NEWSLETTER

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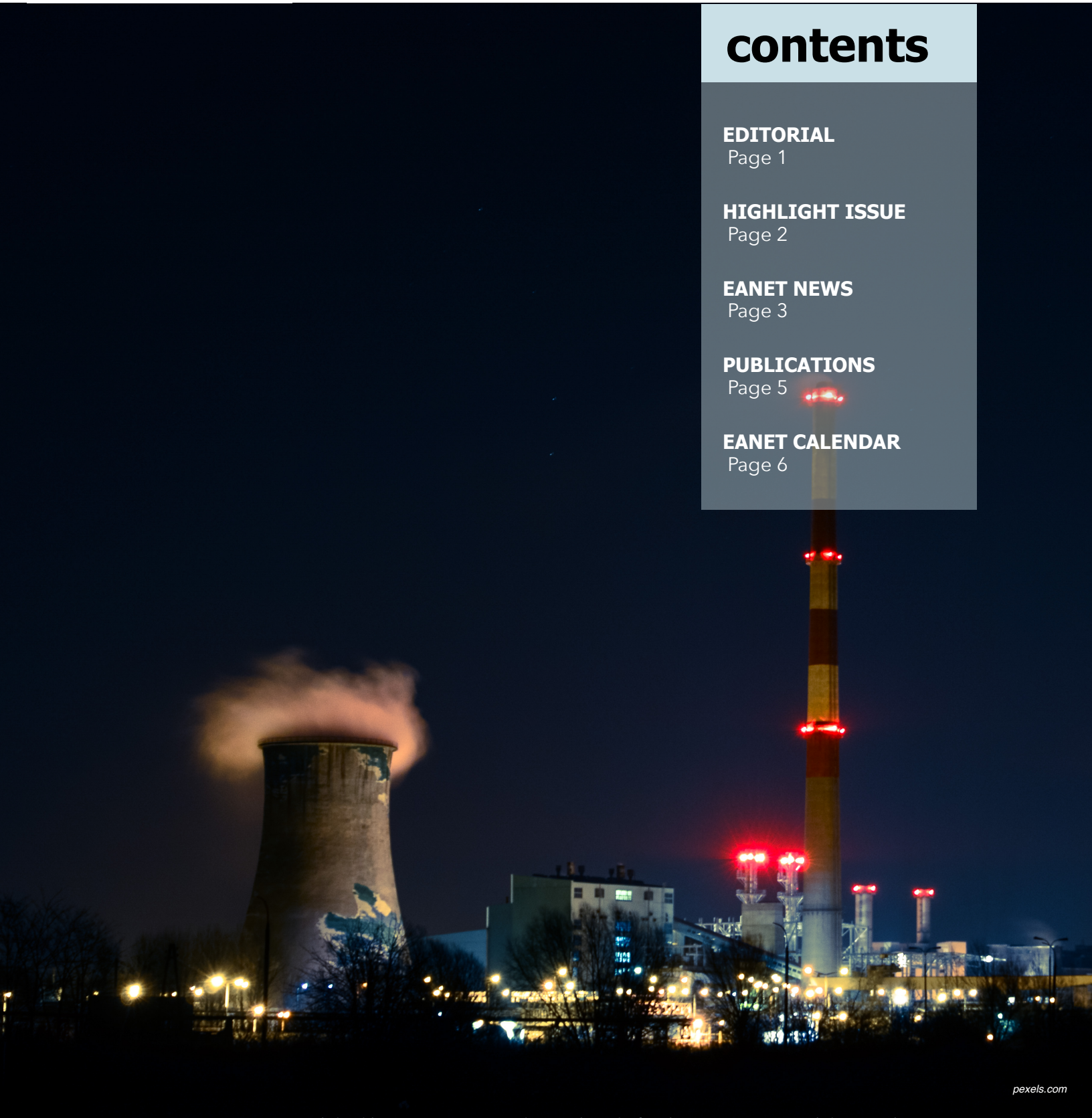

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EDITORIAL

The year 2016 was one of the most important year for the Acid Deposition Monitoring Network in East Asia (EANET). In November 2016, the 18th Intergovernmental Meeting (IG18) on the EANET adopted and signed the Framework Agreement between UN Environment and the EANET for the provision of the EANET Secretariat under UN Environment.

Consequently, this new arrangement of the EANET secretariat services brings new opportunities for the network. Being provisioned under UN Environment gives close proximity to the EANET to any regional and global agenda of the UN. One of them is the upcoming the 3rd United Nations Environment Assembly (UNEA3) which will be organized towards the end of 2017.

