

VinylPlus at a Glance

THE EUROPEAN PVC INDUSTRY'S COMMITMENT
TO SUSTAINABLE DEVELOPMENT

vinyl^{plus}

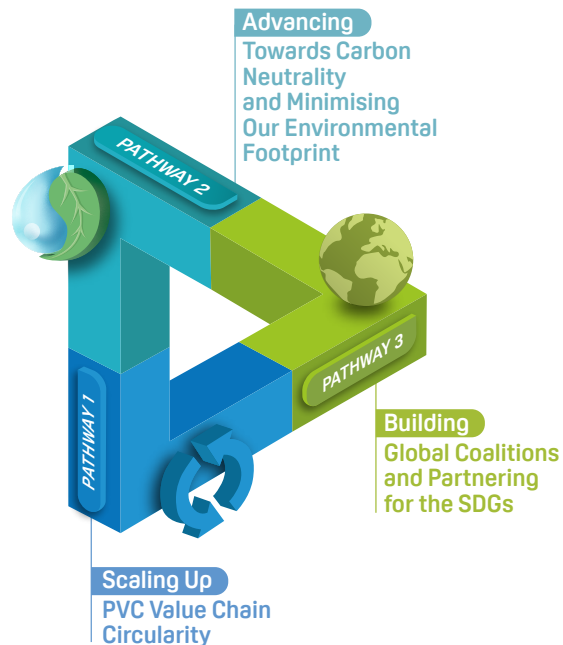


About VinylPlus

VinylPlus® is the European PVC industry's commitment to sustainable development. Through VinylPlus, the European PVC industry is creating a long-term sustainability framework for the entire PVC value chain, improving PVC products' sustainability and circularity and their contribution to a sustainable society.

Launched in June 2021, the **VinylPlus 2030 Commitment** builds upon a track record of more than 20 years of progress and achievements throughout the EU-27, Norway, Switzerland and the UK.

