cultural norms and values of the receiving community: Donors inevitably have their own specific priorities, but it is critical that these can be translated into culturally-relevant local terms.
- The coalition's greatest strength is that it focuses on sharply-defined priorities, where action can deliver the widest benefits on most fronts in the shortest time. SLCPs are of course a reflection of wider and more fundamental problems in the energy and environmental domain. Increasing understanding of these scientific linkages is important, but the critical need is early and effective action, and this requires a narrow focus.

Action on SLCPs should also be seen in the wider context of integration of air pollution and climate strategies, which could deliver substantial reductions in the cost and time required to achieve objectives on both fronts. Often however this is inhibited by the tendency of both air quality and climate scientists and policy-makers to seek to defend their own 'patch' and advance their own priorities. A new balance is now needed: 'One Atmosphere' has to become a reality in the minds of scientists and policy-makers in the two separate communities.

Global Atmospheric Governance

The aim of the Union is an integrated and effective framework for global atmospheric governance. The Union recognises however that, at least in the short-term, the prospects for negotiating and introducing this are slim. The focus should be on incremental and realistic measures which can move the process forward, without losing sight of the overall goal.

Since the last World Congress there have been a number of such measures in addition to establishment of the Climate and Clean Air Coalition, including:

- the new international protocol on mercury, which fills one of the significant gaps in international atmospheric regulation;
- continued growth in regional and sub-regional co-operation;
- growing acceptance that current economic and social problems cannot be effectively addressed without also addressing the environmental challenges to which they are related.

The Union considers that the time is now ripe to promote further concrete action of international atmospheric co-operation by the following measures, which reflect, in particular, the outcome of the 2013 Saltsjöbaden V conference entitled ‘Taking international air pollution policies into the future’:

- The International Law Commission (ILC), established by the United Nations, should continue to explore the scope for a ‘*Law of the Atmosphere*’, which would facilitate integrated action on climate change and tropospheric air pollution.
- Discussions should be initiated among regional networks and relevant bodies on the appropriate elements of a Global Framework for Cooperation of Air Pollution. The intention would not be to have a global negotiating organisation but rather an agreed process for information sharing, policy coordination and to enhance capacity for managing transboundary and local air pollution issues.
- The Convention on Long-Range Transport of Air Pollution (CLRTAP) should take steps to open the Convention to parties outside the UNECE, in recognition of the general character of the obligations of the Convention and to facilitate building upon the work of Task Force on Hemispheric Transport of Air Pollutants (HTAP).
- Climate change policy makers and national IPCC representatives from countries interested in the linkages between air pollution and climate change should propose the compilation of a special report on air pollution and climate change that would engage the IPCC, CCAC, and the air pollution community both globally and locally, including subsidiary bodies of CLRTAP.

Forward from Africa: A Wider Vision

As well as identifying measures of this kind the Congress in Cape Town allowed the principles and priorities they reflect to be given new meaning, depth and urgency by seeing them from the perspective of Africa. Three points in particular emerged:

- Southern Africa is warming at about twice the average global rate. It now faces the prospect of climate impacts including: sea level rise in the Niger and Nile deltas and other low-lying coasts; direct impacts of high temperatures on crops and livestock; direct and indirect impacts on human health (water and air pollution, diseases); regional drying, and increase in storm intensity and frequency.
- As well as being the ‘fiery continent’, combining widespread traditional fuel use with the highest lightning flash density, it is now the major area of land cover change
- Above all it is now the continent with the most rapid rate of urbanisation.

As a result, in Africa disaster is not a remote prospect for the middle of the century when global limits and thresholds, through climate and other changes, might be breached. In human terms it is happening in Africa now. The meeting was reminded that almost half of the African population is living on less than \$1.25 dollar per day as of 2008; that only about 31% of the population in Sub-Saharan Africa has access to electricity with about 14% electrification rate in the rural areas; that traditional biomass accounts for between 70-85% of primary energy supply in many Sub-Sahara countries; and that the economic growth experienced in the last decade has failed to generate significant employment. The effects of

poverty, exacerbated by the impacts of climate change and pollution, are already blighting the lives of much of the population.

Yet across Africa there are signs of opportunity, resilience and hope. While in places there remains the burden of conflict and failed states, recovery can happen quickly. The massive absence of capacity in many areas is balanced by absence of detailed and often stifling regulation which often inhibits progress and innovation elsewhere. Development is also being fuelled by deft and innovative ways of doing things which emerge organically from communities and are owned by them.

What new issues and opportunities does the African perspective then bring to the understanding of 'One Atmosphere' and how it can be delivered in contemporary circumstances?

Two themes repeatedly emerged from the presentations and discussion. The first was the need to bridge the 'Kuznets chasm'. There was a recognition that Africa does not need to follow the Northern Hemisphere's development pattern, that it can find new development paths which short-circuit those followed in the Northern Hemisphere, and can jump many of the more laborious processes which were required there.

This will however require a deeper understanding of the African atmospheric environment. The Congress was therefore encouraged by the prospect that the CCAC might sponsor a regional SCLP Assessment for Africa, to follow the one now being undertaken in Latin America and the Caribbean. Such a study could update and extend the landmark Safari 2000 Project and provide a new and enhanced foundation for atmospheric policy in the region.

Finally, dominating all other issues and concerns is the reality that tomorrow's mega-cities are now emerging across Africa, at a rate unprecedented elsewhere in the world, and often they occur in lowland areas vulnerable to flooding. It is clear that such rapid urbanisation is the dominant environmental - as well as social - trend of our time. It has to inform and condition the One Atmosphere vision, and the means by which it can be effectively pursued. For this reason the International Board of the Union has decided that 'Mega-cities' should be the theme of the next World Clean Air Congress in Korea in 2016.