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2 Three years ago, it was announced that the Commission's proposals for new legislation on air quality would appear in the Year of Air. As it turned out, the proposals were still to be finalised when the Year of Air closed on 9th December. Our last Newsletter of 2013 4 could not appear without summaries of the proposals and because information became available only in a very late stage, we decided to postpone distribution of the Newsletter until the beginning of the 5 New Year.

6 On the next pages you will find summaries of the Clean Air Policy Package which includes proposals for legislation and details of the agenda for policy development in the coming period. Considering that the revision of the NEC Directive may reduce but not eliminate serious health risks, the scope of this policy agenda as well as its ambition is of great interest. In particular, this is the case, when it comes to improving the present approach for its most toxic component, particulate matter. The good news is that the Commission intends to address the short-lived climate pollutants, which include black carbon. EFCA and other parties have for several years advised the Commission to develop additional policies for this fraction of PM. Additional policies are also foreseen for methane which, indirectly, will also impact on ozone.

9 As some EFCA-colleagues recently put it in an Editorial for the special issue of Pollution Atmosphérique on the Year of Air, a robust policy on particulate matter requires a fraction-by-fraction approach in all those cases where a causal relation with health endpoints seems likely. Such an approach could enable policymakers to target the higher health risks together with their sources. PM policies which are source-specific will further improve compliance with air quality requirements in Member States. Also, addressing PM fractions will provide guidance in selecting policies which produce co-benefits for climate objectives.

10 It will, however, take quite some time before such policies will be in place and even longer before we have information on their adequacy. New information on the risks of the Organic Carbon fraction of PM, which is rapidly expanding, gives reason for concern that that the present approach could be insufficient.

Developments in EU policy

Clean Air Policy Package

On 18 December 2013 the European Commission agreed on a Clean Air Policy Package of which details became available soon after. It was communicated to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions under the title “A Clean Air Programme for Europe” and went with additional information, including proposals for legislation. Its main elements include:

- A proposal for a Council Decision on the acceptance of the revised Gothenburg Protocol to the Convention on Long-range Transboundary Air Pollution to abate Acidification, Eutrophication and Ground-level Ozone
- A proposal for a Directive of the European Parliament and of the Council on the reduction of national emissions of certain atmospheric pollutants, amending the National Emissions Ceilings (NEC) Directive (2003/35/EC)
- A proposal for a Directive of the European Parliament and of the Council on the limitation of emissions of certain pollutants from medium combustion plants

Air Quality Directive

The Package does not include a proposal for a revised Air Quality Directive. This is remarkable, because three years ago at the start of the process its revision was announced as one of the two cornerstones, together with that of the NEC Directive, in the proposals for the Year of Air. One has to admit, however, that the decision to renounce of a proposal is also realistic. For many years Europe has been witnessing that many Member States, some of them in spite of taking all feasible measures, do not succeed to comply with the limit values for PM and/or NO₂. Though the present limit values are insufficient to prevent serious health risks, tightening them will obviously worsen the problem of non-compliance: on its own force it may not result in better air quality.

In its Policy Package the Commission now implicitly recognises that the problems of non-compliance to a major part result from an imbalance between its air quality policy and its emission reduction policies, even while the ambitions of the latter have been high. Additional reasons are the increase of emissions through economic growth and the time it takes before clean technologies have sufficiently penetrated the market. The Package foresees to reconsider the matter in later years, however, when emissions reductions may have resulted in lower background concentrations. The review of the Clean Air Package, foreseen for 2020, will provide a first opportunity.

National Emissions Ceilings

The Commission is definitely clear in its conviction that strengthening and completing its source-oriented policies is the way forward. Apart from regulations for the EU territory it is also of interest to cooperate with international institutions. The EU is party to the UN-ECE Convention on Long-range Transboundary Air Pollution which last year agreed in its Executive Body on a revision of its Gothenburg Protocol.

The EU is also a party to the Gothenburg Protocol. The Protocols, however, become binding only when 75% of its 51 Parties have accepted; this is not the case presently. The Commission now proposes the Council to decide on acceptance of the amended Gothenburg Protocol. The acceptance decision will make its requirements binding for the EU which then has to adapt its own legislation in accordance with the Protocol. The latter has to take effect through the proposal for a revised National Emissions Ceilings Directive which has to be a co-decision of the European Parliament and the Council.