VinylPlus 2030 Commitment



VINYLPLUS FOUNDING & CURRENT MEMBERS

ECVM

The European Council of Vinyl Manufacturers

EuPC

The European Plastics Converters

ESPA

The European Stabiliser Producers Association

European Plasticisers

EPPA

The European Trade Association of PVC Window System Suppliers



200
companies



3 national
associate
members



150
recycler
partners

— **recovinyl^{plus}**



2023 Highlights

PATHWAY 1

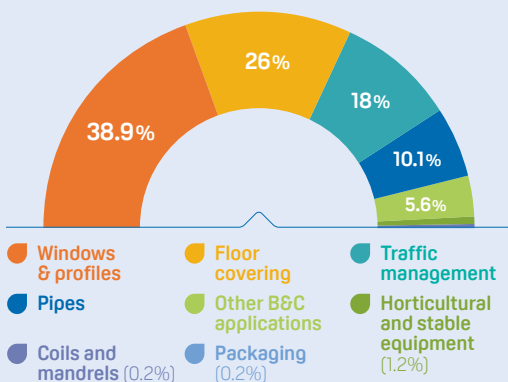
#Circular Economy

SCALING UP PVC VALUE CHAIN CIRCULARITY

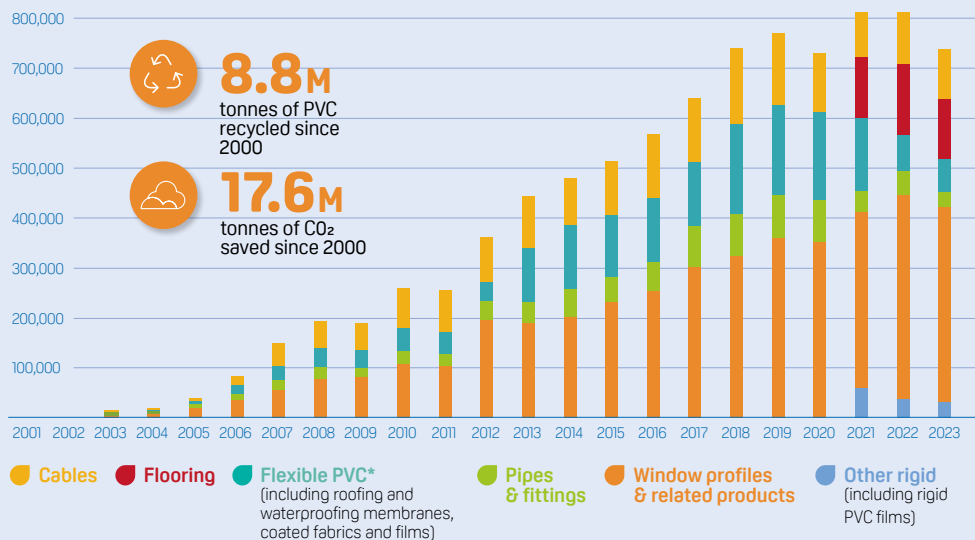
In line with the relevant EU policies, such as the Chemicals Strategy for Sustainability and the Circular Economy Action Plan under the European Green Deal, VinylPlus is leading the European PVC industry towards a circular economy, by improving the sustainability performance of PVC, boosting recycling and ensuring the safe and sustainable use of recyclates.



USAGE OF 2023 rPVC



PVC RECYCLED WITHIN THE VINYLPLUS FRAMEWORK



* Including flooring until 2020



RECYCLING: in 2023, 737,645 tonnes of PVC waste were recycled within the VinylPlus framework, representing around 24.3% of the total PVC waste generated in 2023 in the EU-27, Norway, Switzerland and the UK.



IMPROVING COLLECTION & RECYCLING: in May 2023, EPPA launched the OKNOREC PVC window collection and recycling project in Poland, to enhance collection processes for PVC profiles, ensure their proper recycling and minimise waste.



DETECTING AND SORTING LEGACY ADDITIVES: tests and research developed in the framework of the VinylPlus® Med, WREP and Revinylfloor projects confirmed that analytical techniques such as NIR technology and XRF detectors are the most promising to detect and sort PVC waste containing legacy additives such as LMW orthophthalates (NIR) and lead (XRF). A feasibility study commissioned by VinylPlus Italia to develop an industrial technology capable of separating lead-containing PVC cables confirmed that the XRF technology would fit with the design of an industrial in-line pilot system.



FOR A SAFE USE OF ADDITIVES AND RECYCLATES WITH LEGACY ADDITIVES: addressing ECHA's requests for information for its Investigation on PVC and PVC additives (May 2022 – November 2023), VinylPlus contributed a large amount of data, studies, research and reviews, all based on solid technical and scientific foundations.



PATHWAY 2

#Decarbonisation and Environmental Footprint Minimisation

ADVANCING TOWARDS CARBON NEUTRALITY AND MINIMISING OUR ENVIRONMENTAL FOOTPRINT



ADVANCING TOWARDS CARBON NEUTRALITY: in 2023, VinylPlus started the process to evaluate the potential and progresses on core carbon reduction, to be achieved by 2030, as well as the reporting process on renewable energy use and on sustainable feedstock sourcing.



MINIMISING THE ENVIRONMENTAL FOOTPRINT: a new third-party verification of compliance with the **ECVM Industry Charter** was scheduled to take place at the end of the first quarter of 2024, at six sites of the new ECVM member Kem One and at all sites having shown partial or non-compliance during the first verification round.

An updated **eco-profile** quantifying the average cradle-to-gate environmental impacts of the production of VCM and PVC by the ECVM members was published in December 2022 and further updated in 2023. The results of the new eco-profile are expected to be included in the most relevant LCA databases.



ADISA AZAPAGIC

ETHOS Research, Chair of VinylPlus Environmental Footprint Committee



Climate change and environmental degradation are significant challenges faced by Europe and the world. The priority of the VinylPlus Environmental Footprint Committee (EFC) is to help the PVC value chain to address these challenges, with a focus on the reduction potential of the carbon and water footprints.

