AGPU NETWORKING – KNOWLEDGE – DIALOGUE AGPU 2017-2018

AGPU BOARD



Dr. Oliver Mieden Vinnolit GmbH & Co. KG, Ismaning. Head of Environmental Affairs & Corporate Communications, Chairman of the AGPU Board



INOVYN Europe Ltd., Commercial Manager General Purpose Vinyls, Treasurer of the AGPU



Andreas Kopf debolon dessauer bodenbeläge GmbH & Co. KG, Dessau-Rosslau. Managing Director



Dr. Rüdiger Baunemann PlasticsEurope Deutschland e.V., Frankfurt am Main. Director General



PolyComply Hoechst GmbH, Frankfurt am Main. Managing Director, Vice Chairman of the AGPU Board (till June 15th 2018)



Dr. Dieter Polte VESTOLIT GmbH, Marl. Managing Director



Mailin Bode RENOLIT SE, Worms. Head of Corporate Innovation



Rainer Grasmück Baerlocher GmbH, Unterschleissheim. Advisor SBU PVC Additives



Joachim Tremmel BASF SE, Ludwigshafen. Head of Association Affairs, Industrial Petrochemicals Europe, Vice Chairman of the AGPU Board



Dr. Axel Bruder RENOLIT SE, Worms. Executive Board Member, Chairman of the AGPU Board (till June 15th 2018)



Roland Jahn GEALAN Fenster-Systeme GmbH, Oberkotzau. Advocacy Manager



Stefan Valerius Dekura GmbH, Höxter. Managing Director, Vice Chairman of the AGPU Board

CONTENT

CLOSING LOOPS AND SAVING RESOURCES	3
30 YEARS OF AGPU – 30 YEARS FOR DIALOGUE AND INNOVATION	L
VINYLPLUS – TOGETHER IN EUROPE	e
JOINT AGPU AND VINYLPLUS PROJECTS	8
THE INDUSTRY NETWORK	ç
A VAST POOL OF EXPERTISE	10

OPEN DIALOGUE	11
JOINT PARTNERS	12
20 YEARS OF STARKE SEITEN	13
ADDITIONAL SERVICES BY AGPU MEDIA	14
AGPU MEMBERS	15

CLOSING LOOPS AND SAVING RESOURCES



At the beginning of 2018, the European Commission presented a Europe-wide strategy for plastics in the circular economy. The "EU Plastics Strategy" is only one part of a comprehensive package of measures (Circular Economy Action Plan) to advance the circular economy for important material lifecycles. A goal that we as the German and European PVC industry fully support.

In Germany, AGPU, together with its about 60 member companies, has already set its sights at an early stage on recycling management and recycling, thus setting the course for resource-conserving material cycles and ensuring that PVC is a pioneer when it comes to sustainability. This commitment is now being given an additional boost.

Together with our partners in Germany and Europe, we have been committed to the future viability of PVC for 30 years now. Since 2017, AGPU has also been an associate member of VinylPlus[®], the sustainability programme of the European PVC industry. With this step, we want to make an even stronger contribution than before to making the contents and goals of this voluntary commitment known. With our established recycling activities, we are helping to achieve the ambitious goals we have set ourselves in Europe right from the start.

The European programme has been running for almost 20 years. During this period, around 100 million euros were invested in the development of recycling technologies, collection and recycling systems for the most important PVC products, and recycling volumes were steadily increased. Companies throughout the PVC value chain have also set themselves ambitious targets for the future. VinylPlus has recently announced that it will recycle at least one million tonnes of PVC per year by 2030. The PVC industry is already making a significant contribution to a functioning recycling economy in Europe today and will continue to do so in the future.

Many modern PVC products today are true high-tech wonders thanks to their multitude of properties and functions, which more and more people are enthusiastic about. The new VinylPlus Product Label will make it even easier for consumers to choose particularly sustainable PVC products in the future.

PVC is multi-talented, which convinces in technical, as well as in ecological regard. This is what we continue to work for – together in Germany and Europe.

Dr. Oliver Mieden, Chairman of the Board of AGPU e.V.

