

Sustainability: the European Plasticiser industry commitment

maintaining high performance of flexible vinyl and other applications, the plasticisers industry has been at the forefront of developing sustainable solutions for the European society. One of the major success stories of the industry has been the continuous and extensive research on existing and new technologies over the past 25 years. This allowed the European plasticiser industry to spearhead the substitution of SVHC substances with plasticisers that can be used safely.

With its strong commitment to sustainability while

www.echa.europa.eu/substances-of-very-high-concern-identification

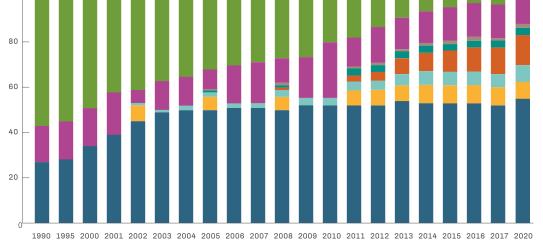
investments in innovation and development, process technology, production, distribution, applications, and value chain support to ensure a smooth transition. Today we have many different plasticisers providing a wide range of solutions for a myriad of applications, meaning Infinite Opportunities! These Infinite Opportunities enabled many manufacturing sectors, from construction to automotive, healthcare and even solar and wind power to in turn enhance their own sustainability solutions. The transformation occurred in parallel with major EU regulatory assessments and REACH, CLP and EU regulatory compliance, with involvement of all EU stakeholders via public consultations and involvement in regulatory assessments. Truly, a European Union success story!

This transition was possible thanks to major industry

European market trends (2020)

Source: 2018 IHS and European Plasticisers estimates

*Substances of Very High Concern:



Due to missing data between 1990 and 2010, the following plasticisers may be included in "other plasticisers": citrates, benzoates, terephthalates, cyclohexanoates, and epoxidised vegetable oils



- LMW Orthophthalates
- Other
- Citrates
- **Benzoates** Terephthalates
- Cyclohexanoates **Epoxidised vegetable oils**
- **HMW Orthophthalates**



safety assessments by EU regulatory bodies and national and international competent authorities with input from European **Plasticisers**



investment





registered substances

The sustainable use of additives is one of the key objectives of the vinyl industry represented by VinylPlus. The functional benefits of the additives enable vinyl products to support sustainable development, including the UN SDGs (United Nations Sustainable Development Goals). Vinyl products can play a role in achieving many of the 17 goals and 169 targets within the SDGs.

a key to sustainability & circularity

Durability



For example, in applications such as cable insulation, studies indicate that over 60 % of these flexible vinyl uses

Microbial degradation

Flexible vinyl is resistant to:

Abrasion

Weathering

Mechanical shocks

Raw materials

will have working lives of over 40 years.

repeated recycling the circular economy is achieved.

Durability is a key aspect in creating a resource efficient economy since it means products have a long life span and then with



achieved when vinyl recycled since 2000 This means CO₂ savings since 2000 in Europe amount to ~1.5 is recycled. million tonnes of CO, saved per year from PVC recycling.



6.5 MILLION

tonnes of vinyl



separated and sorted, shredded and granulated with addition of new resin, plasticisers and other additives that can then be reformed by the usual thermal processing into a variety of

Filler in the production of floor coverings

applications (so called "mechanical recycling"):

For each kg of vinyl recycled,

2 kg of CO, are saved.



13 MILLION

tonnes of CO_a saved



CO.

Up to 92% CO2

savings are

Fashion: footwear, bags, clothing

Fences

Traffic cones

Traffic separators

Soundproof walls

Flexible hoses and tubes

- **Innovative recycling**

Source: Recovinyl In 2020 VinylPlus® started a new collaborative project called VinylPlus®

European Plasticisers is one of the founding members of VinylPlus® together with the resin producers Med. The project is aimed at developing

(ECVM), the stabilizer producers (ESPA) and the European Plastics Converters (EuPC). The commitment and major investment of VinylPlus® over the last 21 years and looking forward, ensure sustainable use of vinyl, including an important focus on the sustainable use of additives. This is where European Plasticisers has been playing a role in supporting recycling, collaborating on additive reviews, conducting life cycle assessments, conducting research, partnering on technical and communications projects and providing information on plasticisers to the vinyl value chain and other stakeholders.

a recycling scheme for single-use vinyl medical devices in Europe, to help hospitals sort their vinyl medical devices for eventual recycling. This includes recycling of flexible vinyl masks, tubing and many other types of medical equipment. The commitmment and major investment of VinylPlus over the last 21 years and looking forward, ensure a sustainable use of vinyl including an important focus on the sustainble use of additives. This is where European Plasticisers has been playing a role in supporting recycling, collaborating on additive reviews, conducting life cycle assessments, conducting research, partnering on technical and communications projects and providing information on plasticisers to the vinyl

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1 MILLION TONNES of vinyl recycled per year by 2030

per year by 2025