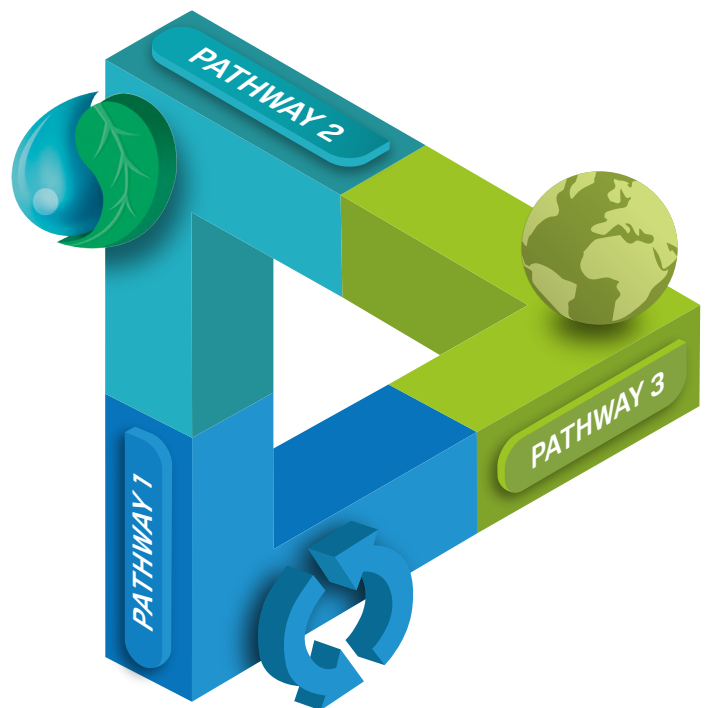


THE NEXT 10-YEAR COMMITMENT

OF THE EUROPEAN
PVC INDUSTRY
TO SUSTAINABLE
DEVELOPMENT

VinylPlus 20 30 Commitment





Advancing

Towards Carbon
Neutrality
and Minimising
Our Environmental
Footprint

Building

Global Coalitions
and Partnering
for the SDGs

Scaling Up

PVC Value Chain
Circularity

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EXECUTIVE SUMMARY

VinylPlus 2030 is the next 10-year Commitment of the European PVC industry to Sustainable Development. It builds upon a track record of 20+ years of progress and achievements by the European PVC value chain. With its renewed Commitment, VinylPlus aims to contribute proactively to addressing the global sustainability challenges and priorities. VinylPlus 2030 covers the EU-27 plus Norway, Switzerland and the UK.

The VinylPlus 2030 Commitment has been developed bottom-up through industry workshops and with an open process of stakeholder consultation. Three ‘pathways’ and 12 ‘action areas’ have been identified embracing the PVC value chain’s circularity, its advancement towards carbon neutrality, minimisation of the environmental footprint of the PVC production and products, and its engagement with stakeholders and global coalitions.

All targets will be subject to a mid-term review in 2025, to take into account technological progress as well as the evolution of socio-economic, regulatory and environmental frameworks.

For the avoidance of doubt, when implementing the Commitment, partners of VinylPlus® are required at all times to comply with EU and national competition laws of the 27 EU Member States, Norway, Switzerland and the UK.

VINYLPUS 2030'S PATHWAYS AND ACTION AREAS:

PATHWAY 1

Scaling up PVC Value Chain Circularity

- 1.1. Advancing our circularity ambitions
- 1.2. Fostering science-based solutions for the safe and sustainable use of additives
- 1.3. Supporting innovative recycling technologies
- 1.4. Prioritising circularity through ecodesign

PATHWAY 2

Advancing towards Carbon Neutrality and Minimising our Environmental Footprint

- 2.1. Advancing towards carbon neutrality
- 2.2. Embracing the sustainable use of chemical substances
- 2.3. Minimising our environmental footprint
- 2.4. Responsible supplier criteria and programmes

PATHWAY 3

Building Global Coalitions and Partnering for the SDGs

- 3.1. Ensuring transparency and accountability
- 3.2. Contributing to sustainable development through certified and traceable products
- 3.3. Engaging stakeholders in the sustainable transformation of the PVC industry
- 3.4. Partnering with stakeholders



INTRODUCTION

PVC'S CONTRIBUTION TO A SUSTAINABLE SOCIETY

Polyvinyl chloride, or PVC, is one of the most versatile and widely used polymers in the world. PVC continues to make life safer and more comfortable through its extensive use in building and construction, as well as in water distribution, automotive, cabling, smart cards and credit cards, packaging, fashion and design, sports, agriculture, telecommunications, medical devices and a wide array of other areas and products.

