

## Newsletter

No.5 May 2008

#### First Policy Framework for Air Pollution in Southern Africa

he last few months have seen significant progress in the development of international co-operation on regulation of air pollution – at both the urban and regional scales – in Southern The draft Lusaka declaration - the culmination of several years work by the Air Pollution Information Network for Africa (APINA), the Forum's Southern Africa member builds upon recent developments including the earlier Maputo declaration, joint APINA, UNEP, World Bank, SEI and USEPA Better Air Quality in sub-Saharan Africa conference in 2006, whose follow- up activities include the Regional Low Sulphur Fuels Programme - but is nevertheless a notable step forward towards more effective co-operation in the region.

The agreement emerged from several days of intense discussion – involving UNEP, national government representatives, APINA members and representatives of key international and nongovernmental organisations during the Policy Session, with the Ministerial session co-chaired by the Minister of Environment for Zambia and Swaziland and attended by four other environment ministers from the region.

The document which emerged from the Policy Dialogue represents a full policy framework for the region, covering local as well as regional impacts, and all the main emission sources, including transport and industry, domestic cooking, rubbish-burning and savannah fires. Ministers were clear that the agreement needed to adopt a multi-sectoral approach, recognising poverty and economic development issues, and highlighting the contributions needed from, amongst others, Ministries of Finance, Transport, and Industry and other ministries and civil sectors. They also recognised the importance of strong links with the wider regional co-operation machinery, in particular the Southern Africa Development Community.

#### Global Forum Undertaking Major Air **Pollution-Climate Change Co-benefits Initiative**

The Global Atmospheric Pollution Forum is undertaking a major programme to promote the integration of air pollution and climate change strategies. The programme kicks off with a major co-benefits conference in Stockholm, Sweden, on 17-19 September 2008. For details, see page 2.

The agreement now sets a clear path for enhanced regional cooperation, and effective progress towards regional standardisation of regulation.

The Ministers laid out a major programme of work, for APINA, led by the Institute of Environmental Studies, University of Zimbabwe and the School of Mines, University of Zimbabwe, and its partner organisations. The Policy Framework will now be circulated by APINA and UNEP to all the SADC environment ministers including those unable to attend the Lusaka Meeting. The Zambian Environment Minister will meanwhile forward the declaration to the SADC Secretariat for consideration at the forthcoming meeting of regional environment ministers.

The Global Atmospheric Pollution Forum, which was one of the sponsors of the Lusaka meeting, looks forward to supporting APINA and its regional partners in carrying forward this exciting agenda. Global Forum partners will also be considering how the experience gained can be made available to other regions of Africa, where far less progress has so far been made, and to other regional networks elsewhere in the world.



Lusaka ministerial meeting March 2008

#### Global Forum Undertakes Major Air Pollution-Climate Change Co-benefits Initiative

#### Includes Conference in Stockholm, Sweden 17-19 September

The Global Atmospheric Pollution Forum has initiated a major programme to examine the potential linkages and synergies between policies at various scales to jointly address air pollution and climate change. Focusing in particular on the opportunities and challenges for rapidly developing regions, the programme has three major themes:

- developing optimized integrated strategies for air pollution and climate change;
- potential regional, hemispheric and global frameworks for managing air pollution and their relevance to and interaction with climate change; and
- delivering co-benefits at urban, national and regional scales.

The Global Forum co-benefits programme will consist of a series of papers, an international conference, regional conferences and other initiatives throughout 2008.

A cornerstone of the programme will be a major international workshop to be held at the Royal Swedish Academy of Engineering Science and the Grand Hotel in Stockholm, Sweden, on 17-19 September 2008. The conference will bring together leading policy and science experts from the air pollution and climate change communities in the autumn of 2008. It will be global in scope, though with a strong Asian focus. The Stockholm conference is intended to focus primarily on policy issues and strategies rather than the underlying science, but it will include a major session on the scientific understanding of linkages between air pollution and climate change.

