



VINYLPLUS AT A GLANCE

THE EUROPEAN PVC INDUSTRY'S COMMITMENT
TO SUSTAINABLE DEVELOPMENT

vinyl **plus**
COMMITTED TO
SUSTAINABLE DEVELOPMENT

VINYLPLUS

VinylPlus is the 10-year Voluntary Commitment to sustainable development by the European PVC industry. The VinylPlus programme was developed through open dialogue with stakeholders, including industry, NGOs, regulators, civil society representatives and PVC users. Five key challenges have been identified for PVC on the basis of **The Natural Step** System Conditions for a Sustainable Society.

The regional scope of the programme is the EU-28 plus Norway and Switzerland.

Through the VinylPlus initiative, the European PVC industry is creating a long-term sustainability framework for the entire PVC value chain. It aims to:

VINYLPLUS FOUNDING MEMBERS ARE:

- the European Council of Vinyl Manufacturers – **ECVM**
- the European Plastics Converters – **EuPC**
- the European Stabiliser Producers Association – **ESPA**
- **European Plasticisers** (formerly ECPI)

- recycle 800,000 tonnes of PVC per year by 2020
- promote a sustainable use of additives
- improve PVC products sustainability and their contribution to sustainable development
- reduce progressively GHG (greenhouse gas) emissions as well as energy and resource consumption along the entire production chain
- move towards a low-carbon circular economy
- build sustainability awareness along the value chain and among stakeholders.

VINYLPLUS' ENABLING CONDITIONS AND KEY ELEMENTS FOR SUCCESS:

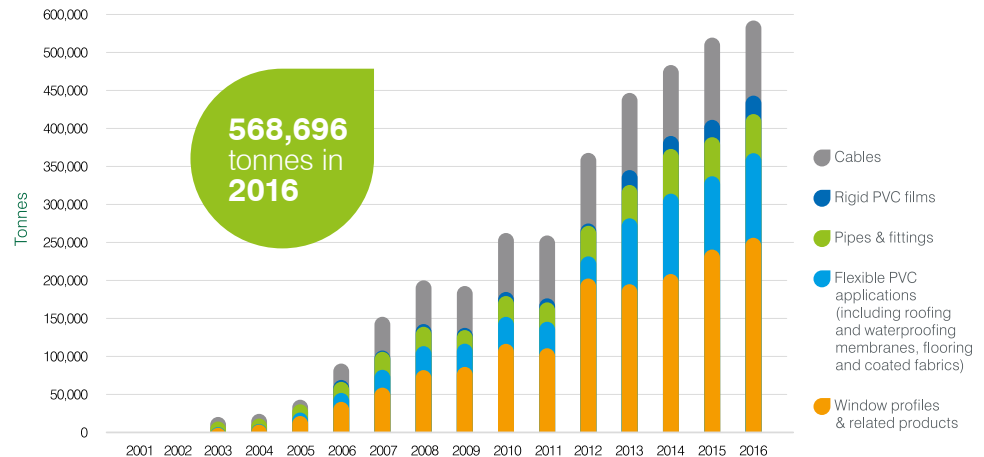


2016 HIGHLIGHTS

Controlled-Loop Management

- 568,696 tonnes of PVC recycled within the VinylPlus framework.
- Strong cooperation with EU authorities to addressing the issue of legacy additives (substances that are no longer used in new PVC products but that can be present in recycled PVC).

PVC RECYCLED WITHIN THE VINYL 2010 AND VINYLPLUS FRAMEWORKS



PVC is one of the most widely used polymers in the world. PVC continues to make life safer and more comfortable through its use in construction, automobiles, cabling, smart & credit cards, packaging, fashion & design, agriculture, telecommunications, medical devices and a wide array of other areas and products. PVC is intrinsically a 'low carbon' plastic, it is extremely durable and cost-efficient. PVC helps preserve resources and energy, and, at the end of its life, it can be recycled without losing essential qualities.

