

February 2021

ESIG: 25 years and thriving!

2021 marks the 25th anniversary of the European Solvents Industry Group (ESIG) that brings together the Hydrocarbon Solvent Producers Association (HSPA) and Oxygenated Solvent Producers Association (OSPA), both sector groups of the European Chemical Industry Council (Cefic).



Looking back

ESIG was created in 1996 when major European producers of oxygenated and hydrocarbon solvents decided to join forces in order to actively promote the sustainable, safe and responsible use of solvents by building alliances, sharing information and engaging with industry partners, downstream users as well as EU policy-makers and regulators. The topics common to HSPA and OSPA are tackled by our four working groups (Advocacy, Communication, Product Stewardship and Air Quality) that develop our position papers and materials.

VOC Solvent Emissions Directive

One of the first EU policy developments that ESIG contributed to in the early days was the so called "VOC Solvent Emissions Directive" or in full the "[Directive 1999/13/EC](#) on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations" which entered into force on 29 March 1999 and was integrated later on into the "[Directive 2010/75/EU on industrial emissions](#)" (IED) which is currently being reviewed.

This year, we will issue every month a newsflash featuring one of our achievements of the past 25 years: our VOC inventories, the pioneering Generic Exposure Scenarios for REACH, our solvents@work materials, the ESIG Award and our co-operation with [the Solvents Industry Association](#) (SIA) in the UK to name but a few.

We look forward to seeing you in October to celebrate our anniversary. So, watch out for more news!

March 2021

Solvents VOC inventories

ESIG has just published its Solvent Volatile Organic Compounds' emissions inventories 2019. The trend of stabilized emissions over the last few years continues. Since 2015, we have collected data and published the inventories annually. Our inventories are based on real data coming from solvents production and can be consulted by EU member states when establishing their own inventories. Since 2016, ESIG VOC inventories are recognized as a valid source in the joint EMEP/EEA air pollutant emission inventory guidebook. The guidebook provides advice on how to report emissions data under the UNECE Convention on Long-range Transboundary Air Pollution (CLRTAP) and the EU National Emission Ceilings Directive. Furthermore, ESIG is an active member of the UNECE Taskforce Emission Inventories and Projections (TFEIP), measurement and modelling (TFTMM) & Technical Economic issues (TFTEI).

[CONSULT THE INVENTORIES](#)

Looking back

The first National Emission Ceiling Directive (NECD) was adopted in 2001. It requested Member States to report their emission inventories for the main pollutants to the EU. However, a common approach was lacking, and industry felt that many inventories were overestimating the VOC emissions from solvents. That is why ESIG decided to develop its own inventories in 2008 and 2009. Since 2015, we have collected data and published our solvents VOC inventories annually.

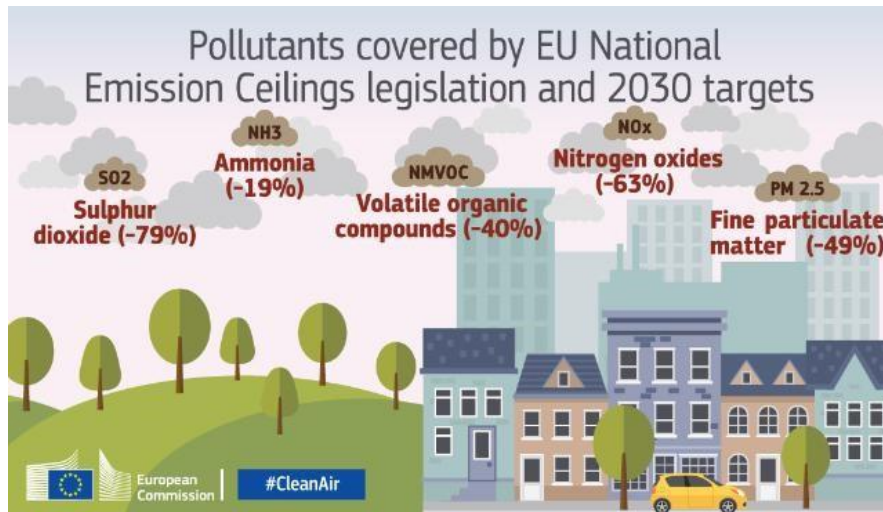
National Emission Ceiling Directive (2016/2284/EU)

The current National Emissions Ceilings (NEC) Directive entered into force in 2016 and sets 2020 and 2030 emission reduction commitments for five main air pollutants:

- nitrogen oxides (NO_x),

- non-methane volatile organic compounds (NMVOCs),
- sulphur dioxide (SO₂),
- ammonia (NH₃)
- and fine particulate matter (PM_{2.5}).

