

# PVC TODAY

MAKING POSSIBILITIES TOGETHER — SUMMER 2008

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## Renewable Energy — Cambodia Invests in Biogas

Hung Up:  
Opera Singers in Vinyl

Hung Around:  
60 Years of "Black Gold"

Hung Across:  
New Sky for Switzerland



Keep it clean: cooking with biogas as an alternative to extremely smoky fires.

# BIOGAS FOR CAMBODIA

Devastating environmental catastrophes such as the earthquake in China and the "Nargis" cyclone in Myanmar have called international relief organisations into action. No matter whether this involves water purification systems, food, tents or medicine, the survivors need help. However, other regions are dependent on international aid as well. This is seen in the case of Cambodia. Bio-digesters have been developed there with simple building products such as cement, bricks and PVC pipes which greatly improve the daily lives of the inhabitants. This substantially contributes to sustainability since the environment and the economy also benefit.

The population of Cambodia in Southeast Asia is battling the consequences of a decade-long war. Surviving primarily on rice farming and raising animals, the inhabitants lead a labour-intensive and strenuous existence and suffer from many privations. In the mostly substandard dwellings, food is prepared over an extremely smoky wooden fire; the energy used to operate the lamps comes from a car battery. It is a country far removed from the normal conditions of life. That is why the Cambodian Ministry of Agriculture, Forestry and Fisheries (MAFF) started the "National Bio-digester Programme" (NBP) together with the Netherlands Development Organisation (SNV). As part of the pilot project which extends until the end of 2009, 17,500 bio-digesters will be built in selected regions. They will bring about considerable improvement to the living and hygienic conditions in these homes, bolster the domestic economy, and ease the burden on the environment.

A typical farmer's house: new bio-digesters are built here. The manure to produce renewable energy is right in front of the door.

PVC pipes which transport biogas to the points of use are protected from the intensive rays of the sun by simple means such as old tyres.



## Effective Health Protection

Small farmers use biogas from the newly built bio-digesters for cooking and lighting. "This is incredible progress because until now cooking fires in homes often led to extremely smoky conditions and respiratory illnesses," reports Jan Lam, responsible for the project at the Dutch development organisation SNV, which provides technical support for the programme. Furthermore, women need considerable time to gather a minimum of six kilograms of firewood required per household each day. This

## BACK TO THE SUNLIGHT

On bright, warm summer days we feel especially well because, as everyone knows, light helps against depression and brightens our mood. But for some people, time in the sun is too dangerous because they suffer from a rare genetic defect. Thanks to a PVC film which prevents ultraviolet rays from penetrating, they can venture back into sunlight.

Markus Prenting, 12 years old, spent the first years of his life at home or in the dark. At the age of 12 months, doctors diagnosed him with the rare skin disease xeroderma pigmentosum (XP). In Germany alone, approximately 50 people suffer from this genetically caused disease which is popularly called "midnight disease". Damage caused by ultraviolet rays is irreparable. Therefore, the danger of suffering from skin cancer is 2,000 times higher than with healthy people. In order to prevent life-threatening skin tumours, time spent outside during the day is only possible with protective clothing and sunscreen with an extremely high sun-protection factor. Even in the summer, their bodies remain hidden under jackets, jumpers, gloves and long trousers. It is especially important that their sensitive facial skin remains protected from dangerous ultra-



violet rays. Therefore midnight children often wear caps made of UV-resistant material with a transparent PVC film hanging from it. This filters the ultraviolet rays while providing the necessary transparency. It is a simple, yet effective solution which Sandra Webb, head of an English self-help group, discovered so that



Markus Prenting (with a ball and in the water) is leading an almost normal life today thanks to the UV-resistant PVC film. Another XP patient from England pictured here even visited the pyramids in Egypt.

## Good News from Germany

those suffering from XP could also go out into the sunlight. The film has been distributed worldwide. Thanks to the film, 12-year-old Markus today leads an almost normal life. His parents, Moni and Dirk Prenting, have founded a self-help group in Germany to help those suffering from XP through donations.