Organochlorine Emissions

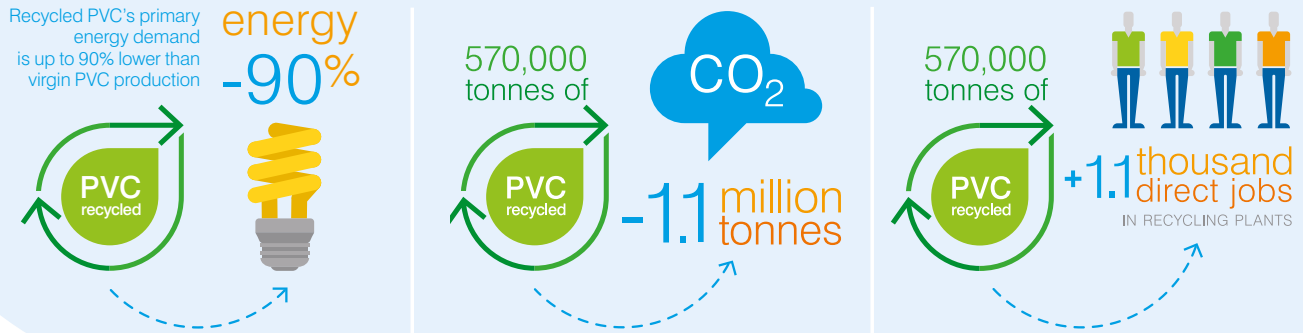
- No transport accidents in Europe with VCM release.
- PVC resin producers committed to achieving full compliance with the ECVM Industry Charters by 2020.

Sustainable Use of Additives

- Achievement of lead-based stabilisers replacement in the EU-28 by ESPA members verified by an external audit company.
- Through ongoing research and innovation, the plasticisers industry continues to adapt to market and regulatory demands, while keeping its commitment to safe products and their sustainable use.
- A methodology named ASF (Additives Sustainability Footprint) is being worked out by the VinylPlus Additives Task Force together with The Natural Step, to evaluate the use of additives in PVC products.



Using recycled PVC helps meet resource-efficiency targets and allows the preservation of natural resources.



Sustainable Use of Energy and Raw Materials

- PVC resin producers on track with the target of reducing their energy consumption by 20% by 2020.
- PVC converters committed to reporting annually their gains in energy efficiency.

Sustainability Awareness

- With the theme 'Smart Vinyl for Our Cities', the 4th VinylPlus Sustainability Forum, in Vienna, Austria, discussed the way forward to a more sustainable low-carbon future.
- VinylPlus selected as a "Highly Commended" entry by The Circulars 2017, the circular economy award programme of the World Economic Forum and the Forum of Young Global Leaders.
- New Cooperation Agreement signed between VinylPlus and the social partners of the European Chemical Sectoral Social Dialogue Committee.
- VinylPlus is registered as a SMART partnership on the UN Partnerships for SDGs platform.



STEPHAN SICARS
UNIDO

Vienna, April 2016

"The role of VinylPlus aligns very well with the Sustainable Development Goals. VinylPlus allows industry to come together and discuss the main characteristics of sustainability and how they can contribute. VinylPlus can make that visible for Governments, for civil society..."



More information can be found in the VinylPlus Progress Report 2017, downloadable from www.vinylplus.eu.

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



VINYLPLUS CONTRIBUTION TO THE SDGs

VinylPlus aims to proactively contribute to addressing the global challenges and priorities through its sustainability programme. While PVC products can potentially play a role in achieving many of the 169 targets within the Sustainable Development Goals (SDGs – <https://sustainabledevelopment.un.org/>), the following chart focuses on the direct contribution of the European PVC industry's Voluntary Commitment, based on the SDG Compass (www.sdgcompass.org) approach.