The Directive ensured that the emission ceilings for 2010 set in the earlier directive remained from 2001 applicable for member states until the end of 2019. The EU law while transposing the reduction commitments for 2020 agreed by the EU and its Member States in the 2012 revised Gothenburg Protocol under the Convention on Long-range Transboundary Air Pollution (CLRTAP).



The 2020 emission reduction targets for volatile organic compounds in the EU were already reached in 2017!

April 2021

Promoting solvents' role in sustainability

Since its creation 25 years ago, the European Solvents Industry Group (ESIG) has promoted the safe and sustainable use of oxygenated and hydrocarbon solvents in Europe. ESIG and the solvents industry help meet United Nations' Sustainable Development Goals (UN SDG) relevant for our sector.



ESIG has identified our sector's contribution to the UN SDGs and has highlighted it via an online communication campaign launched in 2019.

[Find out more](#)

Looking back

In 2016, the European Commission presented its new strategic approach for a sustainable Europe as an answer to the UN's 2030 Agenda. Since then the Commission has presented an ambitious policy programme to deliver on sustainability in the EU and beyond. The Sustainable Development Goals (SDGs) are an intrinsic part of the EU President's political programme and key to internal and external EU policy across all sectors.

ESIG has identified our sector's contribution to the UNSDG and has highlighted it via an online communication campaign launched in 2019.

UN SDGs

[The 2030 Agenda for Sustainable Development](#) adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth - all while tackling climate change and working to preserve our oceans and forests



May/June 2021

ESIG SOLVENTS AWARD

The ESIG Solvents Award aims to highlight the safe and sustainable use of solvents regarding health and safety, environmental protection or product performance or any combination of these. Every second year, downstream users involved in the distribution, formulation, storage or use of solvents or their respective trade associations are welcome to apply. The Award was first handed out in its current format in 2019. The previous Award used to be called the [ESIG Product Stewardship Award](#).



Looking back

Three years after setting up ESIG, its members decided to reward best practices among solvent users by launching the ESIG Product Stewardship Award. The **first winner back in 1999** was Irotec Laboratories of Cork, Ireland for a variety of environmental measures and its systematic plan for improvements, backed up by measuring equipment.

The ESIG Product Stewardship Award was put on hold in 2014 due to dwindling interest and relaunched again in 2019, and the **winner was [PACKWISE](#)** a start-up from Dresden, Germany that innovates in the field of distribution and digitalisation with its “Smart IBC industrial containers” project.

[Find out more](#)

June 2021

SOLVENTS EXPOSURE DATABASE

Collecting data to better protect humans from solvents' exposure

ESIG has just updated and renewed its [human exposure database for solvents](#).

It contains exposure data on a wide range of solvents and key applications.

The database is the largest single source of solvent exposure data available to the industry and to a broader audience. You will find information and measurements from literature on oxygenated and hydrocarbon solvents exposure published over the past 20 years (1998-until now) including a quality assessment.

Anyone can assess and search the database and download information.

The data demonstrate that the Chemical Safety Assessments under REACH are accurate and qualitative enough to ensure the reliability of assessments of safe use for workers and consumers.

Looking back

The first human exposure database was commissioned in 2008 and published in 2009. The first database compiled all the information available on occupational hygiene, related to the use of Hydrocarbon Solvents and Oxygenated Solvents - after a thorough review of papers and studies published between 1998 and 2005, which contained primary exposure data from the use of those solvents. At that time, the database was also seen as valuable support for the development of the REACH Exposure Scenarios.