Emissions reductions

The Gothenburg Protocol and the NEC Directive follow similar systematics of National Ceilings for the emissions of certain pollutants. In the old Gothenburg Protocol these were SO₂, NO_x, NH₃ and VOC. In the revised Protocol also a target for

PM_{2.5} was included as fifth pollutant. The reduction targets vary per country, also relatively, depending on the specific situation, while considering overall cost-effectiveness.

In the proposal for the revision of the NEC Directive the targets for SO₂, NO_x, NH₃, VOC and PM_{2.5} are identical to the ones of the Gothenburg Protocol. The Commission, however, added ceiling values for a 6th component, the short-lived climate pollutant, methane.

Ceiling values for Black Carbon (BC) were considered to be inappropriate presently; however, the EU and Member States are to prioritise measures with an impact on BC. Together the proposal strengthens coherence with the management of the air quality standards of the Air Quality Directive and will also contribute to limiting climate change.

The actual ceiling values are specified as percentage reduction compared to 2005 emissions for 2020 and 2030; the values for 2020 also apply for consecutive years until 2029. In Table 1 the total of the reductions in all Member States are given for the six pollutants.

Table 1 Percentage total reduction in the EU in comparison to 2005 emissions for pollutants as proposed in the new NEC Directive

Pollutant	Reduction in 2020 (%)	Reduction from 2030 (%)
SO ₂	59	81
NO _x	42	69
VOC	28	52
NH ₃	6	27
PM _{2.5}	22	51
methane	-	33

The Commission is well aware that present policies are insufficient to prevent serious health risks and admits that its new proposals will reduce but not eliminate these. Estimates of impacts of the existing and proposed policies on *Premature mortality* and *Ecosystem area exceeding eutrophication limits* are summarised in Table 2.

Table 2 Impacts of present and proposed policies on most persistent air pollution problems

	2005	2010	2020	2030
Premature mortality due to PM and ozone	494.000	406.000		
Existing policies			340.000	327.000
New policies				237.000
Ecosystem area exceeding eutrophication limits		62%		
Existing policies				40%
New policies				35%

In support of the obligations of the Member States a number of additional regulations and actions have been prepared or will be carried through which address specific sources:

- The Package includes a proposal for a new Directive to limit emissions of Medium Combustion Plants (1-50 MW); the Directive will complement the regulations for Large Combustion Plants included in the Industrial Emissions Directive.
- A planning has been made to consider all Reference documents on Best Available Technology (Bref's) which refer to the Industrial Emissions Directive
- In order to include a contribution from the agricultural sector in the reduction of ammonia (NH₃) emissions the NEC Directive provides a set of possible measures. In addition, a general requirement for the nutrient balance in the application of fertilisers and connected measures will be considered at EU level
- The Directive on the Sulphur Content of Liquid Fuels will ensure that the most cost-effective measures to reduce sulphur emissions will become mandatory from 2015 (0.1% S in Baltic and North Sea) and 2020 (0.5% in all EU waters). An additional option to offset reductions from shipping against the reduction obligations for land-based sources aims to incentivise advance actions by Member States
- Finally, a range of non-regulatory measures are presented to support policy implementation; these target, in particular, the urban, agricultural and international dimensions and promote closer links between policymakers and the research and innovation community.

European Clean Air Forum

The Commission will set up a Clean Air Forum to monitor and facilitate the coordinated implementation of its Strategy and bring together all relevant stakeholders every two years. In combination with the EU's research and innovation programme, Horizon 2020, the dialogue may deliver new options, including integrated approaches to tackle both air pollution and climate change. The Forum could assist in improving the integration of knowledge for policy application and identify priorities for research and innovation to improve air quality.

A summary with links to the 15 accompanying documents, including the proposals is available at: http://ec.europa.eu/environment/air/clean_air_policy.htm.