UNEA was set as a groundbreaking platform for leadership on global environmental policy. This year's theme of UNEA is 'Pollution Free Planet', focusing on human and ecosystem dimension of pollution. This issue indeed is closely linked to core activity of the EANET, air pollution. It is hoped that through UNEA3, there will be transformative actions and commitments at the global, regional, national and local levels on key pollution risk areas. In the light of this, contributions from various stakeholders are highly appreciated to the success of UNEA3. The EANET, with its strong presence in the region and active participation of all thirteen participating countries, is expected to contribute significantly to UNEA3.

In the global arena, the EANET through its programme has been continuously contributing to the achievement of world' 2030 development agenda, the Sustainable Development Goals (SDGs). Adopted in September 2015 by the United Nations General Assembly, SDGs offer an opportunity to work together to tackle various global issues including air pollution. Although the SDGs is not specifically addressed a stand-alone goal on improvement of air quality, the article indeed suggested clean air should be achieved as an integral element of the principle of sustainable development. It means clean air as an agenda is set out a much needed complementary pathway of tackling the issue in the absence of a global agreement on air pollution and not only constitutes an important contribution to international law focusing on atmosphere.

Given this situation, there is ample of opportunity for the EANET to contribute more in reducing adverse impact of air pollution. In its Medium Term Plan 2016-2020, the EANET commits to continue strengthening its current monitoring programmes, extend its public awareness activities, capacity building and provide policy support for the participating countries. This is also in line with the willingness of the EANET to expand its scope and context in order to be more responsive in providing science-based solution towards emerging air pollution problems. We all believe, with its sixteen years of experience, the willingness to expand, and strong support from its participating countries, the EANET is able to contribute more significantly for the region in the future.

Tomi Haryadi
Coordinator, Secretariat for the EANET

HIGHLIGHTS

MONITORING OF ACID DEPOSITION AND POTENTIAL CO-BENEFIT

The recent concluded EANET report, the Third Periodic Report on the State of Acid Deposition in East Asia (PRSAD3) revealed that the region is still suffering from the emerging air pollution problems. Air pollutant discharge from industry, biofuels and automotive vehicles are still the biggest contributors of major acidifying species, ozone (O3) and particulate matter (PM) concentrations. It is followed by the transboundary air pollution including haze/ acidic species and the pollution-climate change interaction.

The report revealed data from monitoring of acid deposition including ozone and PM in sites in East Asian Region conducted by the EANET during the period from 2010 to 2014. It was shown that the level of PM10 concentration was comparatively high in monitoring sites in Southeast Asia and lower in sites in Japan. As a note, the PM10 concentrations in China have remained high level from 2001-2014, all monitoring sites in China showed decreasing trends. As for O3 concentration at EANET sites, common seasonal trend was observed at all sites in Russia, Republic of Korea, and Japan from 2000-2014, which is higher in spring and lower in summer.

All monitoring sites in Thailand showed increasing O3 concentration trend, especially in Bangkok and Samutprakarn. It is also showed that although all urban sites in Southeast Asia region showed significant improvement of SO2 concentration since 2000, the level of NO2 and NOx concentration remains high in monitoring sites in Southeast Asia and China. The highest and the second highest nitrate (NO3-) concentrations were observed in Hongwen, China and Hanoi, Viet Nam in 2010 and 2011. Variation of trends of major acidifying species were monitored in all sites in the region. Nevertheless, in general, the monitoring level of spatial and temporal variations is still not yet satisfying.

To move forward, the report suggested an interlinked solution between urban air pollution, transboundary haze and climate change to tackle the air pollution issue as a whole. It is widely known that acid deposition linked to many other environmental issues, since it shares precursor emissions with ozone and aerosols/ particulate matters. Therefore, monitoring major acidifying species and related chemical substances is expected to be able to also provide co-benefits in terms of suppressing other atmospheric pollutants. Ozone, aerosols and other acid deposition causing air pollutants contribute to climate change, which in turn influences acid deposition and its effects through phenomena such as precipitation change.

In the context of EANET, there is a need to extend the assessment of the state of acid deposition, including consideration of other relevant atmospheric pollutants and climate change in order to enable this co-benefit efforts. In the light of this, the work towards improvement and extension of monitoring scope and assessment to provide co-benefit for monitoring of other suppressing other atmospheric pollutants may be essential for the network.