PVC is an intrinsically low-carbon plastic: 57% of its molecular weight is chlorine derived from common salt; 5% is hydrogen; and 38% is carbon. It is an extremely durable and cost-efficient material which can be recycled several times at end of life without losing its essential properties.

Several PVC applications – such as pipes, window profiles, cables, flooring, membranes and films – have been analysed in terms of Life Cycle Assessments and eco-efficiency, and they have shown excellent environmental performance.

Thanks to their intrinsic characteristics and properties, PVC products can make positive contributions towards several of the UN Sustainable Development Goals' (SDGs) targets. To help eradicate poverty, PVC can provide goods and services that underpin basic human needs, making them available for all, at affordable costs.

PVC pipes help provide access to clean water and sanitation all over the world. PVC piping systems are easy to install and highly durable, enabling efficient irrigation even in remote areas and addressing global issues such as soil erosion and water scarcity.

In healthcare, PVC devices account for about 40% of all plastics-based medical devices in hospitals, where they are used for their durability, barrier properties and physiological inertness. Healthcare buildings benefit from PVC applications such as flooring, wall coverings and window profiles in terms of safety and hygiene as well as personal comfort. PVC is also utilised for temporary emergency structures (field hospitals, tents to protect against biological risk and medical devices) that are suitable for health emergencies.

In the building and construction sector, which accounts for around 70% of PVC volumes, the main PVC applications such as windows profiles, pipes, flooring, roofing membranes, wires and cables offer solutions that are efficient in terms of cost, energy, and resources.

PVC products not only save energy during use, but they are also integral to renewable energy technologies. Examples include transparent pipes for photo-bioreactors, photovoltaic cells on reflective PVC roofing membranes, wind turbine blades pressure pipes for geothermal projects, pipes in biogas plants and solar pond liners.

BUILDING ON 20+ YEARS OF PROGRESS

Since 2000, the European PVC industry (PVC manufacturers, additive producers and converters represented by their European associations ECVM, European Plasticisers, ESPA, and EuPC) has been strongly committed to implementing a long-term sustainability framework for the entire PVC value chain and improving PVC products' sustainability and circularity, as well as their contribution to a sustainable society.

Through the adoption of the first two Voluntary 10-year Commitments, the European PVC industry aimed at minimising the environmental impact of PVC production and manufacturing, promoting the responsible use of additives, supporting collection and recycling, as well as encouraging dialogue among all industry stakeholders.

As a united value chain, VinylPlus has achieved valuable progress in terms of product stewardship, the substitution of problematic additives, the development of best practices, research into innovative technologies and improvement of the environmental footprint of PVC. Remarkable advances have been made in recycling, with the set-up of collection and recycling schemes, virtually non-existent 20 years ago, and which today represent a model for other industry sectors. Since 2000, the European PVC industry has recycled 6.5 million tonnes of PVC, thus preventing the release of nearly 13 million tonnes of CO₂ into the atmosphere.¹

Recognizing that progress towards sustainable development is a journey of continuous improvement and that there are open challenges which the PVC and plastics industry in general must continue to address, the PVC industry confirms its strong commitment to sustainable development with its next 10-year programme.

A NEW ROADMAP FOR 2030

The VinylPlus programme to 2020 was developed through open dialogue with stakeholders, identifying key challenges for PVC on the basis of The Natural Step System Conditions for a Sustainable Society.²

For its next sustainability programme to 2030, in order to contribute proactively to addressing the global challenges and priorities, VinylPlus adopted an outside-in³ approach to goal setting. The next VinylPlus Commitment aims to contribute to the United Nations 2030 Agenda for Sustainable Development, with a particular focus on sustainable consumption and production, climate change and partnerships. It also seeks to align with the most relevant EU policies, such as the Circular Economy Action Plan and the EU Chemicals Strategy for Sustainability under the European Green Deal. In line with VinylPlus' active participation in the European Commission's Circular Plastics Alliance (CPA), the new commitment also embraces the CPA's targets on the use of recycled plastics in new products.