Steered by a distinguished international advisory committee, the Stockholm conference is led by the United Nations Environment Programme (UNEP) and the UN Economic Commission for Europe Convention on Long-range Transboundary Air Pollution (LRTAP) on behalf of the Global Forum's partner bodies, and is being developed in consultation with the Secretariats of the UN Framework Convention on Climate Change (UNFCCC), the Intergovernmental Panel on Climate Change (IPCC) and the World Meteorological Organization. It is funded primarily through a grant from the Swedish International Development Cooperation Agency (Sida), and developed in association with the Stockholm Resilience Centre.

Conclusions from the Stockholm conference will then be presented and further considered at a number of associated regional co-benefits conferences to be held around the world in the following months. These associated regional conferences will explore in greater depth the potential implications of the Stockholm conference's conclusions on co-benefit strategies for economic and environmental progress in different regions of the world, and identify co-benefit options likely to be of particular relevance to individual regions. These other conferences include:

 The annual regional conference of the International Union of Air Pollution Prevention and Environmental Protection Associations (IUAPPA) which will be held in South Africa from 1-3 October. The conference will provide the opportunity for the Global Forum to hold a session on air pollution/climate change co-benefits in Africa.

- The Clean Air Initiative-Asia's Better Air Quality (BAQ) conference in Bangkok from 12-14 November. Its theme, Air Quality and Climate Change: Scaling up Win-Win Solutions for Asia, is designed to help provide an Asian focus to the recommendation of the Intergovernmental Panel on Climate Change to integrate air quality management and climate change. [See related story on this page]
- The European Federation of Clean Air, in conjunction with IUAPPA, is holding a conference on climate co-benefits tentatively scheduled for Strasbourg, France, on 6-7 November 2008. The purpose of the conference is to act as a catalyst to raise awareness amongst the scientific communities, the European policy makers and concerned stakeholders (industry, civil society, local authorities) on the need to integrate air pollution and climate change.
- The Forum will work with the UN Environment Programme (UNEP) Regional Office for Latin America and the Caribbean, the Clean Air Initiative Latin America (CAI-LA), and the Inter-American Network for Atmospheric and Biospheric Studies (IANABIS) on including air pollution/climate change co-benefits on the agenda of an early meeting of the newly established Air Pollution Network for Latin America and the Caribbean.

The goal and expectation of the Global Forum's overall cobenefits programme is to provide recommendations to appropriate international negotiating fora, including the 14th meeting of the Climate Change Conference of Parties (COP-14) to be held in Poznan, Poland, in December 2008. The Forum programme is seen, in particular, as supportive in particular of the objectives of the Ad-hoc Working Group on Long-term Cooperative Action (AWG-LWA) established at the COP-13 meeting in Bali in December 2007.

For more information on the Global Atmospheric Pollution Forum's co-benefits programme and the 17-19 September conference in Stockholm, see www.gapforum.org.

# BAQ Workshop in Bangkok: "Air Quality and Climate Change: Scaling up Win-Win Solutions for Asia"



nce every two years, hundreds of air quality advocates, decision makers, and specialists convene for what has become the largest gathering on air quality management in Asia: the Better Air Quality (BAQ) workshop. This year, BAQ 2008 will be held in Bangkok, Thailand on 12-14 November at the Imperial Queen's Park Hotel.

The theme of the BAQ 2008 workshop is "Air Quality and Climate Change: Scaling up Win-Win Solutions for Asia" which will explore ways to address the recommendation of the Intergovernmental Panel on Climate Change (IPCC) to actively link air quality management with climate change mitigation through a "co-benefits" approach, whereby measures to mitigate global warming also reduce urban air pollution.

BAQ 2008 is organized by the Clean Air Initiative for Asian Cities (CAI-Asia), the Bangkok Metropolitan Administration (BMA), and the Pollution Control Department (PCD) of Thailand's Ministry of Natural Resources and Environment, in cooperation with UNEP and ESCAP.

For more information about BAQ, go to www.baq2008.org. Abstracts can be submitted until 30 May 2008.

by Sophe Punte

# MINISTERS APPROVE IMPORTANT INITIATIVE FOR INTER-GOVERNMENTAL NETWORK ON AIR POLLUTION IN LATIN AMERICA AND THE CARIBBEAN

At their biennial meeting in January 2008, the Forum of Ministers of the Environment of Latin America and the Caribbean formally agreed a proposal to establish an *Intergovernmental Network on Air Pollution*. This decision represents a major step forward in cooperation on air pollution-related matters in the region.