Ten years later in 2019, ESIG decided to update the database and show main differences between modelled and measure data. All data have undergone a qualitative assessment and are labelled as either good, fair, or poor.



[ACCESS DATABASE](#)

Exposure Data Versus Modelling

Under REACH, the use of classified substances need to be assessed to show it is safe. To do so exposure scenarios needed to be developed. They can either be based on measured or estimated (modelled) exposure values. Exposure models might be conservative as for instance aggregated exposure that needs to be used (e.g 8 hours models) does not correspond to real life situations. Measured data can be used to show to what extent models are correct or provide support for statements that the risks are adequately controlled.

ESIG will keep the database up to date.

A literature search and data analysis will be conducted every second year from now on and a permanent technical support is provided to users.

July 2021

Solvents@Work

Since its foundation, ESIG has always been promoting the safe use of solvents and helping manufacturers comply with the highest level of safety standards. The ESIG Product Stewardship Team has created a full range of materials in multiple languages (posters and best practice guidelines) explaining how to handle solvents safely. In addition, several films have been produced with the UK Solvents Industry Association (SIA). These materials are promoted via the solvents@work campaign on a regular basis.

OVERVIEW



Looking back

One of ESIG's first actions was to develop "Best Practice Guidelines" under its Product Stewardship Programme. The first one dates back from 1999 and aimed to help solvent users design simple and effective monitoring programmes to measure airborne solvent vapour concentrations. The second one was published a year later in 2000 and focuses on managing solvents exposure with special attention to mixtures. The first film entitled "Safe Handling of Solvents" was produced in 2007. It was reshot in 2017 and is available in English, German, French, Italian and Spanish.

U-OSHA Healthy Workplaces Campaigns

The European Agency for Safety and Health at Work (EU-OSHA) regularly carries out campaigns to promote safety and health in workplaces throughout Europe.

ESIG has been a longstanding campaign partner promoting each campaign since 2012 and encouraging our members to make the most of the helpful resources provided by EU-OSHA. During the 2018-19 Campaign “Manage Dangerous Substances”, we gave several presentations and made even a live demonstration together with the European Safety Federation (ESF) on the right use of gloves when handling solvents. Last but not least, we used the closing event in November 2019 to relaunch the solvents@work campaign.

We continue to make sure our solvents@work materials are up to date. Our industry experts are regularly reviewing them. Our next projects include reshooting the “Solvents and the Safe Use of Gloves” film and the review of the Flammability Guide. On 9th September we offer a free webinar where, as done last year, we will present our materials.

August 2021

Defining Bio-based Solvents' Standards

Since its creation ESIG and its members has been involved in the EU standardization process, often via national delegations. The secretariat participates also as a Cefic observer in several Technical Committees. Our biggest involvement in the development of a standard was accomplished when the European Committee for Standardization (CEN) published the first product standard for bio-based materials (EN16766:2017: Bio-based solvents – Requirements and test) on 1 November 2017. Until today it is the only product standard for bio-based materials.



Looking back

Back in 2012, as part of the Europe 2020 Strategy to boost smart and green growth, the European Commission introduced a Bioeconomy Strategy that recommended increasing the use of bio-based products by 2020. To do so definitions, assessment methodologies, labels and standards needed to be developed. Within this context, CEN was mandated to develop standards for several bio-based products. Technical performance, as well as health, safety and environmental aspects started to be discussed under TC411 and ESIG became the convener of the Working Group 2, that developed the bio-based solvents standard.

EN16766:2017- Bio based solvents – Requirements and tests

This European Standard sets the requirements for bio-based solvents in terms of their bio-based content, their technical properties and test methods. It lays down the characteristics and details to assess to what extent bio-based solvents

- are fit for purpose in terms of performance related properties
- comply with the health, safety and environmental requirements which apply generally to solvents
- are derived from biomass.

The Standard specifies solvent classes, based on the percentage of bio-based carbon content and bio-based content. EN 16575 defines the term "bio-based" as derived from biomass and clarifies that "bio-based" does not imply "biodegradable". In addition, "biodegradable" does not necessarily imply the use of "bio-based" material.