¹ According to a conservative estimation, for each kg of PVC recycled, 2 kg of CO₂ are saved

² <https://thenaturalstep.org/approach/the-system-conditions/>

³ The 'outside-in' approach is identified by the SDG Compass (<https://sdgcompass.org>) as better addressing global needs: "By looking at what is needed externally from a global perspective and setting goals accordingly, business will bridge the gap between current performance and required performance", SDG Compass Guide 2015, p. 19



VinylPlus

WORKING PRINCIPLES

In implementing its 2030 programme, VinylPlus is committed to the following guiding principles:

► **Measurable targets and deadlines**

Ensure accountable objectives that all industries engaging in the Commitment will seek to achieve together.

► **Transparency and accountability**

Guarantee openness, transparency and accountability through the involvement of external third parties in the monitoring and verification of progress and achievements.

► **Dialogue and collaboration**

Work together as a united PVC value chain and engage with interested stakeholders to find solutions that no single player can implement.

► **Science-based solutions and research**

Make sure that technologies, processes and materials are assessed according to solid, credible and science-based sustainability indicators.

► **Priority to sustainability innovation**

Prioritise research, design and innovation that enhance the sustainability potential of PVC.

► **Labelling and traceability**

Ensure that consumers, users and public procurers are provided with clear and correct information, facilitating the recognition of sustainable and recycled products.

► **Global action and knowledge transfer**

Play an active part in supporting an integrated, cross-border, sustainable and circular PVC value chain, including through best-practice sharing and cooperation with other regional PVC actors at the global level.



The VinylPlus 2030 COMMITMENT

Within the next 10 years, the resin and additives producers, converters and recyclers of the PVC industry will actively work together and share responsibility for accelerating the transition of the European PVC value chain to a circular economy. We will act as a pacesetter in innovation, collaboration and communication, adhering to science-based principles to demonstrate that PVC is a material of choice for a sustainable society, thereby acting at the forefront of the circular economy and sustainable development in the plastics sector both in Europe and worldwide.

Our Commitment is built around three Pathways:

PATHWAY 1

Scaling up PVC Value Chain Circularity

"The PVC industry embraces the circular economy. We commit to building upon the achievements made over the last 20 years to accelerate towards circularity. We aim to ensure controlled-loop management of PVC, from circular product design, the development of additional collection schemes and advanced recycling technologies, to ensuring the safe use of recyclate in new high-performance, durable products."

PATHWAY 2

Advancing towards Carbon Neutrality and Minimising our Environmental Footprint

"Sustainable chemistry and carbon neutrality are at the heart of a sustainable economy. By applying a science-based approach, we commit to ensuring that all PVC products, including their supply chains and manufacturing processes, continue to reduce their impact on human health and the environment."

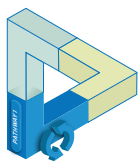
PATHWAY 3

Building Global Coalitions and Partnering for the SDGs

"Representing the united European PVC value chain as VinylPlus, we commit to ensuring transparency and accountability in its relationships with all stakeholders. Engaging with key stakeholders, including brand owners and specifiers, we will contribute to sustainable development through certified and traceable products. We will continue partnering with civil society, European and global organisations, as well as with the global PVC communities, to share our best sustainability practices and contribute to the UN SDGs."

VinylPlus 2030 PATHWAYS

VinylPlus
2030
Commitment



PATHWAY 1

Scaling up PVC Value Chain Circularity

Through Pathway 1, the European PVC industry confirms the recycling commitments made with the European Commission, and where feasible, to further ‘stretch’ them to continue advancing towards full circularity of the European PVC value chain.

The objective is to transform waste into high-quality, safe and valued resources for the recycled materials markets, contributing in particular to SDG12 – Sustainable consumption and production – of the United Nations 2030 Agenda.

Recognizing that research and innovation play a critical role in successfully achieving this objective, VinylPlus will concentrate efforts and resources in supporting technical projects, R&D and innovation in three main directions:

- ▶ improving existing collection and recycling schemes and setting up new ones for additional PVC streams
- ▶ supporting the development of chemical recycling and other recycling and sorting technologies
- ▶ investigating solutions to detect, sort, and remove legacy additives from end-of-life PVC products.

1.1. Advancing our circularity ambitions

VinylPlus intends to remain the data champion in Europe on PVC recycling and the use of recycled PVC in new products. We will provide reliable and credible recycling figures, which will include all value chain levels, and build on figures from the CPA monitoring data or other external sources, as well as enable greater transparency by annually reporting on pre- and post-consumer waste recycling and on the recovery percentage of available waste.

VinylPlus will evaluate opportunities to achieve higher recycling rates of post-consumer PVC waste in Europe. To this end, VinylPlus will initiate and continue to support innovative projects for the collection at the end of life of specific PVC applications, so as to divert PVC waste from landfill, setting up additional collection and recycling schemes where appropriate.