Comment

At first glance the Clean Air Policy Package - published shortly after Christmas at the EU website - seems to include all present feasible options for improving air quality in the coming years. Further delivery of emissions reductions through existing policies together with the new proposals for further reductions will result in substantial improvement of air quality in Europe between 2014 and 2030. It does not make sense to tighten air quality limit values when the projections of intended emission reductions through source-related policies make clear that it will not be possible to comply with these in the intended year.

It is of particular interest that the Commission has taken responsibility to address the SLCPs, methane, ozone and black carbon, as an integrated part of its Clean Air Policy. At this point, however, more could have been possible. In recent years there have been discussions and pleas for a "One atmosphere" approach for the two atmospheric problems, climate change and air pollution. EFCA contributed here, e.g. through symposia in 2008 and 2011 and its Policy Initiatives in 2010 and 2012. In the Assessment document, however, the impacts of the Air Quality Directive or the Industrial Emissions Directive on climate change have not been considered. The benefits of the methane ceiling values have been quantified with respect to reduced health risks and environmental damage. Any context with respect

to climate change objectives for the SLCPs such as a target with a time horizon is missing.

The Clean Air Policy Package would have been the paramount opportunity to propose an overall vision on the integration of the two policy fields and propose an integration which exceeds the issue of the SLCPs and, in particular, includes energy aspects of air pollution policies. Some years ago an integrative approach like this has been laid down as a guiding principle in Scotland's legislation on climate change and air quality. In the EU the feasibility of such an approach has been proven already with its Regulations on emissions for road vehicles.

Aviation emissions and ETS

On 16 October the Commission sent a proposal to European Parliament and Council to bring all emissions from flights in the European Economic Area (EEA) under the Emissions Trading System (ETS). Already in 2008 aviation had been added as an economic activity to be subjected to carbon regulation under the ETS, to become effective from 2012.

The measure, however, generated strong international resistance from countries outside Europe which denied the EU's right to regulate emissions outside its own territory. After agreeing to consider the issue in the International Civil Aviation Organisation the EU decided to postpone enforcement of the requirement for companies based in countries outside Europe for one year while awaiting the decision within ICAO. The ICAO managed to agree this year on a global market-based mechanism to become applicable from 2020.

The Commission now proposes, while continuing the present obligations for flights between airports within the EEA, to include the flights from outside the EEA for the part which is made within the EEA. The obligation is meant for the period till 2020 when ICAO's system is to be operational. Flights to and from third countries which are not developed countries and emit less than 1% of global aviation emissions will benefit from a full exemption.

Warsaw climate negotiations

In November Poland hosted the Conference of the Parties to the UN Framework Convention on Climate Change in Warsaw. To prepare for the occasion the international institutions had published the results of their most recent assessments.

- IPCC raised its conviction that man is causing global warming as near to 100% as scientifically responsible. It also narrowed the uncertainties of its projections for future global warming in different scenarios. The implication of this is that considerable damage from warming is anyway expected, while the risk of serious damage is still there.
- UNEP highlighted the gap between actual global emissions and the levels which are thought necessary to stay within the 2°C warming limit. It pointed to the fact that the countries' existing emissions pledges, if fully implemented, will be insufficient for that.
- IGBP released the results of the Third Symposium on the Ocean in a High-CO₂ World. The oceans are thought to have presently absorbed up to half of the extra CO₂ put into the atmosphere in the industrial age and rendered it 26% more acidic; differently said, its natural pH value of 8.2, dropped by 0.1. This has resulted in a 30% loss of biodiversity in selected areas. It is thought possible that the ocean will be a 170% more acidic by the end of this century. This means that e.g. molluscs will by then have disappeared from our seas.

Because the intermediate negotiations towards the COP-meeting in Warsaw had not delivered tangible progress, the expectations for a breakthrough were not high. Responsible countries are presently continuing climate policies on the basis of an extension of the Kyoto Protocol for the second period until there is a new agreement. Legislation for its ratification by the EU was sent to European Parliament and Council in November. A new Protocol has to be agreed in 2015 at the COP in Paris. What matters most, however, is that more countries, and in particular the OECD and BRIC countries will join the ones which so far made a pledge to decrease their CO₂-emissions at the pace required for staying below the 2°C limit. The priority of the European delegation was, therefore, to insist that countries

prepare pledges during 2014 with subsequent steps which would narrow the emissions gap for 2020.