The Ministers made this decision on the basis of a proposal prepared by the United Nations Environment Programme (UNEP) Regional Office for Latin America and the Caribbean (ROLAC), in consultation with senior national officials and with input from the Global Atmospheric Pollution Forum. The proposal allows for the Network to:

- be established for an initial two-year period;
- undertake reviews of the air pollution situation in the region;
- assess and report on key regional air pollution issues;
- promote technical co-operation and burden-sharing;
- continue to collaborate with the Global Forum and its member bodies; and
- report back to the next meeting of the Regional Forum of ministers in two years' time.



Ricardo Sanchez from UNEP Latin America

The text of the final report of the Preparatory Meeting of Experts, including the decision on atmospheric pollution can be found at the UNEP-ROLAC website (http://www.pnuma.org/).

The Global Atmospheric Pollution Forum strongly supports the initiative, as it is consistent with the Forum's commitment to support intergovernmental cooperation in Latin America and other regions.

The aims of the Global Forum's programme for Latin America are to:

- support the development of action on regional air pollution in the continent;
- strengthen co-operation and capacity building among the states in the region, and between Latin American countries and other regional networks; and
- provide a route to assist the engagement of Latin American leaders in atmospheric science and policy to contribute to consensus building and collective action on hemispheric and global air pollution issues.

The identification of key issues and priorities for the work programme will be an early priority for the Network. The Global Forum stands ready to support the new initiative however possible and will continue to provide input, where appropriate, through its technical liaison at UNEP ROLAC.

The Global Atmospheric Pollution Forum's Latin American partners include UNEP; the Clean Air Initiative – Latin America; and the Inter-American Network for Atmospheric/Biospheric Studies (IANABIS).



Lusaka ministerial meeting (see related story on page I)

#### **NEWS FROM THE NETWORKS**

### Malé Declaration focuses on capacity building for impact assessment

Malé Declaration implementation aims to enhance the impact assessment capacities of member countries through training programmes and field studies. Capacity building activities focus on impact assessment air pollution on crop, corrosion of materials, and human health. Results of crop impact assessment field studies were discussed during a regional workshop

held in Bangkok in March 2008. Initial results indicate potential impacts of ozone on plants in some of the participating countries of the Malé Declaration. Results of corrosion impact assessment studies were discussed during a workshop in Livingstone, Zambia in February 2008. The workshop also promoted south-south cooperating among Malé Declaration and Air Pollution Information Network in Africa (APINA) countries.

by lyngara Mylvakanam

Initial results of crop impact assessment studies conducted by the University of the Punjab, Pakistan. Mung bean plants exposed to ambient air in Lahore, Pakistan in May 2007. The non-EDU treated plants show a much reduced growth in comparison to the EDU-treated and typical ozone-induced leaf injury (large brown spots).



Mung bean plant protected for ozone

Mung bean plant without ozone protection

# LRTAP Executive Body and Working Group on Strategies and Review make progress on revision of protocols

Over the past three years, the LRTAP Convention has reviewed its three most recent Protocols following their entry into force. This has given the Parties the opportunity to see if the Protocols are working as planned, and if further action is required to meet their main objectives.

In December 2007, the Executive Body (Meeting of the Parties) decided to move forward on revising of two of the Protocols – the 1998 Aarhus Protocol on Persistent Organic Pollutants (POPs) and the 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone.

For the Protocol on POPs, recommendations for revision had been made in the review process, in particular to update the annexes of the Protocol to allow for changes to, for example, exemptions for use of the listed substances,

improved permitted emission limit values and to allow for improved technologies for control of emissions. There were also suggestions for an "expedited procedure" (an opt-out procedure) for adding substances to annexes to the Protocol, which might be a more effective way of adding to the substances already covered by the Protocol.

In addition, the Convention's Task Force on POPs has organized technical reviews of several substances proposed for addition to the Protocol. With these reviews completed and agreement reached on the suitability of possible additions, it was agreed that the revision exercise should include the possibility for also adding the new substances.