In the summer of 2007, the UK manufacturer of the protective film stopped production. An odyssey lasting several months began in the search for another film supplier. A company was sought worldwide with the support of English and American self-help groups, unfortunately to no avail. Welcoming news finally arrived from Renolit AG in Worms, Germany, where the Prentings' inquiry landed on the desk of Mike Holzemer, Head of Sales. It was immediately clear that Renolit would help the midnight children and provide the urgently needed film free of charge. After a comprehensive examination of the previously used material, the company supplied a soft PVC film from its own range of products with the required specifications. In the meantime, 1,000 kilograms of transparent PVC film with high ultraviolet protection have left the plant. "This amount is enough to supply XP patients who are known to us worldwide with the essential film for three years," the Prentings happily report in the name of all midnight children. [www.xerodermapigmentosum.de](http://www.xerodermapigmentosum.de), [www.renolit.com](http://www.renolit.com)





Bio-digester shortly before its completion.

### New Markets for Bio-digesters

Bio-digesters exist in four different sizes. The smallest unit requires between 20 and 40 kilograms of manure for a daily gas production of up to approximately 1.5 m<sup>3</sup>. With this amount, an individual cooker can be operated for three-and-a-half to four hours per day. Supposing that 80 percent of the biogas produced each day is consumed, then the amount of gas used replaces about six kilograms of firewood. The cost of the system including gas cooker and lamp is approximately US \$350. Financing is paid by the farmers and subsidised by the NBP. The small loans taken out for this are usually paid back within two years.



Future biogas user in front of a completed system.

is not only burdensome, but also a less environmentally friendly way to produce energy since a large number of the trees are being cut down without any appropriate controls.

Private households consume over 80 percent of the overall energy produced in Cambodia. But only nine percent of the rural population is connected to the electricity network. Many

### Practical Technology

In selecting the bio-digester, those responsible for the project decided on a system which has functioned successfully in India for over 20 years. With the help of the planned biogas programme, CO<sub>2</sub>-emissions in Cambodia can be reduced annually by more than 100,000 tonnes according to the SNV. The installed systems are operational for 15-20 years. They conform to all requirements in terms of economic efficiency, functionality and simple maintenance. This also applies to the required building materials such as cement, bricks and PVC pipes which are all available locally. The durable pipes used are extremely robust and resistant. They can be easily installed, are economical, and require hardly any maintenance.

The functional principle of bio-digesters is easy to envision: it is an indispensable prerequisite for the success of a project in a developing country such as Cambodia. Mixed together with water, the manure reaches an underground bricked dome through a PVC pipe. At the same time, human excrement can be transported from an integrated toilet through a separate PVC pipe. The material ferments and releases gas which rises in a container. From there it reaches the place of use such as a gas cooker or lamp through a small PVC pipe. The resulting biogas is renewable energy which is part of a closed ecological life-cycle. Waste from the bio-digester is then used as valuable fertilizer and helps to increase agricultural production.



This gas lamp is illuminated with biogas.

The success of the project is primarily due to the professional training of all participants, which is a very high priority within the programme. Therefore, bio-digesters are built, monitored and repaired exclusively by craftsmen who have completed the appro-

appropriate technical training. For this purpose, the NBP in Phnom Penh has built its own technical training centre. Following the successful completion of the pilot phase, the biogas programme is supposed to be extended to possibly all regions of Cambodia. "In the long run, we would like to develop the business with bio-digesters into its own branch of economic activity in Cambodia," says Lam. This is seen in the example of Nepal where 172,000 functioning bio-digesters are already in use. An entire branch of bio-digester builders, suppliers, and financial institutions have profited from the project in the meantime. It is an example which has gained continuous support. For this reason, two million bio-digesters are supposed to be built in Africa in the next ten years. This is another ambitious project towards sustainable development through which social as well as economic and ecological goals will be realised.

[www.nbp.org.kh](http://www.nbp.org.kh)



Farmer's kitchen with gas lines. The renewable energy is used here.

people therefore produce artificial light with the help of their car batteries which are comparatively expensive to recharge on a regular basis. Thanks to the proven biogas technology, simple gas lamps can now also be used. Toilets can also be integrated into the system. This is increased hygienic progress for families because normally the toilet is simply a hole in the ground behind the house. Once it fills up with water during the rainy season, there are often cases of diarrhoea. Now the human excrement lands in the bio-digester where coli-bacillus and other germs are rendered harmless.

Photos: SNV Cambodia, Jan Lam



Laying PVC pipes: one to transport the manure, the other for excrement from the toilet.

"quite a compelling account. And all environmentalists should take heart from it; it shows that substantive progress in this industry is possible, is going on..."