For more information



↓ **Download the VinylPlus Progress Report 2024.**

www.vinylplus.eu

All the information reported has been independently audited and verified by third parties.



PATHWAY 3

#Coalitions and Partnerships

BUILDING GLOBAL COALITIONS AND PARTNERING FOR THE SDGs



CONTRIBUTING TO SUSTAINABLE DEVELOPMENT THROUGH CERTIFIED AND TRACEABLE PRODUCTS: the **VinylPlus® Product Label** obtained the European level accreditation by Accredia in September 2023, and was recognized among the most valued certification schemes included in the multi-material label developed by the Belgian Construction Certification Association (BCCA). To date, six ESPA members and one compounder have obtained the **VinylPlus® Supplier Certificate** (VSC). In addition, seven partners of VinylPlus Italia engaged in a sustainability project in 2023 aimed at supporting their steps in achieving the VSC.

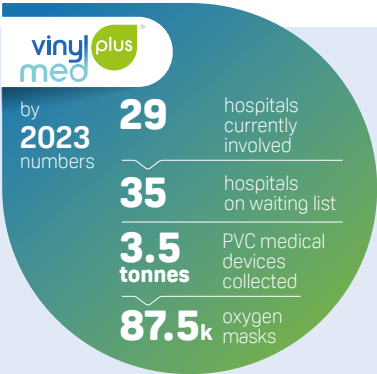


ENGAGING WITH STAKEHOLDERS: the 11th edition of the **VinylPlus Sustainability Forum** (VSF) took place in Florence, Italy, in May 2023. Under the theme *'Making the EU Green Deal Happen'*, the event gathered, in presence, more than 160 delegates from 21 countries. In August 2023, VinylPlus was accredited as an observer organisation to the United Nations Environment Programme (UNEP). In November, it participated in the work of the **Third session of the Intergovernmental Negotiating Committee** to develop an international legally binding instrument on plastic pollution (INC-3).



PARTNERING WITH STAKEHOLDERS: **VinylPlus® Med** is an effective project not only for increasing collection and recycling in the healthcare sector, but also for attracting new partnerships. In 2023, a new collaboration was established for co-collection of single-use PVC medical devices and PP Blue wraps. Another project, **Select4Care**, in partnership with recyclers and logistic operators aims to enhance the collection logistics chain and the recycling of medical devices from Flemish hospitals. As a partner of the Plastic Pavilion at the **World Congress of Architects 2023**, in Copenhagen, Denmark, VinylPlus showcased unique PVC solutions for B&C, the medical sector and smart cities. It also presented its sustainability initiatives, from the VinylPlus 2030 Commitment, to VinylPlus® Med and Garden to Connect, in the events, public gatherings and talks on plastics for sustainable societies hosted at the Pavilion.

VINYLPUS® MED: PVC MEDICAL RECYCLING PROCESS



VinylPlus Partners

In 2023, the contributors were:

CONVERTERS:

A. Kolckmann GmbH (Germany)
Alfatherm SpA (Italy)
Aliaxis Group (Belgium)
Alphacan Srl (Italy)
Altro (UK)
Altro Debolon Dessauer Bodenbeläge GmbH & Co. KG (Germany)
aluplast Austria GmbH (Austria)
aluplast GmbH (Germany)
aluplast Italia Srl (Italy)
alwitra GmbH (Germany)
Amtico International (UK)
APA SpA (Italy)
Ateco Srl (Italy)
Beaulieu International Group (Belgium)
BM S.L. (Spain)
BMI Group (Germany)
Bonlex Europe Srl (Italy)
BT Bautechnik Impex GmbH & Co. KG (Germany)
BTH Fitting Kft. (Hungary)
CF Kunststoffprofilen (Netherlands)
Chieftain Fabrics (Ireland)
CIFRA (France)
Copaco Screenweavers (Belgium)
Danosa (Spain)
Deceuninck Germany GmbH (Germany)
Deceuninck Ltd (UK)
Deceuninck NV (Belgium)
Deceuninck SAS (France)
Dekura GmbH (Germany)
DHM (UK)
Dow Polymer BV (Belgium)
Dyka BV (Netherlands)
Dyka Plastics NV (Belgium)
Dyka Polska Sp. z o.o. (Poland)
Dyka SAS (France)
Elbtal Plastics GmbH & Co. KG (Germany)
Epwin Window Systems (UK)
Ergis SA (Poland)
Eurocompound Srl (Italy)
Fatra a.s. (Czech Republic)
FDT FlachdachTechnologie GmbH & Co. KG (Germany)
FEB – Fachverband der Hersteller elastischer Bodenbeläge e.V. (Germany)
Finproject Spa (Italy)
Finstrel AG (Italy)
FIP (Italy)
Forbo Flooring BV (Netherlands)
Forbo Flooring GmbH (Germany)
Forbo Novilon BV (Netherlands)
Forbo Sarlino SAS (France)
Forbo-Giubiasco SA (Switzerland)
Funke Kunststoffe GmbH (Germany)*
Funzionano AS (Norway)
Gealan Fenster-Systeme GmbH (Germany)

Georg Fischer Deka GmbH (Germany)
Gerflor Mipolam GmbH (Germany)
Gerflor SAS (France)
Gerflor SpA (Italy)
Gerflor Tarare (France)
Gernord Ltd (Ireland)
Girpi (France)
Gislaved Folie AB (Sweden)
Griffine Enduction (France)
Hamos GmbH (Germany)
Helioscreen (Belgium)
H-fasader AS (Norway)
Holland Colours NV (Netherlands)
Hundhausen Kunststofftechnik GmbH (Germany)
I.C.P. SpA (Italy)
Imerys Talc Europe (France)
Industrias REHAU SA (Spain)
Industrie Generali SpA (Italy)
Industrie Plastiche Lombarde SpA (Italy)
Inoutic/Deceuninck Sp. z o.o. (Poland)
Internorm Bauelemente GmbH (Austria)
Inverplast Srl (Italy)
IVC BVBA (Belgium)
Jimten (Spain)
Kisuma Chemicals BV (Netherlands)*
KRONOS International Inc (Germany)*
KURO Kunststoffe GmbH (Germany)
Liveo Research (Germany)
Lubrizol Advanced Materials Europe BVBA (Belgium)
Manufacturas JBA (Spain)
Marley Deutschland (Germany)
Marley Hungária (Hungary)
Mehler Technologies GmbH (Germany)
Mermet Sunscreen (France)
MKF-Ergis GmbH (Germany)
MKF-Ergis Sp. z o.o. (Poland)
Molecor (Spain)
Mondorevive SpA (Italy)
Nicoll (France)
Nicoll Italy (Italy)
Nordisk Wavin AS (Denmark)
Norsk Wavin AS (Norway)
NYLOPLAST EUROPE BV (Netherlands)
Objectflor Art and Design Belags GmbH (Germany)
Omya International AG (Switzerland)
Palram DPL Ltd (UK)
PCW GmbH (Germany)*
Perlen Packaging (Switzerland)
Pipelife Austria (Austria)
Pipelife Belgium NV (Belgium)
Pipelife Czech s.r.o (Czech Republic)
Pipelife Deutschland GmbH (Germany)
Pipelife Eesti AS (Estonia)
Pipelife Finland Oy (Finland)
Pipelife Hungária Kft. (Hungary)
Pipelife Nederland BV (Netherlands)
Pipelife Norge AS (Norway)
Pipelife Polska SA (Poland)