1.2. Fostering science-based solutions for the safe and sustainable use of additives

VinylPlus will continue engaging with regulatory bodies to overcome legislative uncertainties, by providing science-based risk evaluations to demonstrate the safe use of additives and of PVC articles containing recyclates with legacy additives, as highlighted by the EU Chemicals Strategy for Sustainability.

In parallel, VinylPlus will support participation in R&D projects that detect, sort as well as reduce or remove legacy additives in PVC waste streams, including, if appropriate, externally funded schemes. Key sustainability indicators will be used to assess the proposed solutions.

1.3. Supporting innovative recycling technologies

To accelerate towards circularity, VinylPlus is committed to supporting the development of chemical recycling technologies capable of handling difficult PVC wastes which cannot be eco-efficiently mechanically recycled (e.g., contaminated products, composites).

The ambition is to have a chemical recycling technology prototype for plastics waste containing PVC in the operational environment (Technology Readiness Level 7) by 2030.

VinylPlus will also support the development of improved sorting and separation technologies for complex (e.g., composite) PVC products.

1.4. Prioritising circularity through ecodesign

Recognizing its fundamental role in achieving circularity, VinylPlus will help raise awareness of ecodesign among partner companies. In collaboration with VinylPlus product groups and building upon the work on ecodesign developed in the framework of the CPA, VinylPlus will encourage and support the development of ecodesign guidelines to facilitate circularity.

PATHWAY 1 TARGETS



1.1. ADVANCING OUR CIRCULARITY AMBITIONS

1. Achieve at least 900,000 tonnes and 1 million tonnes per year of recycled PVC used in new products by 2025 and 2030, respectively.
2. By 2024, set additional 'stretch' recycling targets.
3. Carry out a review of existing collection and recycling schemes by 2022.
4. By 2023, set-up a list of applications, projects, and initiatives where additional collection schemes to reduce landfill would be required.
5. Where appropriate, support the set-up of additional collection and recycling schemes and produce a status report by 2025.

1.2. FOSTERING SCIENCE-BASED SOLUTIONS FOR THE SAFE AND SUSTAINABLE USE OF ADDITIVES

1. Carry out a gap analysis on existing scientific data and review it annually starting from 2022.
2. Report annually on active support of and data generation for relevant risk assessment, human bio-monitoring and socio-economic studies.
3. Report annually on support given to technical projects that enable and demonstrate the safe use of recyclates containing legacy additives.
4. Continue investigating solutions to detect specific substances in PVC waste streams and produce a report by 2023.
5. By 2025, develop at least one sorting technology for PVC waste with specific additives.
6. Report annually on VinylPlus' continued support to relevant technical projects leading to the removal of legacy additives.

1.3. SUPPORTING INNOVATIVE RECYCLING TECHNOLOGIES

1. Assess where chemical recycling could be a valuable complementary recovery solution to mechanical recycling, based on cost-benefit and LCA assessments. By 2022, identify and evaluate relevant chemical recycling technologies for plastics waste containing PVC.
2. Confirm the feasibility of thermal treatment of difficult-to-recycle PVC waste to recover chlorine and move to an operational status (TRL 7) by 2024.
3. By 2025, encourage the establishment of and participate in consortia aiming to build chemical recycling capacities for plastics waste containing PVC.
4. A valid sorting or separation technology for complex (e.g., composite) PVC products tested (TRL 5) by 2025.

1.4. PRIORITISING CIRCULARITY THROUGH ECODESIGN

1. Promote the ecodesign guidelines developed in the framework of the CPA to foster the PVC value chain's transition to circularity, and, starting from 2022, report annually on the best examples of products and services developed by VinylPlus partners.

PATHWAY 2

Advancing towards Carbon Neutrality and Minimising our Environmental Footprint

Pathway 2 recognizes the need to take urgent action: to combat climate change in line with the European Commission's Green Deal targets; to minimise the environmental footprint of production processes and products in line with the EU Chemicals Strategy for Sustainability; and to increase resource efficiency in consumption and production.

Due to their intrinsic nature, carbon neutrality and environmental footprint minimisation fall within the direct responsibility of the partner companies. VinylPlus' and the sectoral organisations' role is to facilitate stronger sector collaboration so as to raise the value chain's ambitions regarding the use of sustainable feedstock.

VinylPlus will report on the European PVC value chain's progress in advancing towards carbon neutrality and minimising the environmental footprint of production and products.