Short news

Driving on diesel did not help the climate

The promotion, since 1995, of diesel-fuelled cars in Europe may not have had the beneficial environmental effects that were expected. In a study by M. Cames and E. Helmers *) a negative impact on global warming is likely for diesel cars produced in the period until 2003. The authors give two reasons:

- The supposed 35% better fuel-efficiency when compared to cars on petrol amounts in practice to 15%; in comparison to petrol-drive cars the new diesel fleet tended to greater size and power in this period, possibly also because of excessive diesel fuel subsidies in some countries; by improvements in petrol driven cars until 2009 this difference further diminished to 1.5%
- The emission of black carbon (BC), however, puts the balance to the advantage of petrol-driven cars. Diesel exhaust gases contain considerably more BC in comparison to petrol exhaust gases. Until the introduction of diesel particle filters (in 2003) BC-emissions were responsible for an equivalent loss in fuel-efficiency of about 15%. An additional impact could result from the fact that diesel engines produce more NO_x, which is one of the precursors of the greenhouse gas tropospheric ozone; this effect was not quantified in the study.

For present new models a slight advantage for diesel may remain, though on-the-road measurements must finally decide on this, also taking into account their impacts on air quality. In this respect, it is of interest to note that in Japan diesel cars have been phased out entirely, while promoting hybrid petrol-electric cars.

From: Science for Environmental Policy 353 (5 Dec. 2013)

*) Cames, M and E. Helmers, "Critical evaluation of the European diesel car boom – global comparison, environmental effects and various national strategies" in Env. Sciences Europe. The article can be viewed free at www.enveurope.com/content/25/1/15.

Convention on Long-range Transboundary Air Pollution

Implementation of Protocols

After its major achievements in recent years in revising its Gothenburg Protocol to abate Acidification, Eutrophication and Ground-level Ozone, its Heavy Metals Protocol and its Persisting Organic Pollutants Protocol the priority is shifting towards their implementation and that of the Convention itself. It was one of the topics at the 32nd meeting of the Executive Body to the Convention from 9-14 December 2013.

It should be noted that the agreements on the Convention do not include any enforcement mechanisms. By ratifying, Parties to the Convention and its Protocols may commit themselves to comply with the agreed requirements. The challenge for the Convention is that ratification is still far from complete and has hardly taken effect in the countries in Eastern and South-Eastern Europe, the Caucasus and Central Asia. These regions will, therefore, receive the particular attention in coming years.

With respect to the Parties to its Protocols the Implementation Committee of the Convention is charged with reporting on possible non-compliance. In its report for the meeting of the Executive Body several Parties were reported on non-compliance with one of the requirements. The EU was reported to be in non-compliance with respect to the emissions ceiling for NO_x and to have failed to provide projections of its emissions for the years 2015 and 2020. While the latter point will be solved as soon as the new NEC Directive

will come into force, compliance to the NO_x-emissions ceiling may appear to be more difficult.

Policy developments

In line with its Strategy for the next period the draft workplan for the next two years proposes to address linkages with climate change, biodiversity and other cross-sectoral considerations, notably the linkages between nitrogen and human diet, water, ecosystems and biodiversity. Cooperation will be established and maintained with regional and global organizations addressing cross-sectoral issues, such as biodiversity, ecosystems, agriculture, food and climate change.

The implementation of the Convention's protocols is to be strengthened through the exchange of information and good practices on policies, legislation and measures, as well as technology. The development and dissemination of guidance documents and materials to increase the knowledge and awareness of best available techniques (BAT), as well as the exploration of new approaches and abatement measures, including the development of an integrated approach for controlling nitrogen pollution, will further support the implementation of the protocols. The intention to consider best available techniques will be of great value for the EU's work on BAT Reference documents. In this respect it would be of interest if the Convention's working group will consider cross-sectional aspects, in particular climate change.

More information: www.unece.org

EFCA activities in 2013 and 2014

In 2013 EFCA program counted a relatively large number of activities. Though the EU's Year of Air is contributing to it, it is not the main reason for this busy agenda: the majority of activities is

organised by EFCA's Members or amounts to a cooperation with external relations.