In April 2008, the Convention's Working Group on Strategies and Review considered the issue of possible amendments to the Protocol on POPs and the addition of the following reviewed substances: hexachlorobutadiene (HCBD), octabromodiphenyl ether (OctaBDE), pentachlorobenzene (PeCB), pentabromodiphenyl ether (PentaBDE),

perfluorooctane sulfonates (PFOS), polychlorinated naphthalenes (PCN), and short-chained chlorinated paraffins (SCCP).

The Working Group will complete its deliberations in early September in time for Parties to the Protocol to make formal proposals for amendment before the next session of the Executive Body in December 2008.

For the Gothenburg Protocol, entry into force was more recent, so the Executive Body in December needed to formally agree to complete its first review of the Protocol. Following this, the Parties agreed that further emission cuts would be necessary to reach the objective of the Protocol - that (for Europe) critical loads for acidification and eutrophication and critical level of ozone would not be exceeded.

The Working Group on Strategies and Review was therefore charged with developing the basis for a new protocol with more stringent requirements. At its session in April, the Working Group considered a broad range of options that might be included in the development of a new protocol. It was noted that particulate matter was not included specifically in the Gothenburg Protocol but there was a pressing need to take action to curb concentrations of this pollutant.

Delegates agreed that, building on the integrated assessment modeling approach used for the development of the Gothenburg Protocol, a number of additional factors should be taken into account. These included greenhouse gas policy plans complemented by additional analyses on reduction plans for Eastern Europe, the Caucasus and Central Asia and South East Europe, other reduction plans such as IMO plans for shipping and nitrogen reduction due to the implementation of the EU Nitrate Directive. They also agreed that, in addition to end-of-pipe technology, structural changes in energy, transport and agriculture sector should be further explored and quantified.

Further technical work and collation of the necessary national data sets were planned for the coming months and the Working Group will return to its deliberations on a revised Gothenburg Protocol in September.

by Keith Bull, LRTAP

# Executive Body of LRTAP looks hard at its outreach activities and listens to messages from other regions

Under the general title of "Opening the Convention and its Protocols" the LRTAP Executive Body considered how it the Convention interacts with other regions and other regional air pollution networks.

Previous discussions on opening the legal instruments to accession by non-ECE States had been inconclusive and the Bureau of the Executive Body suggested that this was not perhaps the best way to collaborated with regions outside ECE. In its paper prepared for the session, the Bureau noted the role of the Global Atmospheric Pollution Forum and stressed the importance of scientific and technical links between regions as an alternative to the legal approach.

At the Executive Body meeting in December 2007, a number of presentations, from the Global Atmospheric Pollution Forum, UNEP RRC/AP, EANET, the Sahara and Sahel Observatory, APINA and the UNEP Regional Office for Latin America and the Caribbean, emphasized the links already established and highlighted areas where further collaboration would be welcomed.

Delegates welcomed the reports from other regions and expressed their thanks for efforts the representatives had made to attend the session. The session welcomed the activities of the Global Atmospheric Pollution Forum and asked its Bureau and secretariat to keep it informed of developments.

The Executive Body noted the work of the Convention's Task Force on Hemispheric Transport of Air Pollution which included representatives from several other regions. It also encouraged other Task Forces and Expert Groups of the Convention to collaborate with relevant experts and organizations from outside the region to share the Convention's experiences and useful scientific and technical information. The Executive Body charged the Bureaux of its main subsidiary bodies to explore the issue by reviewing all current activities linked to outreach and exploring opportunities for including items on outreach in future work plans.

Delegations viewed the Convention's outreach activities in a positive and constructive way, and they were keen that the Convention's bodies continued to develop relevant work in this important area.

by Keith Bull, LRTAP

### Update from the Clean Air Initiative for Asian Cities (CAI-Asia) Center

The first few months of 2008 have been busy for the Clean Air Initiative for Asian Cities (CAI-Asia) Center. Some of the highlights include a study on e-bikes in China and training to 20 future trainers from China and India under the Sustainable Urban Mobility in Asia (SUMA) program; a Regional Dialogue with over twenty development agencies and foundations on air quality in Asia and areas for cooperation; and a workshop in Viet Nam were policy makers discussed policy options to address air pollution, poverty and health in an integrated manner. The Center has also laid the foundations for the i-AQM database, proving comprehensive data relating to country and city demographics, air quality and greenhouse gas levels and trends, and impacts of air pollution. A Long Term Vision on Urban Air Quality for Asian Cities is being developed for discussion by policy makers at the Second Governmental Meeting later this year.