FINDINGS FROM THE SCIENTIFIC ASSESSMENT REPORT 2016 BY UNECE

There has been significant reduction of air pollution emissions particularly for sulphur upon the implementation of abatement efforts under the Convention on Long-range Transboundary Air Pollution (CLRTAP). It was shown by increasing average life of expectancy in Europe, significant reduction in soil acidification in most part of Europe, ecosystem restoration of many affected areas, such as lakes and forests. However, there is still significant air pollution problem particularly in the urban areas faced by the European region caused by exposure to concentration of fine particles and ozone that are near or above the World Health Organization (WHO) guideline level. These findings are some of the highlights of the 2016 Scientific Assessment Report, produced by the United Nations Economic Commissions for Europe (UNECE).

It was also stated in the Report that because major contributors of urban air pollution are often coming from transboundary sources, many European cities will be unable to meet WHO guideline levels for air pollutants through local action alone, and even national and Europe-wide action may not be enough in some cases.

EANET NEWS

Implementation of the Medium Term Plan for the EANET

During the period of January 2011 to December 2015, the EANET has been making a significant progress in strengthening its programme, through increasing transparency, improving the acid deposition monitoring and analysis and conducting periodic scientific assessment on the state of acid deposition in East Asia and the future development of the EANET including expansion of the scope of the EANET, and efforts to strengthening the capacity of the participating countries through trainings, workshops, technical missions and awareness raising programmes.

After approved at the 17th Session of the Intergovernmental Meeting (IG17) on the EANET in November 2015, the Medium Term Plan (MTP) for the EANET (2016-2020) come into effect as of January 2016. The MTP for the EANET (2016-2020) is developed as the third medium term plan based on the results of the activities in MTP (2011-2015) as well as the outcomes of the Feasibility Study on the Expansion of Scope of the EANET conducted by the Network Center (NC) for the EANET.

For the current MTP, the EANET commits to support participating countries in achieving the objectives through monitoring of acid deposition, strengthening current monitoring through research and capacity building, promoting information exchange on clean air technologies and emission inventories, and research activities, public awareness, providing a forum for cooperation and enhancement of cooperative efforts among participating countries as well as with outside the network.

The total estimated budget for the implementation of the proposed activities in the MTP in 2016-2020 would amount to USD 8.64 million, out of which proposed spending on the Secretariat activities will be USD 3.10 million and the Network Center activities will be USD 5.54 million. The current MTP will be reviewed twice by the IG, in 2018 through the submission of Mid Term Report on the Implementation of the MTP for the EANET (2016-2020) and submission of the Final Report in 2021.

Finalization of Framework Agreement between UN Environment and the EANET

The provision of the EANET secretariat services under the UN Environment has been completed in 2016. In the IG18, the Session endorsed the Framework Agreement on the Arrangement of the Secretariat for the EANET between UNEP and EANET, and authorized the Chairperson of the IG18 to sign the Framework on behalf of the thirteen participating countries and signed by the Executive Director of the UN Environment.

The non-legally binding Framework represents the common understanding between both UN Environment and EANET in line with the Decision 1/IG15 and supersedes the Framework on the Establishment of the Secretariat of the Acid Deposition Monitoring Network in East Asia dated 30 October 2002.

By signing the Framework Agreement, UN Environment is officially tasked to ensure that the Secretariat is fully operational and capable of providing services including the dissemination of information and facilitating liaison and networking between relevant government agencies and institutions. This has marked a new chapter of the EANET to get more involved in UN regional and global agenda.

The 17th Senior Technical Managers' Meeting

The STM17 organized in Listvyanka, Russia from 21 to 22 September 2016. It is the first STM held in Russia. The meeting reviewed and discussed issues such as: (1) progress of the draft "PRSAD3", (2)preliminary draft data report 2015, (3) evaluation for the results of the Inter-laboratory Comparison (ILC) Project 2015, (4) National Monitoring Plans (NMPs) in each participating country, and (5) draft "QA/QC Guideline for the EANET Monitoring". The participating were invited to visit the EANET monitoring site in Listvyanka.

EANET NEWS

The 16th Session of the Scientific Advisory Committee (SAC16)

Organized in Pathumthani, Thailand from 24 to 26 October 2016, the Session of the SAC16 pinned down several agenda such as review of the draft report on the progress of the EANET since SAC15. The Session adopted the EANET Data Report 2015 and the Inter-Laboratory Comparison Projects 2015. The Session also adopted the Quality Assurance and Quality Control (QA/QC) Guidebook with appropriate modifications. And the SAC16 agreed that the Third Periodic Report on the State of Acid Deposition in East Asia (PRSAD3) including its Executive Summary be submitted to the IG18 after circulation and agreement by the SAC members.

The 18th Session of the Intergovernmental Meeting (IG18) on the EANET

The IG18 on the EANET, organized in United Nations Conference Center (UNCC), Bangkok, Thailand, from 22 to 23 November 2016, highlighted some very important agenda of the EANET in the future, such as the programme work and budget of EANET for 2017, Framework on the arrangement of the EANET Secretariat.