. Jueden

THAT'S WHY MEMBERSHIP IN AGPU IS WORTHWHILE

AGPU offers its member companies a number of advantages. At events such as workshops and seminars or in working groups, members meet important partners from the entire PVC industry. In addition, AGPU members have access not only to decision-makers in politics, public authorities, federal states, cities and municipalities, but also to sustainability experts from trade and industry, to architects and developers, to journalists and opinion leaders. The close cooperation with VinylPlus - AGPU has been an associate member since 2017 - looks beyond Germany and opens up the European perspective.

You can find further information about membership in AGPU as well as about the extensive services on our website. We will be happy to explain the details to you personally. Please contact us!



The new AGPU Management Board: Joachim Tremmel (BASF SE) – Deputy Chairman of the Management Board, Dr. Dieter Polte (VESTOLIT GmbH), Stefan Valerius (Dekura GmbH) – Deputy Chairman of the Management Board, Uwe Dietsch (INOVYN Europe Ltd.) – Treasurer, Andreas Kopf (debolon dessauer bodenbeläge GmbH & Co. KG), Mailin Bode (RENOLIT SE), Roland Jahn (GEALAN Fenster-Systeme GmbH), Dr. Oliver Mieden (Vinnolit GmbH & Co. KG) – Chairman of the Executive Board, Thomas Hülsmann – AGPU Managing Director (not member of the Board), Dr. Rüdiger Baunemann (PlasticsEurope Deutschland e.V.). Not on the picture: Rainer Grasmück (Baerlocher GmbH).

30 YEARS OF AGPU – 30 YEARS FOR DIALOGUE AND INNOVATION

In Germany, AGPU has been committed for 30 years now to the innovative and futureoriented material PVC. Thanks to the long-standing support of the member companies from the entire PVC value chain, the right strategy and a competent team, AGPU has in the past successfully mastered the tasks again and again and is thus well positioned for future challenges.

30 years ago, there was no alternative to the foundation of the Arbeitsgemeinschaft PVC und Umwelt e.V.. To this day, nothing has changed, even though the times when the material was the subject of particular criticism are a thing of the past. Thanks to the long-standing commitment of the approximately 60 member companies to the sustainable development of PVC and an open dialogue with stakeholders from all sectors, AGPU and its partners have succeeded in establishing vinyl as an innovative, sustainable and forward-looking material. The fact that modern PVC products today are benefiting more and more people is thanks to their diversity, long service life and performance. They are true high-tech wonders!

> As Chairman of the Board for almost ten years, Dr. Axel Bruder, Executive Board Member of RENOLIT SE, has, with great commitment, played a leading role in shaping the development of the AGPU.





In the publication STARKE ZEITEN, which Federal Environment Minister Svenja Schulze introduces with a welcoming address, 20 companies and partners from the PVC value chain present their contribution to sustainability through innovation on the occasion of the 30th anniversary of AGPU.



Dr. Axel Bruder, AGPU Chairman of the Board for many years, hands over his office to Dr. Oliver Mieden, Head of Environmental Affairs & Corporate Communications at Vinnolit GmbH & Co. KG and member of the AGPU Executive Board for many years.

"The industry set the course early on for resource-saving material lifecycles and ensured that its material met the sustainability criteria. This also benefits the climate: With new buildings and energy-efficient building refurbishment, energy- and resource-efficient PVC building products make a contribution to achieving the climate protection goals of the Federal Government," praised Federal Environment Minister Svenja Schulze in her welcoming address to the 30th anniversary meeting of the AGPU. "For me, environmental policy means modernization policy. They make our country fit for the future. Efficiency technologies and a strong recycling economy are at the forefront. For me, good environmental policy also means involving all actors in order to learn from each other – and this is best achieved through dialogue," said the SPD politician.

At the festive event on 15 June 2018 in Bonn, the two guest speakers were also convinced of the future viability of PVC as a material. For NRW Economics Minister Professor Dr. Andreas Pinkwart, innovative products and manufacturing processes are one of the keys to the future. "We in North Rhine-Westphalia stand for a modern and environmentally friendly industry and create the right framework conditions for sustainable investments," the Minister stressed in his speech. Martin Bastian, Director of the SKZ Institute, was also enthusiastic: "The opportunities for PVC are also great in the future: individual adaptability to the most diverse product requirements and established recycling are the basis for this."