2.1. Advancing towards carbon neutrality

VinylPlus will evaluate the potential and report on projected core carbon reduction progress to be achieved by 2030, reflecting the European Green Deal ambitions on climate change.

VinylPlus will report on the sustainability of non-renewable and renewable energy to consider the possibility to shift away from fossil-based inputs.

It will also produce a report on the use of sustainable sourcing of feedstock, based on scientific evidence. Non-fossil/mined feedstocks include, for example, carbon from chemical recycling, bio-attributed ethylene, and recycled chlorine. VinylPlus' ambition is to see the use of sustainable feedstock in the manufacturing of new products increased as much as feasible by 2030.

2.2. Embracing the sustainable use of chemical substances

VinylPlus will continue supporting the sustainable use of additives. It will evaluate the potential for application of its Additive Sustainability Footprint (ASF) or other available methodologies by its partners, encouraging their use.

2.3. Minimising our environmental footprint

ECVM members are committed to the continuous reduction of organochlorine emissions in line with the requirements of the ECVM Industry Charter for the Production of Vinyl Chloride Monomer and PVC.

VinylPlus sectoral organisations will evaluate the water footprint of processes and products, including consumption and pollution throughout the full product lifecycle, and set up, as appropriate, indicators to support the reduction targets.

VinylPlus will report periodically on the progress made.

VinylPlus will encourage all its partners to hold and report on third-party verified LCAs and/or Environmental Product Declarations (EPDs), showcasing the variety of LCAs, EPDs or the EU's Product Environmental Footprint (PEF) available within the industry.

VinylPlus will encourage all concerned partners to be part of Operation Clean Sweep® or other relevant existing schemes for the minimisation and responsible treatment of spillages of polymers and polymer compounds, providing guidance.

2.4. Responsible supplier criteria and programmes

For the sake of transparency on sustainability performance of suppliers, VinylPlus will collect and map the certification schemes of the upstream supply chain to demonstrate that suppliers' production facilities are progressing towards sustainability. It will also assist its partners to communicate on the sustainability progress made by the upstream supply chain.

PATHWAY 2 TARGETS



2.1. ADVANCING TOWARDS CARBON NEUTRALITY

1. VinylPlus will evaluate the potential and, by 2025, report on projected core carbon reduction progress to be achieved by 2030.
2. By 2025, report on the use of renewable energy.
3. By 2025, report on sustainable feedstock sourcing.

2.2. EMBRACING THE SUSTAINABLE USE OF CHEMICAL SUBSTANCES

1. By 2021, organisation of at least one introductory ASF webinar by VinylPlus.
2. By 2022, produce a report on the sectors'/partners' experience and application of the ASF tool.

2.3. MINIMISING OUR ENVIRONMENTAL FOOTPRINT

1. By 2021, achieve full compliance with the ECVI Charter (updated version 2019).
2. Issue ECVI Charter updates in 2025 and 2030.
3. Sectors will set up, as appropriate, indicators to support the reduction targets of the water footprint of processes and products. Review reports will be produced in 2025 and 2030.
4. Triennial review on the improvement of the eco-profiles of PVC products, starting from 2022.
5. VinylPlus takes an active role in guiding its partners and will recommend relevant schemes for the minimisation and responsible treatment of spillages of polymers and polymer compounds, enabling VinylPlus partners to adopt one scheme by 2022.

2.4. RESPONSIBLE SUPPLIER CRITERIA AND PROGRAMMES

1. By 2024, produce an inventory of relevant certification schemes applied by the chlorine, ethylene and by other extractive industries, to provide the VinylPlus partners with relevant and transparent information on the sustainability progress of the upstream supply chain.



PATHWAY 3

Building Global Coalitions and Partnering for the SDGs

The European PVC industry recognizes the key role of the UN SDGs to contribute to global development, promote human well-being and protect the environment.

With Pathway 3, VinylPlus addresses broader societal needs by:

- ▶ providing maximum transparency and accountability in its governance and reporting
- ▶ encouraging its partner companies to adopt sustainable practices and to integrate sustainability information into their reporting cycles
- ▶ enhancing the industry's contribution to sustainability through labelling and certifications, helping promote sustainable private and public procurement practices
- ▶ encouraging and promoting effective partnerships and initiatives with civil society, institutions, NGOs, the private sector, as well as other regional and global value chain bodies.

3.1. Ensuring transparency and accountability

The VinylPlus 2030 Commitment contains a joint set of targets and ambitions that all industries engaging in it want to achieve together. Each industry sector (ECVM, ESPA, European Plasticisers and EuPC) is committed to transpose the Commitment into its specific reality, cascading targets down to engage more colleagues in the partner companies and to select priorities for their contribution.

