











**Vinyl 2010 Progress Report 2008**Reporting on the activities of the year 2007

# **Executive Summary**





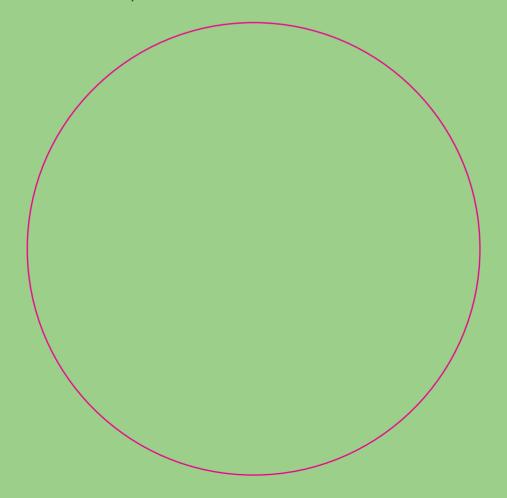
## **EXECUTIVE SUMMARY**

## The Progress Report, the Voluntary Commitment and Vinyl 2010

Sustainable Development and product stewardship across the life cycle of PVC have inspired the approach of the European PVC industry's Voluntary Commitment since its origin in 2000. Vinyl 2010 is the organisation set up to put the Commitment into practice minimising the environmental impact of the PVC production, promoting a responsible use of additives, supporting collection and recycling schemes, and encouraging the social dialogue with all stakeholders. The Progress Report is Vinyl 2010's annual review of progress towards the concrete and measurable targets set out in the Voluntary Commitment.

## **Developments in 2007**

Closer to the symbolic date of 2010, Vinyl 2010 concentrated its efforts in 2007 towards the achievement of its targets, particularly in terms of collection and recycling, with a further substantial increase of recycled volumes of PVC waste. But Vinyl 2010 is also becoming more and more of a reference point on material and product sustainability for the whole of the PVC industry, providing guidelines and sharing knowledge and best practices. Life-cycle approach and stakeholder dialogue have been confirmed to be key elements for the success of Vinyl 2010 as well as the commitment of the whole of the PVC industry value chain.





#### **Resin Manufacturing**

In 2007, based on the latest PVC Eco-Profiles, the PVC industry developed and published Environmental Product Declarations (EPDs) for Suspension-PVC (S-PVC) and Emulsion-PVC (E-PVC). These documents provide a clear and objective picture of the environmental performance data with suitable indicators, for example on greenhouse gas emissions, as well as additional information on health implications and performance aspects.

This data will help industry, academic and other third parties in defining subsequent profiles and assessments.

#### **Plasticisers**

Following the publication of the EU risk assessments on the most commonly-used phthalate plasticisers diisononyl phthalate (DINP), diisodecyl phthalate (DIDP), dibutyl phthalate (DBP) and di-(2-ethylhexyl) phthalate (DEHP), ECPI (the European Council for Plasticisers and Intermediates) has undertaken a major study on human volunteers. The purpose of the study is to define the best methodology in order to correctly measure DEHP and DINP metabolites in humans, and therefore the levels of acceptable exposure.

#### **Stabilisers**

ESPA (the European Stabiliser Producers Association) continued the progressive lead replacement (-34% in the period 2000-2007 in the EU-15), confirmed by the corresponding increase of the use of calcium-based stabilisers. In 2007 the commitment of 100% phase-out by 2015 was also extended to the EU-27.

Following the EU enlargement, the phase-out of cadmium was actually completed in the EU-27 by the end of 2007.

#### **Waste Management Projects**

In 2007, 149,463 tonnes of post-consumer PVC waste were recycled through Vinyl 2010 projects, an 80% increase on 2006 levels.

Recovinyl (the organisation set up in 2003 with the aim of supporting and developing PVC waste collection and recycling schemes) has progressively integrated the collection and recycling initiatives previously directly managed by the EuPC sectoral projects.

In 2007, Recovinyl increased its activities in several European countries and confirmed the effectiveness of the process with a huge increase of registered recycled volumes reported: from 44,690 tonnes in 2006 to 111,322 tonnes in 2007.

Some highlights from other Vinyl 2010 sectoral projects were:

- EPPA (the European PVC Window and Related Building Products Association) has progressively integrated its recycling activities in Recovinyl. Overall the recycling of window profiles and window-related profiles reached 56,046 tonnes (+ 51%) in 2007.
- EPFLOOR (the European PVC Floor Manufacturers Association) increased both collection (by 24%) and recycling (by 16%) volumes in 2007, with a final result of 2,054 tonnes recycled, close to the target of 2,200 tonnes.
- TEPPFA (the European Plastic Pipes and Fittings Association) has integrated most of its activities into the Recovinyl system. Overall the recycled volumes for pipes and fittings almost doubled in 2007, reaching 21,236 tonnes.



- ESWA (the European Single Ply Waterproofing Association) recycled 6,627 tonnes through its project ROOFCOLLECT®, well exceeding its target of 2,520 tonnes.
- EPCOAT (EuPC's PVC Coated Fabrics) faced several challenges such as the quality of available waste with a lower percentage of PVC used in coated fabrics and increases in gate fees of some recycling plants. This affected the volumes of recycling achieved, with a total of 2,609 tonnes being achieved for the year.