CHALLENGE CONTROLLED-LOOP MANAGEMENT

1



TARGET 9.5
Research and development –
Programmes and
progress relating to
materials stewardship



TARGET 12.5
Waste management



TARGET 13.1
Energy efficiency,
GHG emissions,
recycling

CHALLENGE ORGANOCHLORINE EMISSIONS

2



TARGET 1.5
Disaster/emergency
planning and response



TARGET 3.9
Occupational health
and safety



TARGET 8.8
Labour/management
relations; Occupational
health and safety



TARGET 9.4
Environmental
investments



TARGET 12.4
Environment

CHALLENGE SUSTAINABLE USE OF ADDITIVES

3



TARGET 6.3
Water quality



TARGET 12.4
Environment



TARGET 7.3
Energy efficiency



TARGET 8.4
Resource efficiency



TARGET 12.2
Energy and resource
efficiency

CHALLENGE SUSTAINABLE USE OF ENERGY AND RAW MATERIALS

4



TARGET 13.1
Energy efficiency,
GHG emissions,
recycling



TARGET 3.9
Occupational health
and safety



TARGET 4.4
Employee training
and education
TARGET 4.7
Education for sustainable
development



TARGET 5.1
Gender equality

CHALLENGE SUSTAINABILITY AWARENESS

5



TARGET 8.8 r/management
relations; Occupational
health and safety



TARGET 12.6
Reporting
TARGET 12.7
Procurement practices
TARGET 12.8
Product and service information
and labelling
TARGET 12.a
Support developing countries



TARGET 17.7
Knowledge transfer
TARGET 17.16
Partnership
TARGET 17.17
Partnership

VinylPlus Partners

IN 2016, THE CONTRIBUTORS WERE:

A. Kolckmann GmbH (Germany)
 Alfatherm SpA (Italy)
 Aliaxis Group (Belgium)
 Alkor Draka SAS (France)
 Altro (UK)
 Altro Debolon Dessauer Bodenbeläge GmbH & Co. KG (Germany)
 aluplast Austria GmbH (Austria)
 aluplast GmbH (Germany)
 alwitra GmbH & Co (Germany)
 AMS Kunststofftechnik GmbH & Co. KG (Germany)
 Amtico International (UK)
 Beaulieu International Group (Belgium)
 Berry Plastics (Germany)*
 Bilcare Research (Germany)
 BM S.L. (Spain)
 BT Bautechnik Impex GmbH & Co. KG (Germany)
 BTH Fitting Kft. (Hungary)
 CF Kunststoffprofilen (Netherlands)
 CIFRA (France)
 Coveris Rigid Hungary Ltd (Hungary)
 Danosa (Spain)*
 Deceuninck Ltd (UK)
 Deceuninck NV (Belgium)
 Deceuninck SAS (France)
 DHM (UK)
 Dickson Saint Clair (France)
 DLW Flooring GmbH (Germany)
 Döllken Kunststoffverarbeitung GmbH (Germany)
 Draka Polymer Films BV, former Alkor Draka BV (Netherlands)
 Dyka BV (Netherlands)
 Dyka Plastics NV (Belgium)
 Dyka Polska Sp. z o.o. (Poland)
 Elbtal Plastics GmbH & Co. KG (Germany)
 Epwin Window System (UK)
 Ergis SA (Poland)
 FDT FlachdachTechnologie GmbH & Co. KG (Germany)
 Finstral AG (Italy)
 FIP (Italy)
 Flag SpA (Italy)
 Gealan Fenster-Systeme GmbH (Germany)
 Georg Fischer Deka GmbH (Germany)
 Gerflor Mipolam GmbH (Germany)
 Gerflor SAS (France)
 Gerflor Tarare (France)
 Gernord Ltd (Ireland)
 Girpi (France)
 Griffine Enduction (France)
 Gruppo Fabbri (Svizzera) S.A. (Switzerland)
 Gruppo Fabbri Vignola SpA (Italy)
 H Producter AS (Norway)
 Heytex Bramsche GmbH (Germany)
 Heytex Neugersdorf GmbH (Germany)
 Holland Colours NV (Netherlands)
 Icopal Kunststoffverarbeitungs GmbH (Germany)
 IKA Innovative Kunststoffaufbereitung GmbH & Co. KG (Germany)
 Imerys (UK)
 Imperbel NV (Belgium)
 Industrial Sedó SL (Spain)
 Inoutic/Deceuninck GmbH (Germany)