**Jonathan Porritt**  
Chairman of the UK Sustainable Development Commission



## PVC: REACHING FOR SUSTAINABILITY

**D**r Mark Everard is an environmentalist who first became involved with the PVC industry in the preparation of a study entitled 'PVC: An Evaluation Using the Natural Step Framework', which was published in 2000. Eight years on he has authored this new book reviewing the origins of the concept of sustainability, outlining contemporary thinking about the materials that society uses. He has then

used this as a context for reviewing how these concepts can be applied to the PVC industry and the real sustainable development progress that has been made by sectors of the industry since his first study back in the 1990's. 'PVC: Reaching for Sustainability' can be ordered from the environment section of the online shop at: [www.bpf.co.uk](http://www.bpf.co.uk)

# CERTAINLY CONVINCING

Some stories touch us deeply. This is because they show us very clearly that social projects involving sustainable development often go hand in hand with simple means and are valuable both economically and ecologically. Such is the case in Cambodia. Through the construction of 17,500 bio-digesters, a segment of the population there can produce its own gas which is urgently needed for cooking and lighting. These systems, which cost approximately US \$350 and are made of simple building materials such as bricks, cement and PVC pipes, provide a considerably healthier and more comfortable life. At the same time, a branch of economic activity has developed from the project and the environment benefits as well. It is a major leap forward for farming families whose life has been marked by poverty and privation.

But you don't have to travel to Cambodia to discover simple resources making an enormous improvement to the quality of life. The German film manufacturer Renolit has made 1,000 kilograms of a PVC film with high UV-resistance available free of charge to people suffering from the rare midnight disease xeroderma pigmentosum. The film protects the sensitive facial skin of the afflicted individuals from dangerous ultraviolet rays which can cause enormous damage when left unfiltered. Now, those suffering from the disease can venture back into the sunlight.

The 60th anniversary of the good old vinyl record shows that PVC has also made history. It is an example of the innovative strength of the plastic material and by no means the only one. Flooring and PVC window profiles have also enjoyed half a century of successful use. And there are continuously new applications as our interview with Bernd Wiederhold from GEALAN shows. Window profiles with PVC cores made from recycled materials have the same positive properties as frames made from new PVC. It is a successful example of a closed materials cycle to conserve resources.

As always, you will find many examples of the multi-facetted use of PVC material in this edition. For example, an artificial sky made of vinyl net extends across the streets of Basel in time for the European Cup in football. It's a breath-taking roof for visitors to the art metropolis.

Allow yourself to be inspired and enjoy reading the articles. And tell us which stories you particularly like or what you would like to read more about in the future. We always look forward to your opinions and suggestions for exciting new stories.

Werner Preusker  
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## IMPRINT

Publisher in Germany:  
PVCplus  
Kommunikations GmbH  
Am Hofgarten 1-2  
D-53113 Bonn  
Telephone: +49-2 28-91 78 30  
Fax: +49-2 28-5 38 95 96  
E-Mail: pvcplus@pvcplus.de  
Internet: www.pvcplus.de  
Contact: Werner Preusker

Publisher in Switzerland:  
PVCH-Arbeitsgemeinschaft  
der Schweizerischen  
PVC-Industrie  
c/o KVS  
Schachenalle 29c  
CH-5000 Aarau  
Telephone: +41-62 832 7060  
Fax: +41-62 834 0061  
E-Mail: info@pvch.ch

Internet: www.pvch.ch  
Contact: Norbert Helminiak

Publisher in Europe:  
The European Council of Vinyl  
Manufacturers  
Avenue E Van Nieuwenhuysse  
4 Box 4  
B-1160 Brussels  
Telephone: +32-2 676 7441  
Fax: +32-2 676 7447  
E-Mail: info@vinyl2010.org  
Internet: www.ecvm.org  
Contact: Chris Welton

Total number of copies: 5,500  
Created by: www.hl-dialog.de

Cover picture:  
Biodigester  
SNV Cambodia, Jan Lam

# PLAY THE VINYLGAME

**A new online computer game, 'Vinylgame', has been designed for Vinyl 2010 – the European PVC industry's sustainable development programme – to challenge players to manage a virtual PVC industry whilst meeting sustainable development goals. The game challenges players to handle the daily socio-economic and environmental decisions involved in running their own PVC business. Whilst fun to play, the choices faced by the player help to illustrate the challenges in balancing economic growth with the sustainable development of a manufacturing industry.**



Throughout the game, the consequences of playing purely for economic growth without regard to production safety, environmental consequences or post-use recycling become apparent as society in the virtual scenario responds and the trade unions vote to take strike action or legislative measures are brought against the player.