Here we look back at the activities since August and forward into the new year ahead of us.

Air Protection 2013 - Croatia



From 9-14 September EFCA's Member CAPPAA hosted the Eighth Croatian Scientific and Professional Conference Air Protection 2013, in Sibenik, Croatia. The accession of Croatia to the European Union in 2013 rendered the event special this year. *John Murlis* represented EFCA in Sibenik. He also chaired an EFCA session on particulate matter with interesting contributions from the host country. This illustrates that Croatia is well prepared for answering the challenges which the EU's environmental regulations may imply in coming years. His own presentation on EFCA's work in this area is available at www.efca.net.

World Clean Air Congress - Capetown

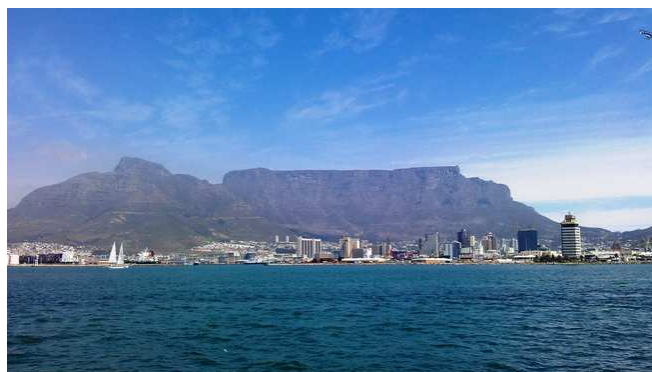


From 29 September - 4 October the 16th IUAPPA World Clean Air Congress took place in Capetown, South Africa. The theme of the Congress was "*Many Nations - One Atmosphere: Plotting the Path to Sustainability*". The theme reflected EFCA's activities in recent years and induced EFCA to arrange a special session at the Congress, highlighting the options of Black Carbon in the One atmosphere approach. EFCA's president, *Thomas Reichert*, chaired and introduced the session and presented EFCA's views; the session was closed with a lively discussion. A session report as well as the papers or presentations in the session can be found at <http://www.efca.net/efca2/index.php?page=capetow-sa-2013>.

WeBIOPATR2013 - Belgrade



From 2-4 October the 4th WeBIOPATR International Workshop and Conference on Particulate Matter - Research and Management was held in Belgrade, Serbia. At the invitation of the three organizing institutes, Vinca, the Public Health Institute of Belgrade and EFCA's associate Member, the Norwegian Institute for Air Research NILU, EFCA sponsored this 2013 event. EFCA's secretary-general, *Joop van Ham*, participated in the conference and presented views from EFCA on the topic of particulate matter. His paper is included in the proceedings of this conference (Eds. Milena Jovasevic-Stojanovic and Alena Bartanova, ISBN 978-86-83069-40-8). Papers of 42 presentations, of which 7 keynote papers are included in the proceedings and available at www.vinca.rs/webiopatr as well as on CD-ROM.



View of Capetown and the Tafelberg

EFCA at Closing Conference Year of Air

On 9 December the European Commission had a Conference arranged in Strasbourg, France meant to conclude the Year of Air. The conference was organised by the ATMO-France Federation in cooperation with ASPA/Atmo Alsace in consultation with the president of EFCA's French

Member APPA, Isabelle Roussel. EFCA was invited to chair one of the sessions which was taken up by *John Murlis*, who made use of the opportunity to introduce EFCA. He also represented Environmental Protection UK which has a history of joint activities with APPA in order to address air quality problems in the regions on both sides of the Channel.



John Murlis introducing his session in Strasbourg

The organizers will publish the presentations and discussion reports of the conference in 2014 at http://www.atmo-alsace.net/site/all4cleanerair4all/index_en.php

Editorial for Pollution Atmosphérique

The Year of Air also induced the Editorial Board of the French international journal *Pollution Atmosphérique* to select it as theme of its last issue of 2013. Its Editor in chief (and also APPA's president), Isabelle Roussel, invited EFCA to draft the Editorial for this issue. The invitation was accepted and a draft, titled "Towards a robust European policy on particulate matter", co-authored by *Joop van Ham*, *Thomas Reichert* and *John Murlis* was submitted which is now on line at: <http://lodel.irevues.inist.fr/pollution-atmospherique/index.php?id=2424>.