"We have succeeded in positioning PVC among decisionmakers in public procurement as an innovative, reliable and sustainable material for a wide range of applications," said Dr. Axel Bruder, member of the Executive Board of RENOLIT SE and Chairman of the Executive Board of AGPU from 2010 to June 2018. At the General Meeting 2018, at which the AGPU Executive Board was also due to be re-elected, Dr. Bruder handed over the chairmanship to his newly elected successor Dr. Oliver Mieden, Head of Environmental Affairs & Corporate Communications at PVC manufacturer Vinnolit. Joachim Eckstein (PolyComply Hoechst GmbH) also retired from the AGPU Executive Board after 30 years.



AGPU Managing Director Thomas Hülsmann (I.) thanked Professor Dr.-Ing. Martin Bastian, Director of SKZ - Das Kunststoff-Zentrum, for his lecture on the future material PVC.



Professor Dr. Andreas Pinkwart, North Rhine-Westphalia Minister for Economics, Innovation, Digitalisation and Energy, described in his lecture the role of innovations as the key to the future and the trust of industry.



At the VinylPlus Sustainability Forum in Madrid, Brigitte Dero, General Manager of VinylPlus, presented the latest Progress Report.

VINYLPLUS – TOGETHER IN EUROPE

Since 2017, AGPU as an associated member has also been directly connected with VinylPlus[®], the sustainability programme of the European PVC industry, and thus contributes even more to making the contents and goals of the voluntary commitment known in Germany. The enhanced cooperation will share important experience and common competences.

Thanks to their multitude of properties and functions, today, modern PVC products are true high-tech wonders which inspire more and more people. The material is perceived by both politicians and society as one with a future that not only contributes to greater resource and energy efficiency and can be recycled after use, but also has already made an important contribution to sustainability during its use-phase and will continue to do so in the future.

Since the late 1990s, companies in the European PVC industry have set and achieved ambitious targets with their voluntary commitment. With the VinylPlus sustainability programme, this successful path was continued at the beginning of 2011. The VinylPlus programme was developed through open dialogue with stakeholders from industry, NGOs, regulators, civil society and consumers. On the basis of the conditions developed by The Natural Step for a sustainable society, five major challenges were identified for the material. These include increasing the annual PVC recycling volume to 800,000 tonnes by 2020, promoting the sustainable use of additives and developing in the direction of a "low carbon" recycling economy.



A short summary of the VinylPlus Progress Report with the most important results.





The VinylPlus Product Label is the new sustainability mark making it easy for customers, specifiers and markets to identify the most sustainable and high-performance PVC building and construction products.

According to the latest VinylPlus progress report, a total of 639,648 tonnes of recycled PVC was registered in 2017. That is almost 80 percent of the target. Recently, VinylPlus also announced its intention to recycle at least one million tonnes of PVC per year by 2030. Compliance with the targets set – not only in recycling – is essential for the success of the sustainability programme. For example, recycled quantities are independently verified and submitted to a monitoring committee

composed of representatives of the European Commission, the European Parliament, consumer organisations, trade unions, academia and industry.

The sustainability programme involves companies along the entire PVC value chain from the 28 EU Member States, including many from Germany, Norway and Switzerland. Since 2017, the AGPU has also been linked with VinylPlus as an associate member. The Bonn PVC experts and their approximately 60 member companies are thus making an even greater contribution than before to making the contents and objectives of the voluntary commitment known in Germany.

AGPU is an associate member of VinylPlus.



With VinylPlus, the European PVC industry created at an early stage the prerequisites for a recycling economy. The partner companies have been investing intensively in the further development of the sustainability of their processes and products for years. To ensure that this success story can be continued in the future, reliable political framework conditions are crucial. The joint commitment of AGPU and VinylPlus must also continue to focus on sustainability, resource and energy efficiency and the recycling of PVC products – especially since these issues are playing an increasingly important role in politics and society.



PVC RECYCLED WITHIN THE VINYL 2010 AND VINYLPLUS FRAMEWORKS

VinylPlus, the European PVC industry's sustainability programme, registered a total of 639,648 tonnes of recycled PVC in 2017, almost 80% of the target of 800,000 tonnes in 2020.

Source: VinylPlus

vinyl

JOINT AGPU AND VINYLPLUS PROJECTS

For many years, the AGPU has carried out various communication projects in close cooperation with VinylPlus[®] on a number of topics. The aim here is to highlight the sustainability of PVC products and to make the contents and results of the voluntary commitment known in Germany.