Katie LaZelle, 26, from the European Parliament tested the Vinylgame: "I am really interested in sustainable business practices and this affects my consumer choices. Yet during the game, when faced with investment decisions, against a ticking clock, I managed to score a sustainability rating of only 14%. Obviously, I have some learning to do about

what makes good business sense and how to create a sustainable industry."

As part of the European Commission's Green Week 2008, the Vinylgame was promoted at the Vinyl 2010 stand. Throughout the course of the four-day event, participants from all over Europe were invited to try out the game and each day an iPod shuffle was awarded to the player achieving the best economic growth whilst maintaining a responsible sustainable development programme.

Following the success of the Sustainable Development Essay Competition in 2007, the Vinylgame is another way in which Vinyl 2010 hopes to educate a wide range of stakeholders not only on the complexity of the PVC industry but also how a Voluntary Commitment approach like Vinyl 2010 can strategically address the challenge of the future sustainability of the PVC industry across the entire product value chain.

Info: [www.vinyl2010.org](http://www.vinyl2010.org)



Katie LaZelle tested the new 'Vinylgame' for sustainability.



Pieter De Corte (Belgium), Elise Renault (France), Ana Roche (Portugal) and Andrzej Szeremeta (Poland), from left to right, got top scores for sustainable management in playing the 'Vinylgame' and each won an iPod shuffle.

Before – after: the office on the right with sustainable products immediately makes a much more positive impression.



British Loose Leaf not only offers its customers possibilities for recycling office stationery, provisions have also been made for reusing other recyclable materials.

**PVC is the material of choice for many office stationery articles such as files. However, customers have lacked the possibility of returning used products for recycling. That is now changing with the Recycling Guaranteed™ programme of a UK stationery manufacturer.**

Based in Crayford, Kent, British Loose Leaf manufactures office stationery such as ring binders, lever arch files and presentation products in large numbers, including specially-designed customer solutions. Whenever possible, recycled material is reused. The manufacturer now offers a recycling programme geared towards sustainable development. All products delivered by the company, such as those made

of PVC, can be returned for recycling by the customer after use. The stationers, with whom the manufacturer works closely, present their products in catalogues together with the possibility of returning used materials as part of their purchasing contracts in both the UK and all of Europe.

#### Too Good for Rubbish

Until now, lever arch files and ring binders have landed in the rubbish since it was not possible to recycle large amounts of the material. The recycling companies lacked the necessary equipment. Moreover, they did not have any experience in separating the various stationery materials from one another in order to recycle them separately afterwards.

British Loose Leaf has now made that promise deliverable by investing in the space, new equipment, and the corresponding process development required.

#### Effective Logistics

The company has organised the logistics for the return system through various channels. Instead of having vehicles drive back empty after delivering new products, they now transport articles from the UK manufacturer back at the end of their useful life. It is an economically and environmentally sound solution. Additionally, the stationery manufacturer has signed cooperation agreements with recycling companies. They transport the used products that customers have purchased from British

Loose Leaf to their own storage areas. Afterwards, the manufacturer collects the materials from there. Customers who use British Loose Leaf products can also return any files from other manufacturers free of charge for recycling. This is another important factor which is of immediate benefit and makes the venture even more attractive.

British Loose Leaf has strengthened its market position and gained new customers through this unique recycling guarantee in the UK. Through its Recycling Guaranteed™ programme, the company has integrated PVC more firmly into the stationery business as a more environmentally friendly material.

