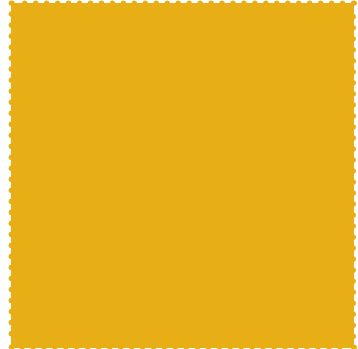




DustConf 2007, a call to stakeholders and governments

April 23 - 24, 2007, Maastricht, The Netherlands



Many EU Member States are not compliant with existing EU air quality standards. This means that implementing measures to reduce PM emissions needs to be accelerated - in all levels of Government and sectors of industry in all EU Member States. Sharing best practice, research and solutions can help this, and was one of the main aims of DustConf 2007.

This paper brings together the output of the conference with a distillation of the presentations to support this conference statement. A separate Annex, which can be found on the website (www.dustconf.org), presents the collated problems, solutions and further action required as identified by participants of DustConf 2007. The annex also outlines the concrete steps that need to be taken to ensure the momentum from DustConf 2007 is continued.

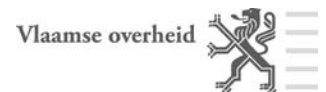
Health effects

Air pollution by suspended particulate matter - dust, PM10 - has a great impact on public health, and is estimated to cause 350 000 premature deaths every year in the EU.

Introduction

Particle pollution kills: living in the densely populated areas between Antwerp, Rotterdam and Ruhrgebiet means an average of 1 to 3 years decrease of life expectancy because of particulate matter. Non-road transport sources contributed 84% to overall total EU-primary PM10 emissions in 2000. While it is essential to reduce road transport emissions, particularly in cities where pollution is highest, reducing these sources alone cannot reach the EU Limit Values. DustConf 2007 focused on these other sources of particle pollution, which have had less attention until now. These sources include agriculture, industry, fugitive sources, power production, domestic wood/bio fuel heating, construction and shipping. Animal housing alone contributes an estimated 20% of PM10 emissions in the Netherlands and wood-burning in Germany emits more PM than traffic.

There are many sources of PM emissions all over Europe. Polluted air moves within days from one end of the continent to the other end.





It is also understood that smaller particles and some chemical compositions affect health more than other PM fractions, with smaller particles and emissions from combustion bearing a greater risk, but -based on the current knowledge - all forms of PM10 have health impacts. Measures to reduce PM10 are often cost effective for society, and Limit Values need to have the right level of ambition to balance health effects together with feasibility and cost effectiveness.

Understanding the problem

We know that the sources discussed at DustConf 2007 are a problem and need tackling. Better knowledge and understanding of the sources will enable action to be better focused.

We have to:

- Understand more about lesser known sources of emissions, such as wood burning, livestock housing, soil erosion and diffuse and fugitive sources – in the context of reducing these emissions
- Improve existing abatement technologies and develop new technologies for these sources, together with industry/operators/farmers and manufacturers and promote their implementation
- Improve emission data, modelling and monitoring methods for these sources
- Undertake further research on the health effects of the different particle fractions and types to enable measures to be further targeted to health benefits.
- Identify new and more effective ways of communicating with farmers and other small businesses.

Wider use of available emission reduction measures

Many measures to reduce primary PM emissions presented at DustConf are not in common use – giving further opportunities to reduce emissions. These best practices need to be made more widely known, to those both regulating and operating polluting sources, so that they can be more widely implemented. For example in the case of agricultural chicken housings, a short, focused practical research project is needed

to identify the most appropriate abatement solution, and then this information shared. Best practice presented at DustConf 2007 include chemical air scrubbers that reduce dust, ammonia, and odour emissions from agricultural livestock housing, fabric and electrostatic filters in stacks and other applications, real-time monitoring techniques to support reduction of diffuse and fugitive emissions, , construction best practice codes, and on-shore power for ships in harbours. The full list can be found in the Annex on the website (www.dustconf.org).

It was shown that the Best Available Techniques is not only new techniques. In many cases the performance of the existing technologies can be improved. Mechanisms to implement those existing techniques more widely are also essential, as they are unlikely to be widely used unless they are either the cheaper option, required by regulation, or give significant other benefits that are financially beneficial.

Spreading best practice

All levels of Government should ensure that they are aware of the current best practice. Those involved with the polluting activities need to be informed and incentivised to take action. The knowledge shared at DustConf 2007 must be put into practice where possible. The EU Member States and the European Commission should support international networks of professionals that can provide the exchange of information between different countries, between research institutions and industry, between NGOs and Government.

For industry, the feasible known, most effective, actions need to be implemented. The existing and future EU and other policies and legislation need to be used to enhance the use of the Best Available Technologies to reduce emissions of PM, in line with the IPPC Directive¹ and also for smaller (not-IPPC)-sources. IPPC needs to be fully implemented in all countries, and the flexibility aspects used less often, and with reasoning given. For agriculture, current techniques need to be implemented and others more fully developed. Local regulators need to consider PM together with current regulation of ammonia and odour, and require appropriate solutions for their area. Government and regulators need to set the organisational arrangements to ensure implementation of the currently



available techniques. Training and guidance, both as a meeting and written, should be run for the regulators and operators. Bio fuel - particularly wood burning, is increasing due to climate change policies. Emissions limits are needed to ensure that the stoves and boilers currently sold use the best technology – for example the planned German regulations for small boilers. Local or national authorities have a role in requiring new wood burning installations to use the latest technologies as well as introduce measures to replace existing high polluting stoves – for example financial incentives and smoke control areas. Appropriate European-wide standards for type testing and fuel quality should support this.