Inoutic/Deceuninck Sp. z o.o. (Poland)
 Internorm Baulelemente GmbH (Austria)
 Jimten (Spain)
 Kalan (France)*
 Klöckner Pentaplast GmbH & Co. KG (Germany)
 Konrad Hornschuch AG (Germany)
 LINPAC Packaging PONTIVY (France)*
 Manufacturas JBA (Spain)
 Marley Deutschland (Germany)
 Marley Hungária (Hungary)
 Mehler Technologies GmbH (Germany)
 MKF-Ergis GmbH (Germany)
 MKF-Ergis Sp. z o.o. (Poland)
 Molecor (Spain)
 Mondoplastico SpA (Italy)
 Nicoll (France)
 Nicoll Italy (Italy)
 Nordisk Wavin A/S (Denmark)
 Norsk Wavin A/S (Norway)
 Novafloor (France)
 NYLOPLAST EUROPE BV (Netherlands)
 Omya International AG (Switzerland)
 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 France (France)
 Pipelife Hellas S.A. (Greece)
 Pipelife Hungária Kft. (Hungary)
 Pipelife Nederland BV (Netherlands)
 Pipelife Polska SA (Poland)
 Pipelife Sverige AB (Sweden)
 Poliplast (Poland)
 Poloplast GmbH & Co. KG (Austria)
 Polyflor (UK)
 Polymer-Chemie GmbH (Germany)
 Profine GmbH (Germany)
 Protan AS (Norway)
 PUM Plastiques SAS (France)
 Redi (Italy)
 REHAU AG & Co (Germany)
 REHAU GmbH (Austria)
 REHAU Ltd (UK)
 REHAU SA (France)
 REHAU Sp. z o.o. (Poland)
 REHAU Industrias SA (Spain)
 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)
 Resysta International GmbH (Germany)
 Riuvert (Spain)
 Roechling Engineering Plastics KG (Germany)
 Salamander Industrie Produkte GmbH (Germany)
 Sattler PRO-TEX GmbH (Austria)
 Schüco PWS Produktion GmbH & Co. KG (Germany)
 Serge Ferrari SAS (France)
 Sika Services AG (Switzerland)
 Sika Trocal GmbH (Germany)
 SIMONA AG (Germany)

Sioen Industries (Belgium)
 SKZ-Testing GmbH (Germany)
 SOTRA-SEPEREF SAS (France)
 Stöckel GmbH (Germany)
 Tarkett AB (Sweden)
 Tarkett France (France)
 Tarkett GDL SA (Luxembourg)
 Tarkett Holding GmbH (Germany)
 Tarkett Limited (UK)
 TMG Automotive (Portugal)
 Tönsmeier Kunststoffe GmbH & Co. KG (Germany)
 Uniroyal Global Limited, former Wardle Storeys (UK)
 Uponor Infra Oy (Finland)
 Veka AG (Germany)
 Veka Ibérica (Spain)
 Veka Plc (UK)
 Veka Polska (Poland)
 Veka SAS (France)
 Verseidag-Indutex GmbH (Germany)
 Vescom BV (Netherlands)
 Vulcalflex 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 Metaplast (Poland)
 Wavin Nederland BV (Netherlands)
 Wavin Plastics Ltd (UK)

PVC PRODUCERS CONTRIBUTING TO VINYLPLUS IN 2016

INOVYN (Belgium, Germany, Italy, Netherlands, Norway, Spain, Sweden, UK)
 Shin-Etsu PVC (Netherlands, Portugal)
 VESTOLIT GmbH (Germany)
 VINNOLIT GmbH & Co. KG (Germany, UK)
 Vynova Group (Belgium, France, Germany, Netherlands, UK)

STABILISER PRODUCERS CONTRIBUTING TO VINYLPLUS IN 2016

Akdeniz Kimya A.S.
 Asua Products SA
 Baerlocher GmbH
 Chemson Polymer-Additive AG
 Galata Chemicals
 IKA GmbH & Co. KG
 PMC Group
 Reagens SpA
 Valtris Specialty Chemicals

PLASTICISER PRODUCERS CONTRIBUTING TO VINYLPLUS IN 2016

BASF SE
 DEZA a.s.
 Evonik Performance Materials GmbH
 ExxonMobil Chemical Europe Inc.
 LANXESS Deutschland GmbH
 Perstorp Oxo AB