[www.bll.co.uk](http://www.bll.co.uk)

Photos: British Loose Leaf

## INTERVIEW: RECYCLING PROFILES

**Interview with Bernd Wiederhold, Environmental Manager at GEALAN Fenster-Systeme and winner of the Environmental Award by the German Environmental Management Association**

**Mr Wiederhold, GEALAN offers its customers window frames with inner-cores made of recycled PVC materials in addition to PVC profiles made of new material. Why?**

+++ Unmixed PVC granulates can be ground-down from used PVC profiles and from production off-cuts. This material is extremely well suited for the production of high-quality new frames. For windows, the recycling process can be repeated several times over without any negative effects on the material or processing quality. Along with a majority of the German profile manufacturers, GEALAN is therefore pursuing the goal of increasing the number of windows, doors, and roller shades made from recycled plastic materials as part of the Rewindo recycling initiative. In doing so, an important contribution is made towards Vinyl 2010, the voluntary commitment of the European PVC industry. In this commitment, the industry has pledged to fulfil established recycling quotas for PVC post-consumer waste across the board. What is more obvious for sustainable development than to use

materials from old products for the production of new profiles? After all, PVC granulates are a valuable raw material in view of increasingly scarce resources. This applies equally in the growing markets of Eastern Europe such as in Poland, Romania and Lithuania where GEALAN is represented by subsidiaries and affiliated companies.

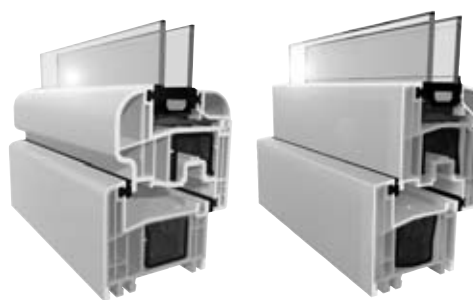
#### What is meant by window profiles made from PVC recycled materials?

+++ These window profiles have a core made of high-quality recycled material and a covering layer made from virgin PVC. Production is



Not only ecologically convincing: recycled profiles made of PVC.

carried out in two extruders which are joined by a special coextrusion tool. This special processing method allows for the inseparable combination of recycled and new material. By the way, thanks to coextrusion, GEALAN has been able to offer a profile system with a recycled inner-core since 1996. This meets the high demands that we place on our environmental management system.



Window profiles with an inner-core made of recycled PVC material have the same positive qualities as frames made from 100% virgin material.

#### Is there a difference between window profiles made of recycled material and traditional frames?

+++ PVC profiles with recycled inner-cores made by GEALAN fully meet the quality demands of modern plastic window systems. Prior experience and numerous examinations have shown that they display the same positive qualities as profiles made of virgin material. In general, plastic windows already enjoy a positive ecological profile and offer cost



Bernd Wiederhold, Environmental Manager at GEALAN Fenster-Systeme.

advantages throughout their entire life-cycle, which is approximately 40 years. This is not only due to their affordability, but also because they are extremely easy to clean and maintain, never requiring a coat of paint.

And in terms of appearance there is no difference between PVC windows with an inner-core made of recycled material and frames made from 100% virgin material because the outer visible layer is made of identical virgin PVC material. These windows display the same weathering properties as windows made of 100% virgin material and offer the same diverse range of designs in various colours and grains. With recycled windows, customers choose a product with enhanced ecological benefits. They therefore make a greater contribution to sustainable development while not having to sacrifice any comfort or quality.

[www.gealan.de](http://www.gealan.de), [www.rewindo.de](http://www.rewindo.de), [www.vinyl2010.org](http://www.vinyl2010.org)

Photos: GEALAN Fenster-Systeme

New product by Optimal Media Production: the new vinyl disc is a record and CD or DVD in one.



Whether it's the state of Israel, the Declaration of Human Rights; or legendary vehicles such as the Land Rover, Porsche and 2CV: all are celebrating their 60th anniversary this year. And this is also true for the humble vinyl record, the "black gold" of music enthusiasts. An innovation that rang in a new era in the history of sound recording.

## 60 YEARS OF 'BLACK GOLD'

When Dr Peter Goldmark at CBS America developed the first marketable long-playing record made of PVC in 1948, he revolutionised the music industry. In comparison with the prior shellac discs, the new low-noise material had a number of advantages which led to a worldwide breakthrough. Vinyl records were the first to play at a speed of 33 <sup>1</sup>/<sub>3</sub> rotations per minute instead of the previous 78. Considerable improvements in the tone and sound quality, as well as a distinctly longer playing time of up to 30 minutes per side, were



Attractive bowl in an LP-design: Jeff Davis gives old vinyl records a new life.



convincing arguments for the music industry. Moreover, PVC was considerably more affordable and less sensitive than shellac.