#### **Recycling Technologies and Trial Plants**

Vinyloop® is a mechanical recycling technology based on separation by the use of solvents, operating in a plant at Ferrara, Italy. In 2007, the plant further improved its performance, processing 8,191 tonnes of PVC waste, almost 14% over the target.

The gasification plant technology for waste demonstrated by the German company Sustec Schwarze Pumpe GmbH (SVZ), did not convince the market because of the existence of cheaper solutions, and in 2007 SVZ ceased operations.

Vinyl 2010 is currently exploring the possible use in Europe of a feedstock recycling process based on Sumitomo Metal gasification technology. The first step was the identification of a suitable location for a potential 30kt plant in Europe. At the moment some locations found in Germany are under evaluation.

#### Other Projects

REACH – Following the recommendation of the Monitoring Committee, Vinyl 2010 will initiate an impact assessment of possible options to reconcile recycling of waste containing certain types of additives with the restriction provisions of the REACH regulation.

The Vinyl Foundation is the new initiative set up by EuPC with the assistance of Vinyl 2010 to collect funding contributions, in a fair and equitable way, from all PVC converters, including those not represented in the industry associations. It is a non-profit independently-managed trust. The accountancy firm KPMG has been appointed to operate a confidential 'black box' system and independently administrate the collection of funds on behalf of the Vinyl Foundation. KPMG will handle all the information collected in the strictest confidence, in full compliance with the EU competition laws.

## Monitoring, Access to Information and Stakeholder Relations

#### **Guidance from the Monitoring Committee**

The Monitoring Committee is the independent body set up to check the progress of the Vinyl 2010 programme.

The Monitoring Committee is formally called twice a year under the chairmanship of Professor Alfons Buekens of the Free University of Brussels (VUB).

#### **Finance**

Expenditure by Vinyl 2010, including EuPC and its members amounted to  $\leq$ 7.68 million in 2007, up from  $\leq$ 7.09 million in 2006.

#### **Independent Auditors**

Vinyl 2010 is committed to transparency and has engaged independent auditors and verifiers.

- The financial accounts of Vinyl 2010 were audited and approved by KPMG.
- KPMG also audited the statement of tonnages of products recycled.
- The Progress Report 2008 was reviewed by DNV and verified as giving a true and honest representation of Vinyl 2010's performance and achievements.





#### **Encouraging Dialogue with Stakeholders**

An ongoing dialogue is an important component for Vinyl 2010 if it is to represent the interests of its stakeholders both inside and outside the industry. In 2007, Vinyl 2010 participated in several international conferences and exhibitions, reinforcing the network of relationships with the scientific and academic community, with the authorities, and with the rest of the industry. The partnership between Vinyl 2010 and the other PVC regional associations, from North to South America, from Australia to the Asia-Pacific region is of great importance.

In 2007 Vinyl 2010 launched its first Sustainable Development Essay Competition intended to engage young European people on the issues surrounding this very topical subject.

The Essay Competition with the theme 'Are sustainable development and economic growth mutually exclusive?' was judged by an independent Judging Panel of European sustainable development experts. The full set of entries has been published at www.vinyl2010.org.

To provide a forum for the exchange of views about its strategy, programme and initiatives, Vinyl 2010 hosted events during 2007 specifically dedicated to its stakeholders. The first Stakeholder Networking Event was held in the European Parliament Members' Dining Room, to present the Annual Report. A second Stakeholder Networking Event was organised in Brussels to officially introduce the new Vinyl Foundation.

Since 2004 Vinyl 2010 has been a registered Partnership with the Secretariat of the UN Commission on Sustainable Development.

Vinyl 2010 Progress Reports and Executive Summaries, published since 2001, can be downloaded from **www.vinyl2010.org**.

### **Key Achievements 2000-2007**

- Recycled tonnages increasing exponentially: 14,255 tonnes in 2003, 18,077 tonnes in 2004, 38,793 tonnes in 2005, 82,812 tonnes in 2006 and 149,463 tonnes in 2007
- Publication of Environmental Declarations (EPD) for S-PVC and E-PVC (2007)
- Cadmium stabilisers phase-out completed in the EU-15 (2001), EU-25 (2006) and EU-27 (2007)
- Lead stabiliser phase-out by 2015 extended to the EU-25 (2006) and EU-27 (2007)
- Phthalate risk assessments completed (2005-2006) and published (2006-2007)
- Risk assessment on lead stabilisers published (2005)
- 15% reduction in lead stabiliser use achieved ahead of time (2005)
- External verification of ECVM S-PVC and E-PVC production charters (2002 and 2005 respectively)
- Registration of Vinyl 2010 as a Partnership with the Secretariat of the UN Commission on Sustainable Development (2004)
- 25% recycling of pipes, windows and waterproofing membranes (2003)
- Bisphenol A phased out of PVC resin production in all ECVM member companies (2001)



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