Integration

Policies to reduce PM emissions should be based on an integrated approach. The aim to reduce PM emissions should become part of:

- Strategies to reduce energy use and greenhouse gases and increase renewable energies
- Extended EU NEC-directive and the UNECE Gothenburg protocol
- EU and UNECE actions to reduce heavy metals, dioxins and PAHs (polycyclic aromatic hydrocarbons)
- Ammonia and odour control regulation for animal housing
- Activities to reduce the spread of animal diseases through airborne pathogens

Policy development

Measures to reduce traffic emissions are being implemented already in many countries across Europe, such as Euro standards and Low Emission Zones. Next to these measures further efforts need to be taken by all levels of Government on the other sources of PM, on the issues in this paper, in particular:

- Local authorities need to take stricter local action. For example regulating dust emissions together with agricultural ammonia and odour regulation and action on wood stoves, and take a wider look at planning applications to require

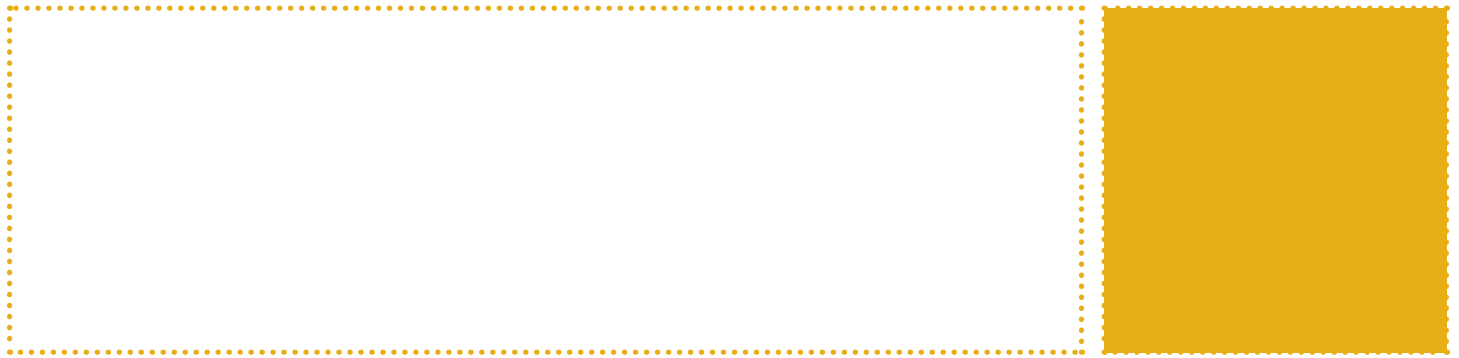
mitigation of both the site itself and other surrounding sources.

- Member States need to
 - o take action on many of the issues above, such as increased integration of policies
 - o make financial incentives available for implementation of available measures that will not be implemented otherwise
 - o provide local authorities with the knowledge and resources needed in the implementation of their task
 - o support new Community legislation
 - o introduce their own legislation
- The European Commission should propose and implement Community legislation to support Member States meeting the Limit Values, and take action such as updating the Best Available Technique Reference documents (BREFs) with respect of particulates, ensuring IPPC is fully implemented, and setting type approvals for domestic boilers.

Conclusion

- PM kills and is emitted from many different sources all over Europe. Polluted air does not respect national or regional boundaries. Therefore further reducing PM emissions must be a common task for all levels of Government and industry in all EU Member States.
- There needs to be a greater political will for action. Information campaigns should inform the public of the health impacts of PM.
- Research programs are needed to develop new and improved techniques and to understand dust sources better to enable action to be further focused and more effective abatement to be developed.
- Regulators need to identify additional incentives to encourage stakeholders to take action, communicate these – for example the fact that measures to reduce particle concentrations in animal houses will also improve the health of farmers and livestock at the same time as reducing particle emissions to ambient air.
- Where possible, regulation has to be produced and tightened for many sources that have escaped from reduction measures until now.

¹ and include 'BREF's', the IPPC best practice reference guides for each IPPC sector



Attention is now just starting to be turned to the sources discussed at DustConf 2007, and we cannot expect to have all the answers yet. However, many solutions were presented and we have seen that there are methods available to reduce emissions from many of the sources discussed. This must now be shared and implemented. For other sources it is clear what actions need to be done to fully develop solutions. There is a need to meet the EU Limit Values, and an eagerness to act on different sources was seen at DustConf 2007. It has started sharing information and the momentum needs to be continued, so that a few years from now, we will have more answers, and have come a long way in implementing emission reductions in these sources.

About DustConf 2007

DustConf 2007 was an international conference on abatement of emissions of particulate matter, held in Maastricht (Netherlands) on the 23rd and 24th April 2007. DustConf was hosted by 8 governmental organisations from Belgium, Germany, France and the Netherlands. It was attended by 285 participants from 23 nations. This statement and its annex were prepared by the organising committee, based on the conference – the presentations, participant input, panel discussion –, and a draft was circulated at the conference. The annex gives, in principle, a write-up of the event. For more information, including presentations, abstracts and papers, see www.dustconf.org.