The Session approved the Work Programme and Budget of the EANET in 2017 and the Framework on the arrangement of the EANET Secretariat was adopted and signed by the Chairperson of the IG18.

Participation in the Second Joint Session, UNECE CLRTAP

The Network Center for the EANET attended the Second Joint Session of the Steering Body to EMEP (Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe) and the Working Group on Effects (WGE) of the Convention on Long-range Transboundary Air Pollution (CLRTAP) held on 13-16 September 2016 in Geneva, Switzerland to exchange information and views on transboundary air pollution issues with the experts in Europe and others, and presented the outcomes of the Feasibility Study on the expansion of the scope of EANET and on the key elements of the Medium Term Plan for the EANET (2016–2020).

Research Fellowship Programme in 2016

After considering six applications, the Selection Committee decided to select Ms. Cuihong Chen, Ministry of Environmental Protection, Satellite Environment Center, Beijing, China, as a successful applicant for the EANET Research Fellowship Programme in 2016. She started her fellowship research with the topic "Comparison of observed and modeled NO2 in China during the summer, 2013-2015: Sensitivity of meteorological conditions and NOx emission constrains". She was working at the premise of ACAP, in Niigata, Japan from October to December 2016 to complete her research. She submitted the final report to ACAP in March 2017.

PUBLICATIONS

The Third Periodic Report on the State of Acid Deposition in East Asia

The EANET has periodically published scientific assessment report on the state of acid deposition in East Asia in 2006 and 2011 based the EANET monitoring data for 2000-2004 and for 2005-2009. The current 3rd Report summarizes the outcomes of the monitoring activities from 2010 to 2014. This report is planned to be published in March 2017.

Data Report 2015 of the EANET

The Data Report 2015 is compiled and verified data obtained from monitoring activities carried out in 2015. It covers five environmental items, such as wet deposition, dry deposition (air concentration), soil and vegetation, inland aquatic environment, and catchment-scale monitoring.

Report of the Inter-laboratory Comparison Projects 2015 of the EANET

The report presents the result of the 18th Inter-laboratory Comparison Project on wet deposition, the 11th Inter-laboratory Comparison Project on dry deposition, 17th Inter-laboratory Comparison Project on soil and 16th Inter-laboratory Comparison project on inland aquatic environment.

Quality Assurance and Quality Control (QA/QC) Guidebook for the EANET 2016

The Guidebook was prepared to be used in the monitoring laboratories to establish their Quality Management System (QMS), and also to be utilized for confirming and approving these laboratories by the National Center for the EANET.

EANET Science Bulletin (Volume 4)

The EANET Science Bulletin is published to share the scientific findings from the EANET research activities and to provide a platform for scientists from member countries to publish their scientific and technical research activities relevant to the EANET.

The summaries and proceedings of the following EANET Meeting/Sessions are uploaded on the EANET website for relevant members in the participating countries with authorized passwords.

All of these publications can be found and downloaded at the EANET website:

www.eanet.asia

NON-EANET PUBLICATIONS

Towards Cleaner Air: Scientific Assessment Report 2016, UNECE CLRTAP
The assessment report highlights current scientific knowledge in transboundary air pollution measures in addressing large-scale effects on forests and lakes as well as in protecting human health and preventing other air pollution effects, such a loss in biodiversity and damage to crops, the built environment and cultural heritage.

http://www.unece.org/fileadmin/DAM/env/lrtap/ExecutiveBody/35th_session/CLRTAP_Scientific_Assessment_Report_-_Final_20-5-2016.pdf

The Cost of Air Pollution: Strengthening the Economic Case for Action, the World Bank
The report highlights the economic costs of premature mortality from air pollution to strengthen the business case for governments to act ambitiously in reducing pollution.

http://documents.worldbank.org/curated/en/781521473177013155/pdf/108141-REVISED-Cost-of-PollutionWebCORRECTEDfile.pdf

EANET CALENDAR 2017

5-6 July	**2-22 July**	**July-August**
The 5th Meeting of the Task Force on Soil and Vegetation Monitoring	The EANET Individual Training at the Network Center	The 1st Meeting of the Expert Group on Revision of the Technical Manuals for Dry Deposition Flux Estimation and Air Concentration Monitoring
August	**26-28 September**	**13-14 November**
The 18th Senior Technical Managers' Meeting	The 17th Session of the Scientific Advisory Committee	The 19th Session of the Intergovernmental Meeting on the EANET
September-December	For more Information:	
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