VVM-CLAN is preparing for its 7th symposium on Non-CO₂ Greenhouse Gases under the motto "*Innovations for a sustainable future*". It will take place in Amsterdam, Netherlands from 5-7 November 2014. The deadline for the Call for Papers is coming near: proposals for contributions are welcome **until 1 February 2014**. All details can be found at the conference website www.ncgg.info.

EEA Reports

A selection of recent reports by the European Environment Agency; a complete list can be found at www.eea.europa.eu/publications/

Status of black carbon monitoring in ambient air in Europe

This report provides a summary of black carbon (BC) definitions as discussed in the air quality

monitoring community. Secondly, it provides a summary of the current status of BC-related monitoring in Europe. Information presented in the report includes an overview of available measurement techniques and associated technical issues, monitoring networks and current data reporting practices.

Technical report No 18/2013; published 10 December 2013

<http://www.eea.europa.eu/publications/status-of-black-carbon-monitoring/>

A closer look at urban transport – TERM 2013: transport indicators tracking progress towards environmental targets in Europe

This TERM 2013 report includes an assessment of progress towards the transport-related environmental targets set out in the 2011 White Paper and other transport and environment regulations. It also includes a focus on the environmental impacts of urban transport.

EEA Report No 11/2013; published 3 December 2013 <http://www.eea.europa.eu/publications/term-2013>

CO₂ emissions performance of car manufacturers in 2012

The EEA has collected Member States' data on passenger car registrations, in accordance with Regulation (EC) No 443/2009 (CO₂ from cars). All Member States reported information on CO₂ emissions and the mass of cars, together with other vehicle characteristics. This data was used to evaluate the performance in 2012 of the new vehicle fleet, and its progress toward meeting the CO₂ emissions target.

Published 30 October 2013
<http://www.eea.europa.eu/publications/co2-emissions-performance-of-car-1>

Trends and projections in Europe 2013 – Tracking progress towards Europe's climate and energy targets until 2020

This report provides an assessment of the progress of the EU and European countries towards achieving their climate mitigation and energy policy objectives. These targets include international commitments pursuant the Kyoto and the EU 2020 commitment to reduce by 20 % greenhouse gas (GHG) emissions compared to 1990, to create 20 % of energy consumption from renewables and to increase energy efficiency by 20 %. The assessment is based on GHG data for the period 2008–2012, including recent estimates of proxy 2012 GHG emissions, GHG projections until 2020 submitted by Member States in 2013, as well as energy statistics until 2011.

EEA Report No 10/2013 Published 9 Oct 2013
<http://www.eea.europa.eu/publications/trends-and-projections-2013>

Air quality in Europe – 2013 report

This report presents an overview and analysis of air quality in Europe from 2002 to 2011. It reviews progress towards meeting the requirements of the air quality directives and gives an overview of policies and measures introduced at European level to improve air quality and minimise impacts. An overview of the latest findings and estimates of the effects of air pollution on health and its impacts on ecosystems is also given.

EEA Report No 9/2013 Published 15 Oct 2013
<http://www.eea.europa.eu/publications/air-quality-in-europe-2013>

News from EFCA and its Members

Environmental Protection Scotland joins EFCA

By the end of 2013 the EFCA Assembly approved the application for Full Membership of **Environmental Protection Scotland**. From 2014 EP Scotland will be the 16th organisation which participates in EFCA. Also at this place a warm welcome to EP Scotland!

EP Scotland was founded in 2012, following Scotland's increased autonomy within the United

Kingdom on a number of policy terrains, including Environment. It resulted in 2009 to the adoption by the Scottish Parliament of the most ambitious climate change legislation anywhere in the world. With respect to air quality the Parliament adopted objections for PM₁₀ and PM_{2.5} which are more than twice as strict as the equivalent EU limit values. Moreover, the Scottish legislation contains requirements to ensure

positive outcomes for both greenhouse gas and air pollution reduction upon its implementation.

EFCA is happy to have from now on a direct entry to this environmentally innovative part of Europe. EP Scotland's Policy and Development Officer, **Dr Iain McLellan**, will represent the association in the EFCA Assembly.