Pipelife Sverige AB (Sweden)
Poliplast (Poland)
Poloplast GmbH & Co. KG (Austria)
Polyflor (UK)
Polymer-Chemie GmbH (Germany)
PreZero Kunststoffrecycling GmbH & Co. KG (Germany)
profine GmbH – International Profile Group (Germany)
profine Italia Srl (Italy)
PROJECT FLOORS GmbH (Germany)
Qi Sistemi Srl (Italy)
Redi (Italy)
REHAU AG & Co (Germany)
REHAU GmbH (Austria)
REHAU Ltd (UK)
REHAU SA (France)
REHAU SpA (Italy)
REHAU Sp. z o.o. (Poland)
RENOLIT Belgium NV (Belgium)
RENOLIT Cramlington Ltd (UK)
RENOLIT Hispania SA (Spain)
RENOLIT Ibérica SA (Spain)
RENOLIT Milano Srl (Italy)
RENOLIT Nederland BV (Netherlands)
RENOLIT Ondex SAS (France)
RENOLIT SE (Germany)
Riflex Film (Sweden)
Riuvert (Spain)
Roehling Industrial Lahnstein SE & Co. KG (Germany)
Saint Clair Textiles (France)
Salamander Industrie Produkte GmbH (Germany)
Sattler PRO-TEX GmbH (Austria)
Schüco Polymer Technologies KG (Germany)
Screen Protectors SL (Spain)
Serge Ferrari SAS (France)
Sika Services AG (Switzerland)
Sika Trocal GmbH (Germany)
SIMONA AG (Germany)
Sioen Industries (Belgium)
SKZ-Testing GmbH (Germany)
Soprema Srl (Italy)
Sovere SpA (Italy)
STIR Compounds Srl (Italy)
Stöckel GmbH (Germany)
Tarkett AB (Sweden)
Tarkett France (France)
Tarkett GDL SA (Luxembourg)
Tarkett Holding GmbH (Germany)
Tarkett Limited (UK)
Teraplast SA (Romania)
TMG Automotive (Portugal)
TPV Compound SpA (Italy)
Veka AG (Germany)
Veka Ibérica (Spain)
Veka Plc (UK)
Veka Polska (Poland)
Veka SAS (France)

Verseidag-Indutex GmbH (Germany)
Vescom BV (Netherlands)
Vinilchimica Srl (Italy)
Vi.Pa. Srl (Italy)
Vulcaflex SpA (Italy)
Wavin Baltic (Lithuania)
Wavin Belgium BV (Belgium)
Wavin BV (Netherlands)
Wavin France SAS (France)
Wavin GmbH (Germany)
Wavin Hungary (Hungary)
Wavin Ireland Ltd (Ireland)
Wavin Metalplast (Poland)
Wavin Nederland BV (Netherlands)
Wavin Plastics Ltd (UK)
Westlake Compounds Italy Srl (Italy)
Windmüller GmbH (Germany)

PVC RESIN PRODUCERS:

Ercros (Spain)
Kern One (France, Spain)
INEOS Inovyn (Belgium, France, Germany, Italy, Norway, Spain, Sweden, UK)
Shin-Etsu PVC (Netherlands, Portugal)
VESTOLIT GmbH (Germany)
Westlake Vinnolit GmbH & Co. KG (Germany)
Vynova Group (Belgium, France, Germany, Netherlands, UK)

PVC STABILISER PRODUCERS:

Akdeniz Chemson Kimya San. ve Tic. A.Ş.
Asia Products S.A.
Baerlocher GmbH
Galata Chemicals GmbH
IKA GmbH & Co. KG
PMC Group Inc.
Reagens SpA
Valtris Specialty Chemicals Ltd

PVC PLASTICISER PRODUCERS:

BASF SE
DEZA a.s.
Eastman
Evonik Performance Materials GmbH
ExxonMobil Chemical Europe Inc.
Grupę Azoty ZAK SA
LANXESS Deutschland GmbH
Perstorp Oxo AB
Polynt Group
Varteco

ASSOCIATE MEMBERS:

British Plastics Federation (BPF)
VinylPlus UK
VinylPlus Deutschland e.V. (Germany)
VinylPlus Italia (Italy)

* Companies that joined VinylPlus in 2023