To guarantee transparency, accountability and participation, VinylPlus will maintain a Monitoring Committee, the independent body supervising the implementation of the Commitment and providing guidance and guidelines.

The Monitoring Committee will continue to be led by an independent Chairperson, with the majority of members being external stakeholders (representatives from the European Parliament, the European Commission, academic institutions, trade unions as well as consumer organisations).

As with the previous Commitments, an independently verified and audited report detailing the progress being made against each of the targets will be published annually and proactively circulated to relevant stakeholders.

VinylPlus will encourage its partners to ensure transparency and communicate progress to their stakeholders. To this end, it will provide partners with supporting information and arguments useful for external stakeholders, including potential investors, on the PVC value chain's progress towards sustainability.

3.2. Contributing to sustainable development through certified and traceable products

VinylPlus will continue to develop and promote widespread recognition of the VinylPlus® Product Label, with the aim to help PVC users select products with the best sustainability performance, and the VinylPlus partners to third-party certify their sustainability performance.

VinylPlus will promote the VinylPlus® Supplier Certificate, extending its scope to the suppliers of additives and compounds to demonstrate responsible sourcing.

Furthermore, VinylPlus will assess PVC products' contribution as sustainable solutions for end-users, identifying and promoting PVC products which allow downstream customers to reduce their environmental footprint.

3.3. Engaging stakeholders in the sustainable transformation of the PVC industry

VinylPlus will continue to pursue global engagement with international and intergovernmental organisations, initiatives and programmes, so as to share its knowledge, experience and business model for sustainability, gathering input and feedback. It will also pursue engagement with key global and regional NGOs to seek continued dialogue.

VinylPlus will continue to co-operate with the

other regional PVC associations and develop plans to engage industries within the PVC value chains globally to exchange best practices and share sustainability pathways.

3.4. Partnering with stakeholders

To enhance the PVC industry's contribution to the SDGs, VinylPlus will engage with civil society, including young generations, local communities and institutions/associations of public authorities, including at the cities and regions levels, as well as with the private sector, to develop partnerships, joint projects and initiatives.

PATHWAY 3 TARGETS



3.1. ENSURING TRANSPARENCY AND ACCOUNTABILITY

1. A public, and independently audited, VinylPlus Progress Report will be published annually and proactively promoted to key stakeholders.
2. By 2021, each VinylPlus industry sector will define its specific contributions to the common targets and ensure that they are properly disseminated within the partner companies.
3. By 2025, develop guidelines and supporting information to help VinylPlus partners demonstrate the progress of the PVC value chain towards sustainability.

3.2. CONTRIBUTING TO SUSTAINABLE DEVELOPMENT THROUGH CERTIFIED AND TRACEABLE PRODUCTS

1. Extend the scope of the VinylPlus® Product Label:
 - a. Obtain recognition by at least one additional major green building standard by 2022.
 - b. Obtain the Label's inclusion in three different procurement systems by 2025.
 - c. Expand the scope of the Label's certification scheme to at least one additional PVC application by 2025.
2. Extend the scope of the VinylPlus® Supplier Certificate:
 - a. By 2022, five production sites to have obtained the VinylPlus® Supplier Certificate.
 - b. By 2025, twenty production sites to have obtained the VinylPlus® Supplier Certificate.
3. Assess PVC products' contribution as sustainable solutions for end-users:
 - a. Starting from 2023, produce a biennial report on contribution to climate change reduction by PVC products.
 - b. By 2025, evaluate the potential of the 'Carbon handprint methodology' or other suitable tool(s) to assess the contribution of PVC products to the improvement of the environmental footprint of end-users.

3.3. ENGAGING STAKEHOLDERS IN THE SUSTAINABLE TRANSFORMATION OF THE PVC INDUSTRY

1. Pursue engagement with international and intergovernmental organisations to share VinylPlus' knowledge, experience and business model for sustainability and report annually.
2. By 2024, engage regularly with at least one well-known NGO.
3. Co-operate with regional and global value chain bodies to exchange best practices and communicate the VinylPlus sustainability model at the regional and global levels. Annually report on progress, starting from 2022.

3.4. PARTNERING WITH STAKEHOLDERS

1. Keep engaging with civil society, including young generations, on joint projects for sustainable development and report annually.
2. By 2024, develop at least one joint project per year with local communities and institutions/associations of public authorities to progress on one or more of the SDGs' targets.
3. By 2025, develop partnerships with three consumer-facing global brand owners or private sector sustainability leaders to progress on one or more of the SDGs' targets.