More information on EP Scotland is available at its website, www.ep-scotland.org.uk. For additional information on the Scottish policy see also the report on EFCA's session at IUAPPA's World Clean Air Congress on page 7.

IUAPPA prepares for future

At the recent World Clean Air Congress IUAPPA's International Board used the opportunity to consider the future role the Union may want to play. Its joint initiative with the Stockholm Environment Institute to establish the Global Air Pollution Forum in 2004 has raised the awareness of the need to solve air pollution problems in international context and made, under the umbrella of UNEP, an important contribution to the establishment of the necessary regional infrastructure on different continents. The GAP Forum also assisted in paving the way for the Climate and Clean Air Coalition which IUAPPA joined as supporting organisation. With the work for the GAP Forum nearing completion the Board discussed its options for IUAPPA's future role. The direction in which the Union will go will be one of further integrative concepts which connect climate and air pollution also with themes like ecosystem services, biodiversity and food security

while considering the global governance which could effectively achieve progress. The Capetown Declaration, which also considers the special position of Africa and is about to be finalised, will outline main lines for future work of the Union.

IUAPPA's next World Congress will take place in 2016 in Bunan, South Korea; the Board welcomed *K.C. Moon* as its new president and *Young Sunwoo* as vice-president.

IUAPPA's Director General, *Richard Mills*, who has served the Union since the end of last century and had a big share in its international policy development work, announced that he wants to step back at the time of the next Congress. In the coming period he will already delegate some of his tasks to a group of three volunteers.



In Capetown Hanlie Liebenberg-Enslin handed over IUAPPA's presidency to her successor, K.C. Moon from South Korea; at left Thomas Reichert, president EFCA

Calendar

9th International Conference on Air Quality – Science and Application
24-28 March 2014, Garmisch Partenkirchen, Germany
(<http://www.airqualityconference.org/>)

Delivering Multiple Benefits from Our Land: Sustainable Development in Practice
15-16 April 2014, Edinburgh, UK
(www.sruc.ac.uk/srucsepaconf)

International Conference and Exhibition on Emissions Monitoring
14-16 May 2014, Istanbul, Turkey (www.cem.uk.com)

Emissionsminderung (Emission reduction) 2014 - KRdL-conference
20-21 May 2014, Nürnberg, Germany
(www.vdi.de/emissionsminderung)

9th International Conference "Environmental Engineering"
22-23 May 2014, Vilnius, Lithuania (<http://enviro.vgtu.lt>)

Indoor Air 2014 – 13th International Conference on Indoor Air Quality and Climate
7-12 July, Hong Kong, China.
(<http://www.indoorair2014.org>)

International Aerosol Conference
21 August-5 September 2014, Busan, South Korea.
(<http://www.iac2014.net>)

26th Annual International Society for Environmental Epidemiology (ISEE) Conference - From Local to Global: Advancing Science for Policy in Environmental Health
August 24-28th, 2014, Seattle, USA (www.isee2014.org);
CfP: 28-02-2014

7th symposium on Non-CO₂ Greenhouse Gases
“*Innovation for a sustainable future*” (NCGG-7)
5-7 November 2014, Amsterdam, Netherlands
(www.ncgg.info) CfP: 1-2-2014

5th International Conference on Plants & Environmental Pollution (ICPEP- 5)
3-6 December 2014, Lucknow, India (<http://isebindia.com>)

17th IUAPPA World Clean Air Congress
25-30 September 2016, Busan, South Korea
(www.iuappa.org)

Published: 8 January 2014

EFCA

President	Thomas Reichert (GUS e.V., Germany)
Vice-president	Vladimira Vadjic (CAPP, Croatia)
Past-president	Giuseppe Fumarola (CSIA, Italy)
Secretary-general	Joop van Ham (VVM-CLAN, The Netherlands)

Newsletter

Editor	Joop van Ham, VVM-CLAN
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Published by

European Federation of Clean Air and Environmental Protection Associations
Burg. Scholtenstraat 1, NL-2645 NL DELFGAUW

E-mail: info@efca.net

Fax: +31-15-261 3186

Website: www.efca.net