For more information about CAI-Asia, go to www.cleanairnet.org/caiasia.

by Sophe Punte

# Update on Task Force on Hemispheric Transport of Air Pollutants: Next Assessment Report Due June 2010

he Task Force on Hemispheric Transport of Air Pollution (TF HTAP), organized under the UNECE Convention on Longrange Transboundary Air Pollution, continues to make progress towards an improved understanding of the intercontinental transport of air pollutants in the Northern Hemisphere. The TF HTAP held their 4th annual meeting in Rome, 7-11 April, in conjunction with the UNEP Global Partnership on Atmospheric Mercury Transport and Fate Research. The meeting was hosted by the Italian Ministry for the Environment and CNR. The meeting included an extensive discussion of the Partnership's draft report, which is being developed to inform a report to the UNEP Governing Council in February 2009. The Partnership's report includes some new information about mercury emission sources, mercury chemistry in the atmosphere, and recent comparisons of several regional and global mercury models. The Rome meeting also included discussion of the long-range transport of persistent organic pollutants (POPs), the ongoing effectiveness review of the Stockholm Convention on POPs. and the international implications of the new European chemicals management legislation REACH (Registration, Evaluation, Authorisation, and restriction of Chemicals). Presentations from the meeting are available at www.htap.org.

An important outcome of the Rome meeting was a decision to extend the schedule for completion of the TF HTAP's next assessment report by six months until June 2010. Building on the TF HTAP's interim report, Hemispheric Transport of Air Pollution 2007 (UNECE Air Pollution Studies 16), the TF HTAP's next assessment will address the intercontinental transport of ozone, aerosols, mercury, and POPs. The six month delay will enable the TF HTAP to incorporate more findings from its ongoing efforts on regional and global modeling, emissions inventories and future projections, and analysis of observational data. The delay will also allow the next assessment to take account of the findings of a number of reports and analyses that are expected to be completed in 2008-2009, including a Royal Society (U.K.) study of ground-level ozone in the 21st century, the UNEP Chemicals mercury report, the Stockholm Convention's effectiveness review and Global Monitoring Plan, a new National Academy of Sciences (U.S.) study on the significance of international transport of air pollutants, and analyses under AMAP and IPCC.

The TF HTAP's next workshop will be in Washington, DC, 9-13 June, 2008. This meeting is being organized in coordination with the new National Academy of Sciences (U.S.) study mentioned above and the IGAC/SPARC Atmospheric Chemistry & Climate Initiative (AC&C), a global atmospheric modeling initiative intended to inform the next IPCC assessment. The first half of the meeting will focus on reviewing the current state of scientific understanding of intercontinental transport of air pollutants, in part to inform the NAS study. The second half of the week will focus on planning future cooperative modeling and analysis efforts under TF HTAP and AC&C.

Looking towards the autumn, the TF HTAP is intending to organize a workshop 13-14 October in Hanoi, Vietnam. This workshop will be held adjacent to the annual EANET Scientific Advisory Committee meeting. The workshop will focus on identifying the synergies between the work of TF HTAP and efforts related to air pollution observations, emissions, regional modeling, and impact assessment in the Asian region.

#### Global Forum Brings Together Regional Networks in Geneva to Encourage and Support LRTAP Outreach

n December 2007, the Global Atmospheric Pollution Forum organized a series of presentations by regional air pollution network representatives from around the world to make recommendations to the Executive Body of the UN ECE LRTAP in Geneva. The effort was the latest step in the Global Forum's continuing initiative to encourage and support UNECE outreach to other regions and other regional air pollution networks. [See related article on LRTAP outreach efforts]

Previously, in October 2007, the Global Forum presented a major paper and sponsored a side event at the Conference for European Environment Ministers in Belgrade, Serbia. There, the Global Forum praised UNECE efforts to address transboundary atmospheric pollution to date, and presented a number of recommendations calling on the UNECE Convention on Long-range Transboundary Air Pollution to play a leading role in promoting global action on air pollution control and climate co-benefits issues.