The event "PVC Recyclers meet PVC Processors" has existed since 2012. Due to the positive feedback from all participants, this project has already been repeated several times, most recently in 2017. In addition to the kick-off event at Europe's largest specialist conference in the field of demolition and dismantling with over 900 participants, three regional network meetings for PVC processors and recyclers took place during the year. In particular, the focus was on direct discussions with the participants in order to exchange information on their respective offers and requirements. Other topics on the agenda include the promotion of PVC recycling in Germany and the creation of greater acceptance for products containing recycled materials. In addition to AGPU and VinyIPlus, Rewindo, AgPR and Roofcollect have been actively involved since 2017.

Another joint communication project focuses on the advantages of "PVC products in public procurement". Since 2015, the AGPU has regularly published editorial articles on the topics of sustainable construction as well as resource and energy efficiency through PVC products. These have been published in trade journals relevant to the target group, such as KBD -Kommunaler Beschaffungs-Dienst and UmweltMagazin. Both media are aimed in particular at decision-makers in municipal





Ressourcen schonen, Energie sparen

In the journal "KBD - Kommunaler Beschaffungs-Dienst" AGPU, supported by VinyIPlus, regularly publishes articles about PVC products in the context of public procurement.

administrations and companies. In addition to the articles, special editions were produced on selected topics which member companies can use, for example, for information at trade fairs or customer events.

Further projects in 2018 included various dialogue events with decision-makers from politics, authorities and the construction industry, including at the Altkunststofftag of the byse in Bad Neuenahr, the DDIV Verwaltertag in Berlin and the NRW-SPD party conference in Bochum, as well as the continuation of the joint project "Plastic Recycling under REACH and End of Waste Regulations". AGPU has taken over the coordination of the PVC topics. The project was managed by the BKV, other partners were PlasticsEurope Germany, the GKV and the QKE.

The event series "PVC Recyclers meet PVC Processors" is a joint communication project of AGPU and VinylPlus to strengthen recycling.



Lectures and specialist events, such as this on the occasion of the 30th anniversary of AGPU, offer members a forum for the direct exchange of information and personal dialogue.

THE INDUSTRY NETWORK

AGPU counts among its members around 60 partners along the entire PVC value chain and represents the interests of the German PVC industry. One focus is the intensive dialogue with decision-makers from politics, business, trade and NGOs in Germany, which the AGPU has now been conducting successfully for three decades with the active support of its members.

The promotion of the sustainable development of PVC products has always been at the heart of the AGPU, founded in 1988. Through the partnership with the European sustainability programme VinylPlus®, the goals of the European PVC industry will also be made better known in Germany. Active participation in the European PVC network and the creation of added value for the member companies with a clearly defined value promise are among the objectives with which AGPU is committed to the future-oriented material PVC.

AGPU regularly offers its members networking platforms. For example, the "PVC and Environment" workshop, organised twice a year in cooperation with PlasticsEurope Germany in Bonn and Frankfurt/Main, achieved a record number of visitors in January 2018 with 90 participants. In addition, the general meeting with the Round Table of decision-makers from the PVC industry is an important forum for personal dialogue.



Dr. Jenni Meiners, Chemist, Material Development - Organic Materials at Opel Automobile GmbH in Rüsselsheim, presented the future of PVC in automotive interiors at the workshop "PVC and the Environment".



Dr. Ralf-Jürgen Burgstahler, Senior Expert Regulatory Affairs & Product Safety at BASF, spoke at the "PVC and Environment" workshop about various ways of promoting PVC recycling.

A VAST POOL OF EXPERTISE

AGPU brings together the knowledge of many experts and promotes the exchange of their expertise and experience. Information is collected, processed and summarised for this purpose. By constantly monitoring the media and legislation, AGPU acts as the industry's radar.



In line with its motto of "A Meeting of the Minds", since June 2012, the PVC-WIKI has been providing an exclusive knowledge database to all AGPU members working with PVC.

The central knowledge tool available to all members is the PVC-WIKI, which enjoys great popularity among AGPU members. Whether news, data and facts, results of media monitoring or working documents for AGPU committees, the exclusive knowledge database is continuously fed with new information. The medium now has around 300 registered users, offers just under 22,000 documents in the search index and, with around 140,000 page impressions since the launch of the service in 2012, it has shown a high level of acceptance among its members. The knowledge management tool offers its users simple and clear navigation in German and English. It is technically supervised by the experts of the Knowledge Working Group.