SUMMARY OF MAJOR MILESTONES TO 2030

	PATHWAY 1	PATHWAY 2	PATHWAY 3
2021		Achieve full compliance with the ECVM Charter (updated version 2019)	Each sector will define its specific contribution to the common commitment targets and ensure that they are properly spread within the partner companies
2022	Review of existing collection and recycling schemes Gap analysis on existing scientific data on legacy additives	Report on adoption of relevant schemes to avoid spillages of polymers or polymer compounds	VinylPlus® Product Label: obtain recognition by at least one additional major green building standard VinylPlus® Supplier Certificate – 5 production sites certified
2023	Report on solutions to detect specific substances in PVC waste streams	Review on the improvement of the eco-profiles of PVC products	First biennial report on contribution to climate change reduction by PVC products
2024	Set additional 'stretch' recycling targets Confirm the feasibility of thermal treatment of complex PVC wastes to recycle chlorine and move to an operational status	Inventory of relevant certification schemes applied by the chlorine, ethylene and by other extractive industries	Report on engagement with at least one well-known NGO Develop at least one joint project per year with local communities and/or public authorities to progress on one or more of the SDGs' targets
2025	Use at least 900,000 tonnes per year of recycled PVC in new products At least one sorting technology is available for PVC waste with specific additives Improved sorting and separation technologies for complex PVC products tested (at TRL 5)	VinylPlus will evaluate the potential and, by 2025, report on projected core carbon reduction progress to be achieved by 2030 Report on the use of renewable energy Report on the sustainable feedstock sourcing ECVM Charter update First review report on water footprint of PVC industry processes and products	VinylPlus® Product Label: obtain the Label's inclusion in three different procurement systems VinylPlus® Product Label: expand the scope of the Label's certification scheme to at least one additional PVC application VinylPlus® Supplier Certificate – 20 production sites certified
Formal interim review of all targets			
2030	Use at least 1 million tonnes per year of recycled PVC in new products Chemical recycling technology for plastics waste containing PVC reaching TRL 7	ECVM Charter update Second review report on water footprint of PVC industry processes and products	Report on developed partnerships





VinylPlus 2030 COMMITMENT SIGNATORIES

Within the next 10 years, we, the resin and additives producers, converters and recyclers of the PVC industry, will actively work together and share responsibility for accelerating the transition of the European PVC value chain to a circular economy.

On behalf of the VinylPlus Steering Board,

Stefan Sommer
Chairman of VinylPlus
ECVM

Myriam Tryjefaczka
Vice Chairwoman of VinylPlus
EuPC / Vinyl Foundation

Dirk Breitbach
EuPC / Vinyl Foundation

Filipe Constant
ECVM

Andreas Hartleif
EuPC / Vinyl Foundation

Andy Jones
ESPA

Ettore Nanni
ESPA

Matthias Pfeiffer
European Plasticisers

Hans-Christoph Porth
ECVM

Karl-Martin Schellerer
ECVM

Christian Vergeylen
EuPC / Vinyl Foundation

Brussels, 17 June 2021



APPENDIX

GLOSSARY

ASF Additive Sustainability Footprint. A methodology that assesses through a science-based approach the use of additives in any specific vinyl application.
<https://vinylplus.eu/asf>

CARBON HANDPRINT METHODOLOGY Carbon handprint refers to the positive environmental impact of a product throughout its lifecycle. It can be used by organisations to communicate the climate benefits of their products, services, and technologies.
https://www.researchgate.net/publication/330563782_Carbon_Handprint_Guide

CIRCULAR ECONOMY ACTION PLAN The EU Circular Economy Action Plan provides a future-oriented agenda for achieving a cleaner and more competitive Europe. It aims at accelerating the transformational change required by the European Green Deal, while building on circular economy actions implemented since 2015.
https://ec.europa.eu/environment/circular-economy/pdf/new_circular_economy_action_plan.pdf

CONVERTER SECTORS Groups of PVC converters organised on the basis of the application sectors, e.g., pipes, window profiles, flooring, etc. Converter organisations contribute to VinylPlus® through the Vinyl Foundation, the funding mechanism run by EuPC.