Building on this, in December 2007 the Forum organized a series of presentations by representatives from regional air pollution networks around the world at the LRTAP Executive Body (EB) meeting in Geneva. The presentations were given by representatives of the Acid Deposition Monitoring Network in East Asia (EANET); the Malé Declaration on Control and Prevention of Air Pollution and Its Likely Transboundary Effects for South Asia; the Sahara and Sahel Observatory (OSS); the Air Pollution Information Network for Africa (APINA); and the two newly appointed UNEP regional liaisons from Africa and Latin America and the Caribbean.

The resulting outcomes of the discussions included:

- a positive response to the invitation to LRTAP from the Malé
  Declaration on Control and Prevention of Air Pollution and Its
  Likely Transboundary Effects for South Asia to cooperate on a
  joint programme on issues related specifically to air pollution
  impacts on crops and food security;
- support for general co-operation in areas e.g. monitoring where several regions urgently need enhanced capacity;
- agreement to expand the involvement and contribution of the Convention's subsidiary bodies in increasing technical cooperation and harmonization with other regional networks; and,
- consideration whether periodic (formal and informal) meetings between the Chairmen and leading representatives of various networks should be pursued, particularly in light of the valuable contribution the LRTAP Secretariat has made towards the development of liaison and co-operation among Secretariats of the various regional networks.

Overall, there is clearly now general support for enhanced cooperation. This was evident both at the annual meeting of the Malé Declaration for South Asia, and at the LRTAP Executive Body. Although legal and practical problems make it difficult for LRTAP to pursue its aim of opening the Convention to members beyond the UNECE region, there was strong support for practical co-operation along the lines promoted by the Global Forum.

► More information about the TF HTAP's activities can be found at www.htap.org.

by Terry Keating and André Zuber

#### The 'World Atlas of Atmospheric Pollution' published in May 2008

An important contribution to the global air pollution literature, the World Atlas of Atmospheric Pollution, was published by Anthem Press in May 2008.

Along with the International Union of Air Pollution Prevention and Environmental Protection Associations (IUAPPA), the Global Atmospheric Pollution Forum was one of the major sponsors of the World Atlas.

Edited by Professor Ranjeet Sokhi, on behalf of IUAPPA, the World Atlas provides a valuable overview of air pollution in the 21st century. Professor Sokhi is affiliated with the Centre for Atmospheric and Instrumentation Research at the University of Hertfordshire in the United Kingdom. The World Atlas will be an important source of information for environmental professionals, scientists, consultants, city officials, air quality experts,

industrialists, students, and policy-makers across the world. Topics in the *World Atlas* are presented in a way that makes it accessible to the non-expert as well as to the more informed reader.

The World Atlas is full colour throughout its 144 pages, with over 150 maps, photographs and illustrations. It is comprehensively referenced and indexed. The Atlas is published in hard cover and is 363 mm x 269 mm in size. ISBN is 978-1-84331-289-5.

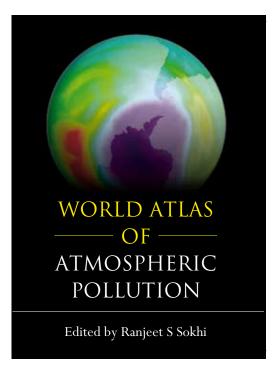
Each of its seven chapters was written by leading authorities around the world. Wherever possible, the chapters provide a world-wide view of the state of the atmosphere. Nobel Laureate, Mario Molina, wrote the Forward to the *World Atlas* and the various other lead and co-authors are listed below.

#### **History of Air Pollution**

Dr. Peter Brimblecombe, University of East Anglia (UK)

#### Air Pollution in Towns and Cities

Drs. Ranjeet S Sokhi, (University of Hertfordshire, UK), Nutthida Kitwiroon, (University of Hertfordshire, UK)



#### Long-Range Transport of Atmospheric Pollutants and Transboundary Pollution

Coordinating author: Dr S.T. Rao, (National Oceanic and Atmospheric Administration/U.S. Environmental Protection Agency, USA)

Co-authors: Drs. Christian Hogrefe (University at Albany, USA), T Holloway (University of Wisconsin-Madison, USA) and George Kallos (University of Athens, Athens, Greece)