### A Huge Fan Community

The vinyl record reached its zenith in 1981 with 1.14 billion albums sold worldwide. Special

editions made of coloured or transparent vinyl or picture discs with printed images are still collectors' items today. Its soaring flight ended with the introduction of the CD. Sales figures continued to decrease in the mid-1980s. But actually this did not dampen the popularity of vinyl records with enthusiasts. Many music lovers still value the full and warm sound, even if vinyl records can sometimes sound a bit scratchy. Huge markets attest to this, where collectors' items are fervently bargained for. And new vinyl records are also in demand. In 2007 alone, approximately 0.7 million albums were sold in stores. With

the recently-introduced vinyl disk, a combination of analogue record and CD or DVD, the manufacturer, Optimal Media Production, is expecting additional sales success.

### Second Life for the Hot Items

Trillions of old vinyl records still exist worldwide. Many of them are damaged and hardly playable. In order to save them from being thrown away, Jeff Davis of the American company Vinylux has given them a second life. In the past five years, the young designer has turned more than 400,000 vinyl records into new products such as clocks or bowls. PVC waste from the production of his objects and old album covers are recycled. Davis has reduced the packaging of his products to a minimum. For this innovative idea, he was honoured with the International Design Resource Award for excellence in sustainability and environmentally friendly design.

[www.musikindustrie.de](http://www.musikindustrie.de), [www.optimal-online.de](http://www.optimal-online.de), [www.vinylux.net](http://www.vinylux.net)

Photos: Jeff Davis, Vinylux, and Optimal Media Production GmbH



## PLASTICS IN MODERN MEDICINE

The Thackray Museum in Leeds, in the UK, presents its visitors with an extensive collection of instruments, devices and useful materials from the history of medicine. Now the museum has added an exhibition called "Fantastic Plastic" dealing in particular with the role of plastic materials in modern medicine.

Plastics have a long tradition in patient care. And this applies particularly to PVC, a very well-researched material, which has been used in many fields of medicine for over 50 years. The new exhibition "Fantastic Plastic" at the Thackray presents a wide range of modern plastic materials with easy-to-understand explanations. Extremely thin transparent PVC film for treating burns, stable blood bags, sterile disposable gloves to prevent infection, or respiratory masks and life-saving tube systems: they are all indispensable in today's medical care and save many human lives each year. These and many other products are on display in the new permanent exhibition "Fantastic Plastic" in the UK museum, which tells the story of medicine. This latest addition to the museum brings the story of medicine right up-to-date with the latest developments in medical care.

### The Medical Field Yesterday and Today

First opened in 1997, the Thackray Museum now attracts approximately 75,000 visitors



The new exhibition "Fantastic Plastic" in the Thackray Museum in Leeds shows a wide range of plastic medical products with PVC playing a central role.

each year. Families with children and school pupils make up the largest proportion of visitors and 24,000 children a year visit the museum as part of their school curriculum. The goal of the museum is to make the history of medicine accessible in practical terms and to provide information about the medical care in the past, which was so very different from the standards we take for granted today. The new exhibition highlights the advantages modern patient care enjoys in being able to utilise modern polymer technology.

### Productive Cooperation at Work

It took staff at the Thackray over two years to research and prepare the new exhibition. In addition to the physical displays the project includes teaching materials for schools and a new section on the museum's internet site which discusses the challenges that plastics have had to face more recently in medical applications, allowing young people to learn about the scientific facts and make their own judgements. The project idea originated and

was sponsored financially by UK PVC medical compounds producer Hydro Polymers, now part of INEOS Chlorvinyls/Films and Compounds; along with the UK based Institute of Materials, Minerals and Mining (IOM3). It also received international support in the latter stages with help and advice from the PVC Information Council Denmark. Overall the whole experience of working with industry was very positive and productive, reports Almut Grüner, Chief Executive of the Museum. The partners involved gave an invaluable insight into the medical plastics industry and provided curators from the museum with a unique opportunity to visit two companies to get an idea of the production process for PVC medical compounds and products. This was genuinely appreciated and the curators admit made a real impact on their understanding and approach to developing an exhibition that promises to make a vital contribution to science education over the coming years.