The AGPU brochure "Everything about PVC – From Manufacturing to Recycling" provides up-todate data on all relevant topics and will soon be available in a revised form.



AGPU'S WORKING GROUPS: WELCOMING YOUR COMMITMENT!

The Communication Working Group (Arbeitskreis Kommunikation)

The focus of the working group is on defining communication goals, target groups and messages about PVC as well as on identifying relevant topics of importance for the work of the AGPU. The target group oriented approach serves to ensure that quality, economic efficiency and environmental aspects are presented in such a way that decision-makers can choose PVC products with a clear conscience.

The Knowledge Working Group (Arbeitskreis Wissen) In addition to supporting relevant specialist topics and publications, preparing and conducting the "PVC and Environment" workshop and maintaining contacts with other PVC and plastics experts, the working group's tasks also include expanding and maintaining the PVC WIKI.

The Recycling Working Group (Arbeitskreis Verwertung) Recycling as one of the recovery options is an important area for the sustainable development of PVC. In addition to regular working meetings, the working group organises excursions to important recycling plants and evaluates current research projects.

OPEN DIALOGUE

As a reliable partner, AGPU and its members engage in an open dialogue with decisionmakers from business, politics, the media and NGOs. The target-group-oriented approach and convincing factual arguments have made it possible to dispel most of the reservations of critics and build trust among relevant stakeholders.

Communication with selected target groups takes place both within the industry and in exchange with external stakeholders. AGPU has a number of established communication channels at its disposal for this purpose. In addition to personal dialogue and the direct exchange of information at workshops and networking events, AGPU uses, for example, the BLITZ-INFO three times a year to inform around 6,500 environmental decision-makers from all over Germany about the sustainable development of PVC. In addition, AGPU members and selected partners receive the weekly PVC-TICKER. The PVC-BULLETIN is aimed at decision-makers from the European PVC industry.

PVC Aerycling-Finder			PREMIUM PARTNER
In salw over hereit, he is hit wavent.	uller on langements (Pro	GAU SHI AN FIC PROVIDE IMPREMENT	
Million Pril Anyoing Frederick waver bit such	-		
 dis Annahmediams, in our PVC venantant best servicement). 	inclusion destination and prove	when which all them that particular value	
· en bermenne beiging hundet laner be	is seried units defen	on Product and	
 anise Solings (a) times in the Table, Solien () 	a andudi dan 11,2 an		
anse binnet to mer o tor table. Color 1 Art des Bestindes (% organi		0	
Art das Batriadas		BITTE WAREN SE LINKS MER	
An des Batilates	10	OPTIONEN De reternaturet and register o ant	
Art das bestiebes Internet	10	OPTIONEN De riternationer und ingénie in des Unerechnique Phile des Pré-Augusting Index. Auditer des bei det des antipilitations	
At ins buildes the separate Nothergan	10	OFTIONEN De internationel und implace in east Universite composition aux fich Augustry Protein	
At ins boondas (ils regen Hochetzahl Hochetzahl Prakaizant	18 - 16 - 16	OPTIONEN De internationer and ingélier in ann unternationaux d'en an fait Augustes l'Augustes audites au lan ait aut anternationaler presentation aut generation autor to autor bar	

At www.pvcrecyclingfinder.de interested parties can search for companies that recycle PVC or find a variety of PVC recycling products.



The website www.vinyl-erleben.de presents with interesting articles a selection of innovative soft PVC applications.



The following took the opportunity to exchange experiences during the AGPU's 30th anniversary (from left to right): Barbara Hecker-Schilgen, Gisela Steves (Perstorp AB), Dr. Ralf-Jürgen Burgstahler (BASF SE), Hans Joachim Schilgen (FEB - Fachverband der Hersteller elastischer Bodenbeläge e.V.).

Various online offerings supplement the information spectrum and are continuously adapted. For example, AGPU website provides new content about the VinylPlus[®] sustainability programme and the partnership with AGPU. Due to various cooperations with European partners, the PVC Recycling Finder has also been available in an English version since autumn 2018. At present, around 70 PVC recyclers are represented on the platform. The most important AGPU publications are also available in digital format via the PVC-PARTNER app for smartphones and tablet PCs. More than 23,000 app users access this information medium.