#### **Global Air Pollution**

Dr. Ding Yihui, (IPCC, National Climate Centre, China)

#### **Ozone Depletion**

Dr. Richard S. Stolarski, (NASA Goddard Space Flight Center, USA)

### **Environmental and Health Impacts of Atmospheric Pollution**

Coordiating author: Dr. Mike Ashmore (University of York, UK)

Co-authors: Drs. J –P Hettelingh (Netherlands Environmental Assessment Agency, The Netherlands), H van Dobben (Alterra Green World Research, The Netherlands), W de Vries (Alterra Green World Research, The Netherlands), M Posch (Netherlands Environmental Assessment Agency, The Netherlands), G J Reinds (Alterra Green World Research, The Netherlands), AEJ Tonneijck (Wageningen University and Research Centre, The Netherlands), L van Bree (Netherlands Environmental Assessment Agency, The Netherlands), and K Hicks (Stockholm Environment Institute, University of York, UK)

#### **Future Trends in Air Pollution**

Dr. Markus Amann (International Institute for Applied Systems Analysis - IIASA, Austria), Janusz Cofala (IIASA, Austria), Wolfgang Schöpp (IIASA, Austria), Frank Dentener (Institute for Environment and Sustainability, Italy)

#### Significant discounts available on the World Atlas of Atmospheric Pollution

Friends and associates of the Global Atmospheric Pollution Forum and its partner networks and organizations are eligible for significant discounts when purchasing copies of the World Atlas.

The World Atlas of Atmospheric Pollution normally sells for £135.00. [Note: This does **not** include postage and packing.] However, if you are a friend or associate of one of the partner organizations to the Global Atmospheric Pollution Forum, you can buy copies of the World Atlas for £123.00 [Note: Because this price **does** include postage and packing, the result is about a 20% discount].

To order one or more copies of the World Atlas on Atmospheric Pollution using a debit or credit card, log on at www. iuappa.com and follow the on-screen instructions. For more information contact Peter Mitchell at IUAPPA on iuappa@btinternet.com.

## Global Forum Management Committee Meeting

#### Held in the Principality of Monaco

The Global Atmospheric Pollution Forum's Fourth Management Group meeting was held on 21 February 2008 in conjunction with the 10th Special Session of the UN Environment Programme's Governing Council in Monte Carlo.

The Management Group meeting's primary focus was on the best ways to progress the Global Forum's programme focusing on air pollution and climate change co-benefits. The meeting resulted in a number of key decisions that have led to the development of the co-benefits programme for 2008 [discussed on page 2 of this newsletter].

In the meeting participants also spent significant time discussing the Global Forum's progress in promoting air pollution networks in Africa and Latin America, as well as highlighting the outreach efforts of the UN Economic Commission for Europe's Convention on Long-range Transboundary Air Pollution. The Management Group was particularly pleased to welcome the participation of Mr. Ricardo Sanchez, Director of the UNEP Regional Office for Latin America and the Caribbean, and Mr. Abdessalem Kallala, Chargé de Mission, for the Sahara and Sahel Observatory.

The Management Committee is responsible for strategic decisions and directs the activities of the Global Atmospheric Pollution Forum. The Committee is comprised of representatives of each of the Global Forum partner bodies. It meets twice a year.



At the Global Forum Monaco Meeting

#### Luisa F. Robles Joins the Clean Air Institute

uisa F. Robles has joined the Clean Air Institute (CAI) (www.cleanairnet.org/lac), based in Washington DC, as an Operations Specialist. Luisa holds a PhD from the University of Maryland and her background includes studies in environmental sciences, sustainable development, ecological economics and biology.



Dr. Robles plays a dual role for the Clean Air Institute. On one side, she conducts policy research activities on climate change and air quality related issues. Among other projects, she is currently collaborating to develop a strategy for improving the efficiency of carbon finance instruments to foster sustainable urban transport. On the other side, she supports the day-to-day management and follow-up of projects in which CAI is currently engaged.

Dr. Robles is an avid environmentalist and tries to live as sustainably as possible. She also volunteers on a number of local environment, education and community initiatives in the Washington DC area.



Global Forum Management Committee Meeting

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CALL FOR INFORMATION: The Forum Secretariat would welcome news on your regional networks