[www.thackraymuseum.org](http://www.thackraymuseum.org)

Photos: PVC Information Council Denmark

# CAPTURED IN PLASTIC

Captivity and liberation: these themes are common motifs throughout the opera "Ariane et Barbe-Bleue" which celebrated its premiere in Paris in 1907. During the performance of the work in the Frankfurt Opera in spring 2008, these motifs were reflected in an unusual setting. Stable PVC curtains had their remarkable debut on the stage.



Robust PVC curtains play an important role in the stage design of the opera "Ariane et Barbe-Bleue" in Frankfurt.

It took Paul Dukas seven years to compose the opera "Ariane et Barbe-Bleue" which is now being performed under the direction of Sandra Leupold in Frankfurt. Maurice Maeterlinck wrote the libretto for this moving story of constraint and freedom as a fairy tale in three acts. In the story, Duke Blaubart locks his five ex-wives in a cellar vault one after the other where they endure a vegetative existence. It is his sixth wife, Ariane, who first gets on the trail of the mysterious disappearances and finds the intimidated women in their dark prison. Stage designer Dirk Becker sets the scene with impressive curtains made of half-transparent, matt PVC tarpaulins. As an expression of their

captivity, the Duke's ex-wives stick like puppets to the backside of the extremely robust curtains, seemingly inseparable from the material. From the other side, Blaubart moves through a built-in slit in the plastic wall. Upon opening the cellar dungeon, the curtain turns and the women climb down from their prison. But in the end, they return once again to their captivity and continue their limited existence. For Ariane it is different: she chooses freedom and leaves the stage. She turns her back on the vinyl curtain which impressively represents the self-imposed imprisonment of the other characters.

[www.oper-frankfurt.de](http://www.oper-frankfurt.de)

Photos: Wolfgang Runkel

# MULTIFACETED ART

German artist Klaus Lomnitzer selects materials for his paintings that are somewhat unusual in the art world and uses processing methods that are hard to categorise. While he waxed, ironed and sprinkled his works with sand as a student, he later even painted X-ray photographs. The desire for transparency pushed him to explore a wider and wider range of materials until he discovered transparent PVC film.



Photo: Markus Rübner

The artist Klaus Lomnitzer paints transparent PVC film which he processes beforehand.

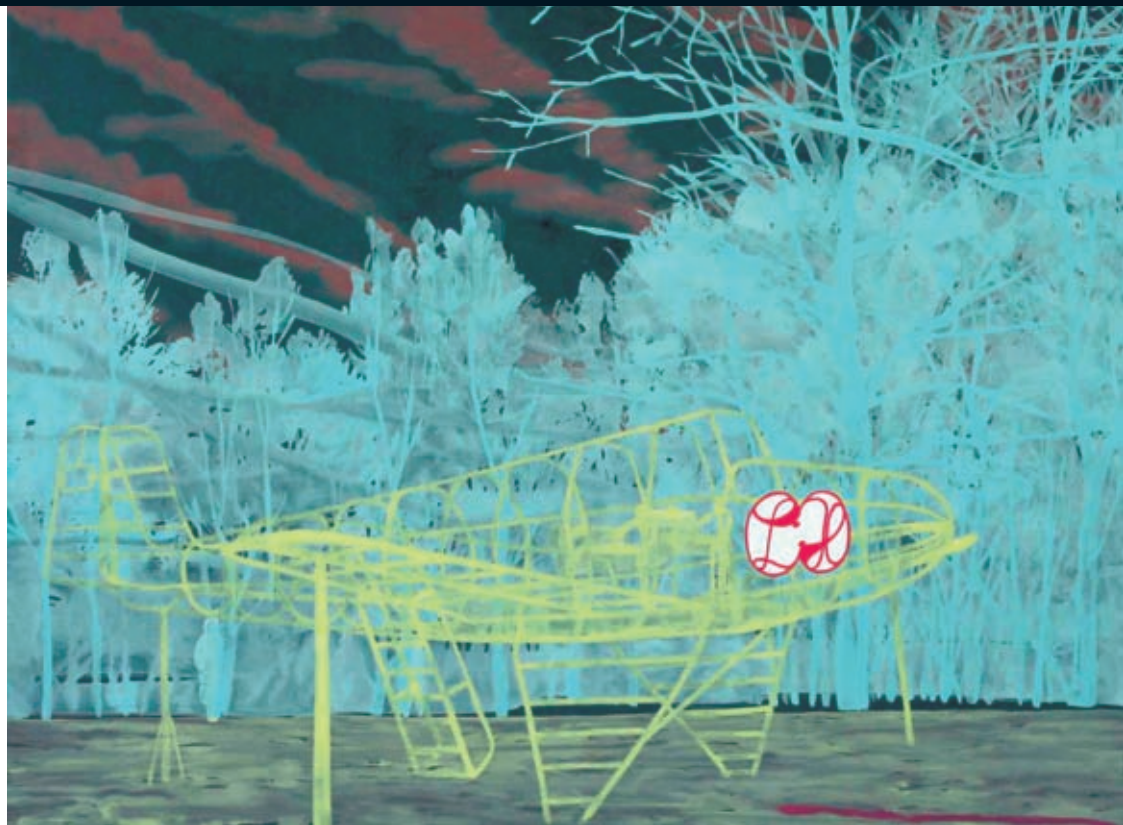
For approximately eight years now, Lomnitzer has been painting primarily on transparent PVC film with acrylic paint. In doing so, pictures emerge which range from stylised landscapes, alien situations, and non-representational motifs in unusual colours. His works are an expression of a complicated



