ES-VOC-CG
EUROPEAN SOLVENTS VOC CO-ORDINATION GROUP
A CROSS-SECTOR INDUSTRY VOICE

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ESVOC CG supports a pragmatic approach towards new emission targets under the review of the NEC Directive

ESVOC, which represents European solvents producers and downstream users, welcomes the EU Thematic Strategy on Air Pollution and the proposal for the revision of the National Emission Ceilings Directive that accompanies it. ESVOC is in favour of the proposed emission reduction targets for volatile organic compounds (VOCs) for 2020, as these will help ensure that the EU meets the objectives of the Gothenburg Protocol[1].

However, there is currently significant uncertainty around the impacts of introducing more stringent objectives for VOCs beyond 2020. Therefore, ESVOC strongly believes that the level of ambition in longer term emission reduction targets should be based on a comprehensive assessment of the environmental, health and economic impacts on all sectors that would result from measures taken in order to reduce VOC emissions.

In addition, any new targets should ensure a level playing field between EU and non-EU countries. Air quality is a global issue and the transboundary movement of ozone from outside the EU is a significant problem that cannot be addressed by the EU alone, but should be tackled at the international level.

Over the years, the European solvent industry has shown continuous commitment in improving air quality by reducing volatile organic compounds (VOC) emissions from solvents by more than 40% since 1990 and is now reaching a limit in terms of technical feasibility. Further reductions are unlikely to bring substantial benefits in terms of ozone reduction, while additional requirements will imply increasingly high adjustment costs for the European industry, in particular downstream users most of which are SMEs. The costs alone of implementing the current EU air pollution control measures are estimated to reach €1.964bn by 2015 and €2.140bn by 2020 for the solvent sector, according to the European Commission[2].

ESVOC is committed to working with the EU institutions towards the improvement of air quality and to finding common solutions that benefit the environment while preserving the competitiveness of the European industry, in order to ensure that solvents continue improving our daily lives by performing their essential role in the development of new technologies and products.

[1] Protocol of the United Nations Economic Commission for Europe (UNECE) Convention on Long-Range Transboundary Air Pollution to abate acidification, eutrophication and ground-level ozone.
[2] Impact Assessment accompanying the Clean Air Policy Package, p. 132, Table 164, available here.

Background information

Understanding the impact of VOCs on ozone formation

VOCs come from a variety of sources. They can be both man-made (originating from transport, industrial processes and energy production) or a result of natural emissions from trees and plants. When VOCs react with nitrogen oxides (NOx) in the presence of sunlight they form ground-level ozone. **Ground-level ozone formation is therefore a complex matter**, considering the emissions from many sources, natural and man-made, the atmospheric chemical reactions of these emissions as well as the transboundary air pollution between continents.

The role of the industry in decreasing VOC emissions from solvent over the years

Over the years, the European solvents industry has been complying with the various pieces of EU legislation that seek to control VOC emissions from solvents, such as the VOC Solvents Emissions Directive (1999/13/EC), the Industrial Emissions Directive (2010/75/EU) and the National Emissions Ceiling Directive (2001/81/EC). As a result, **VOC emissions from solvents have decreased by more than 40% between 1990 and 2010 in the EU-27**[3]. The significant efforts and high investments from the solvents manufacturers and European downstream users enabled to achieve this ambitious objective in the last 20 years.

For example, the European Automobile Manufacturers Association (ACEA) estimates that the introduction of low-VOC paint spray booths has led to the reduction of VOC emissions by 30-50%. In many cases and especially for the introduction of water-based paints, it resulted in costs in the range of €100-200 million per plant. Furthermore, the use of recuperative or regenerative oxidisers in coil coating installations brings VOC emissions down by up to 50% compared to traditional thermal oxidisers (ECCA)

In addition, as part of its commitment to ***Responsible Care®***, the industry actively supports innovative ways of reducing the impact of solvent use on the environment and health and shares this information so that other solvent users and handlers can also introduce similar measures beyond regulatory requirements.

The decrease in VOC emissions is documented by the European Solvents Industry Group (ESIG) which has proactively undertaken an extensive research project on VOC emissions based on solvents sales data from the EU 27 Member States. The ESIG inventory provides policymakers with reliable information on actual emissions rather than calculations based on estimates and are therefore a useful tool to help support Member States in meeting VOC regulatory requirements under the National Emission Ceilings Directive. In particular, it shows that the contribution of the solvent sector to VOC emissions is generally overestimated. The results of the inventory have been welcomed by the European Monitoring and Evaluation Programme (EMEP)[4], the International Institute for Applied Systems Analysis (IIASA) as well as EU Member States and leading European experts.

The European solvents industry: a significant pillar of the European economy

Solvents have significantly changed modern living and are an invaluable solution for industries as diverse as pharmaceuticals and microelectronics to domestic cleaning and printing. Without solvents, many of the products we use and rely on would not perform to the standards we demand today. For example, solvents are critical to the manufacture of drugs, such as penicillin, aspirin or cough syrup. They are also essential for making car travel safe as they are used in brake fluids and windshield washers.

Solvents manufacturers, which include small and medium-sized enterprises as well as multinationals, employ more than **10,000 people** throughout Europe and have an estimated **combined turnover of €2.5-3bn**. Furthermore, the solvents industry sells a total volume of approximately **5 million tonnes a year** and spends more than **€20m per year on research and development**, to ensure that solvents meet the highest standards of safety and environmental protection. More than half a million European companies, ranging from pharmaceutical to agrochemical and paint producers, rely on the use of solvents. These companies have a **combined turnover of €200bn**, and employ more than **10 million people**. Downstream users generally tend to be SMEs and micro-SMEs.

[3] EEA Air Pollutant emissions data viewer: http://www.eea.europa.eu/data-and-maps/data/data-viewers/air-emissions-viewer-lrtap
[4] Centre on Emission Inventories and Projections (CEIP), www.ceip.at

About ESVOC

Solvents producers and downstream users have come together under the European Solvents Volatile Organic Compounds Coordination Group (ESVOC CG) to facilitate the implementation of legislation, develop joint positions on legislative matters impacting the use of solvents and facilitate the collection of data to support scientific programmes, studies and surveys. ESVOC CG has contributed to the reduction of VOC emissions from solvents and the improvement of air quality for over 15 years.

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