The online service www.aktion-pvc-recycling.de offers a wide range of information on PVC recycling and also names contact persons for these various construction products.



At the press conference at the FENSTERBAU FRONTALE 2018 in Nuremberg, PROWINDO informed about the topic "The window to the future: current performance and challenges".

JOINT PARTNERS

AGPU members benefit not only from active participation in the European PVC network, but also from strong cooperation within Germany. Together with other industry associations and partners, AGPU has, among other things, prepared position papers on PVC issues, participated in consultations and carried out numerous projects.

PROWINDO celebrates its tenth anniversary in 2019. The platform combines both the professional and political competence of the sector and is aimed at decision-makers from politics, public authorities, the construction industry and the housing industry. The traditional press conference at the industry trade fair FENSTERBAU FRONTALE in March 2018 in Nuremberg was held under the topic "The window to the future: current performance and challenges". In addition to AGPU, five other partners (EPPA, pro-K, QKE, Rewindo and SKZ) presented solu-



In the "Best Practice for the Environment" campaign launched jointly with Rewindo and AgPR, AGPU identified and supported reference projects in the areas of demolition and dismantling in which PVC building products were recycled. tions that contribute to achieving the climate protection goals of the German government. These include, for example, the new requirements for the material and design of PVC profiles as well as the increase in the amount of old windows recycled. In December 2018, another parliamentary breakfast took place in Berlin. This high level exchange between representatives from politics and the PVC window industry was supported by Ulli Nissen (SPD), member of the Bundestag. For the parliamentary breakfast in March 2017 the deputy chairman of the environmental committee, Michael Thews (SPD), could be won as patron.

Together with Rewindo and AgPR, AGPU launched the **"Best Practice for the Environment"** campaign in the summer of 2016. As part of the cooperation, with the support of other partners in Saxony, Saxony-Anhalt and Thuringia, reference projects were identified and supported in the areas of demolition, dismantling and removal in which, for example, old PVC windows or floor coverings were produced and recycled via the established recycling systems.

The successful campaign is now over after two years. The recently published documentation provides evidence of numerous good examples in the three federal states and beyond. It also illustrates the positive response to the best practice initiative among all participants. This also includes extensive reporting in the daily and trade press. The selected projects should be motivation for many further actions for the purposeful utilization of valuable resources.



The publication STARKE SEITEN was launched in 1998 and clearly brings the benefits of PVC products to the forefront in an entertaining manner.



20 YEARS OF STARKE SEITEN

For the last two decades, AGPU Media GmbH has published its magazine STARKE SEITEN, containing impressive pictures and texts which demonstrate the versatile application possibilities of PVC and the benefits of PVC products. The diversity and reliability of global PVC products is reflected in a variety of areas: from architecture, art and design to leisure, play and health. This creates sympathy for the material, demonstrates the innovative strength of the industry and creates trust in the products.

Decision Makers as a Target Group

The magazine STARKE SEITEN is published three times a year with a circulation of 26,500 copies. The publication celebrated its 20th anniversary in 2018. For this reason, the special supplement STARKE ZEITEN was enclosed with a partial edition. In it, 20 companies and partners from the PVC value chain presented their innovative strength on the occasion of the 30th anniversary of AGPU.

Whether energy and resource efficiency, innovation or healthcare, each issue focuses on a different topic with concrete application examples for vinyl products. English editions on special occasions, such as the K plastics fair in Düsseldorf, expand the readership.

The continuously growing and constantly updated personalised distribution list is unique in the specialist media landscape and appeals to a broad target group: from decisionmakers for the use of PVC such as architects, employees from building and environmental authorities, from the housing industry as well as the largest German commercial enterprises to members of parliament and ministry officials, representatives from science, members of AGPU and other companies from the PVC industry. AGPU sends a partial edition together with the BLITZ-INFO, which summarises current information on the sustainable development of PVC, to around 6,500 environmental decisionmakers from politics, administration, industry and trade. The supplement and an additional personally addressed cover letter focus on particularly important topics for this target group.



The media data contain all relevant information on STARKE SEITEN and can be accessed online.