ESIG deems it important that safety and sustainability aspects are fully assessed as bio-based solvents are not by definition more sustainable or safer and cleaner. Indeed, the phys chem and toxicity properties are the same whatever the feedstock. Therefore, bio-based solvents are expected to remain a niche market as inferred from a 2019 JRC study analysing the reasons (**Insights into the European market for bio-based chemicals**) . ESIG members continue to provide input and support to initiatives like the “**Roadmap for the Chemical Industry in Europe towards a Bioeconomy**” and to prevent any market distortion due to green washing practices.

September 2021

Promoting the safe & sustainable use of solvents together with our UK Sister Association

Many of ESIG's best practice materials have been established in close co-operation with the Solvents Industry Association (SIA) in the UK. For the majority of the films, the SIA was responsible for the content review, while ESIG took care of the translations and voice overs in other languages than English. The solvent training courses are also conceived by SIA and organised on the European mainland by ESIG. We are guests at each other's General Assemblies or Meetings and both associations benefit from the continuous and excellent co-operation. Our best known and most popular common publication is the **Solvents Family brochure**.



Looking Back

The co-operation with the SIA started off back in late 2005. Since then, the SIA General Secretary has been a permanent guest in ESIG Steering Committee and in the ESIG Product Stewardship Team.

A first concrete outcome of this cooperation was in 2006 with the first DVD entitled 'Safe Handling of Solvents'.

The common training courses on the solvents' industry started in 2015 and a second module on solvents applications was added in 2018.

Established in 1973, the Solvents Industry Association (SIA) has sought to support the UK solvents industry and consumers in the promotion of the safe and responsible use of solvent materials. Its membership covers the entire value chain, comprising not only solvent manufacturers (as is the case with ESIG) but also distributors, hauliers, packaging manufacturers and other solvent-related industries. It aims to promote the UK solvents industry, and to ensure that the UK regulatory framework relevant to the manufacture, storage, distribution and use of solvents is based on sound science and best practice. Close co-operation is maintained with UK legislative bodies such as HSE, Environment Agency,

HMRC and others, resulting in the production of high quality, relevant guidance which is available to all those using solvents and solvent-based materials.

Despite Brexit with all of its implications for businesses, ESIG and the SIA have maintained their close cooperation and continue to work together as we have done over the past 15 years. We are currently in the process of reshooting three films: “Solvents and the safe use of gloves”, “Solvents and IBCs” and the “Solvents and static electricity”.

[Solvents Industry Association website](#)

October 2021

ESVOC is also 25 years!

ESVOC, the European Solvents Downstream Users Coordination Group, is a unique platform that brings together manufacturers and their downstream users' trade associations to facilitate the implementation of relevant existing legislation. It currently consists of representatives from 30 associations that meet once a year in the Core Group to review the work programme and define strategies.

You can drag and drop blocks of text, images or other content elements to add them to your message. Customize the font and the colors. Add links to track clicks.



Looking back

ESVOC's original name was: European Solvents' Volatile Organic Compounds Coordination Group. It was set up shortly after ESIG was founded for solvents manufacturers and users to jointly provide input to the upcoming volatile organic compounds (VOC) Solvent Emissions Directive, Directive 1999/13/EC. Over the past 25 years, several task forces were set up under ESVOC to address next to solvents' VOC emission, workers' health, and environmental protection. In 2018, ESVOC underwent a complete restructuring to adapt the groups to the ongoing topics and organize an annual meeting for all associations.

The Surface Treatment Using Organic Solvents (STS) reference document (BREF) addresses installations for the surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating. The first Best Available Techniques' (BAT) BREF for the surface treatment using organic solvents (STS BREF) dated back from August 2007. The review started in 2015.

In December 2020, the new BAT were published in the Official Journal of the European Union as Commission Implementing Decision (EU) 2020/2009. Member States have four years to enforce it.

Currently, two working groups are active within ESVOC. They both work on harmonizing approaches whilst also providing advice and exchanging best practices in different areas. One of them deals with industrial applications and monitors the STS BREF implementation. The other one deals with professional and consumer applications and addresses topics such as indoor air quality and secondary organic aerosol formation.

[VISIT OUR AIR QUALITY PAGE](#)