CPA Circular Plastics Alliance, the European Commission's multi-stakeholder platform aimed at boosting the market for recycled plastics to 10 million tonnes by 2025.
https://ec.europa.eu/growth/industry/policy/circular-plastics-alliance_en

CHEMICALS STRATEGY FOR SUSTAINABILITY The EU Chemicals Strategy for Sustainability is part of the EU's zero-pollution ambition, which is a key commitment of the European Green Deal.
https://ec.europa.eu/environment/strategy/chemicals-strategy_en

ECVM The European Council of Vinyl Manufacturers represents six leading European producers of PVC resin, which account for around 70% of the PVC resin manufactured in Europe. These businesses operate around 36 different plants spread over 23 sites and employ approximately 7,000 people.
<https://pvc.org/>

ECVM INDUSTRY CHARTER ECVM Industry Charter for the Production of Vinyl Chloride Monomer and PVC. It is aimed at minimising any detrimental effects from activities and products to the environment or human health in the production phase.
<https://pvc.org/about-ecvm/ecvms-charter/>

EPD Environmental Product Declaration. It is an independently verified and registered document that communicates transparent and comparable information about the lifecycle environmental impact of products in a credible way.
<https://www.environdec.com/What-is-an-EPD/>

ESPA The European Stabiliser Producers Association represents eight companies that produce more than 95% of the stabilisers sold on the European market. They provide direct employment to more than 2,000 people in Europe. ESPA's mission is to promote the use of stabiliser additives for vinyl applications and to provide a forum for the study and discussion of matters of scientific, technical, and environmental interest.
<https://www.stabilisers.eu/>

EUPC EuPC is the professional representative body of plastics converters in Europe, whose activity embraces all sectors of the plastics converting industry, including recycling. It represents more than 50,000 companies in Europe, which produce over 50 million tonnes of plastic products every year from both virgin and recycled polymers. They employ more than 1.6 million people, generating turnover in excess of €260 billion per year.
<https://www.plasticsconverters.eu/>

EUROPEAN GREEN DEAL It is the growth strategy launched by the European Commission at the end of 2019 that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use.

https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

EUROPEAN PLASTICISERS European Plasticisers represents eight major chemical companies producing approximately 90% of the plasticisers manufactured in Europe. With decades of experience and a focus on science and safety, European Plasticisers provides valuable input to regulatory authorities, non-government organisations and consumer groups and is proactive in contributing and encouraging dialogue between these stakeholders.

<https://www.europeanplasticisers.eu/>

LCA Life Cycle Assessment. It is a cradle-to-grave or cradle-to-cradle analysis technique to assess environmental impacts associated with all the stages of a product's life, which is from raw material extraction through materials processing, manufacture, distribution, and use.

OPERATION CLEAN SWEEP® Operation Clean Sweep® (OCS) is an international programme designed to prevent the loss of plastic granules (pellets, flakes and powders) during handling by the various entities in the plastics value chain and their release into the environment. First adopted in North America, the OCS programme is now implemented in Europe since 2015.

<http://www.opcleansweep.eu/>

PEF Product Environmental Footprint. It is a lifecycle-assessment-based method to quantify the environmental impacts of products (goods or services). It builds on existing approaches and international standards.

https://ec.europa.eu/environment/eussd/smgp/ef_pilots.htm

TRL Technology Readiness Levels. A type of measurement system used to assess the maturity level of a particular technology:

- ▶ TRL 1 – basic principles observed
- ▶ TRL 2 – technology concept formulated
- ▶ TRL 3 – experimental proof of concept
- ▶ TRL 4 – technology validated in lab
- ▶ TRL 5 – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- ▶ TRL 6 – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- ▶ TRL 7 – system prototype demonstration in operational environment
- ▶ TRL 8 – system complete and qualified
- ▶ TRL 9 – actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)

https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf

VINYL FOUNDATION The Vinyl Foundation is a non-profit making trust run by EuPC in charge of collecting funds – mainly from European PVC converters, but also from other companies from the value chain, who want to be a part of VinylPlus.®

<https://www.vinylfoundation.org>

VINYLPLUS® PRODUCT LABEL Sustainability certification scheme for PVC products in the building and construction sector.

<https://productlabel.vinylplus.eu/>

VINYLPLUS® SUPPLIER CERTIFICATE A scheme developed to certify the upstream sustainability of VinylPlus-labelled products.

<https://vinylplus.eu/progress/25/134/Product-Label>

VinylPlus®

Avenue de Cortenbergh 71
B-1000 Brussels, Belgium
Tel. +32 (0)2 329 51 05
info@vinylplus.eu
www.vinylplus.eu

 @VinylPlus_EU

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