Untitled (rück), 2007-2008

creative process. Working with PVC film plays a key role for him here. First, the artist grinds the smooth surface of the membranes. A matt effect emerges in the material which provides the images with a slightly indistinct quality and allows the colour to stick better. The artist then works on the back side of the film made by the company Klöckner Pentaplast. In this way, the abstract colour surfaces show through to the front side. As a result of this technique,

Untitled (see), 2006



Untitled (leaving home), 2006

the artist creates his works mirror-inverted on the carrier material, a technique similar to that used in reverse glass painting.

## Transparency and Feel of the Surface

Painting the pictures, which are sometimes very large, is multifaceted in the truest meaning of the word since Lomnitzer applies the acrylic paint in stages, sometimes using up to 20 working layers. By doing so the results cannot be planned to the smallest details because some of the paint still runs after application. "PVC film has a very strong tactile and material attraction. With this carrier material, calculated painting processes are in opposition to uncalculated ones," Lomnitzer explains about the special material properties. In most cases, he paints the back of his pictures afterwards with a dark colour which prevents much light from permeating. With the final coating, the viewer first recognises the individual layers as a unit. "Klaus Lomnitzer works with PVC film to make

the structure of his work visible," explains Anja Knöß, who exhibits his works in the Cologne gallery "Projektraum Knut Osper". "The layering of the various levels of the painting, and the effects which result from the coating and mixing, are recognisable to the viewer because of the transparency of the carrier material." The elastic PVC film hangs down from the walls like a flag.

## Early Practice Makes Perfect

Born in 1970 in Marburg, Lomnitzer studied fine arts and philosophy at Johannes Gutenberg University in Mainz. Today he has numerous artistic accomplishments to his credit. For example, he received the Art Prize of the city of Limburg, the Fine Arts Award of the city of Mainz, and three grants. He has been showing his works in various changing exhibitions such as in the art societies of Konstanz and Ludwigshafen as well as in galleries and museums. [www.projektraumknutosper.de](http://www.projektraumknutosper.de)

Photos: Klaus Lomnitzer/Projektraum Knut Osper

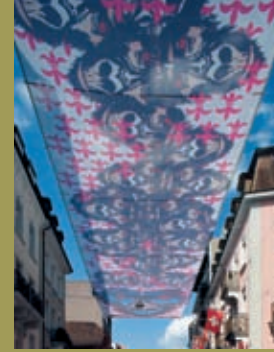


Metres of translucent tarps made from vinyl net – here created from a concept by Peter Kogler – traverse the pedestrian area in Basel. The motif at middle right was also created from his work.



Above: Nathan Carter created this colourful motif for the City Sky project.

In recent days, Basel has lived up to its reputation as an international art metropolis. Until 14th September a partially artificial sky made of stretched vinyl is extending between the facades of the buildings of the city centre. Printed with the works of internationally renowned artists, the temporary installation connects the Messeplatz with the Centralbahnplatz. It extends along the 3.2-kilometre-long Fan-Boulevard for the football European Cup: it is an unusual directional system not only for football fans, but also for all visitors to Basel. "The City Sky creates new horizons in terms of public space. A walk below the art sky with its changing firmament, interacting lights, and presentation of pictures proves to be a unique artistic experience," states cul-

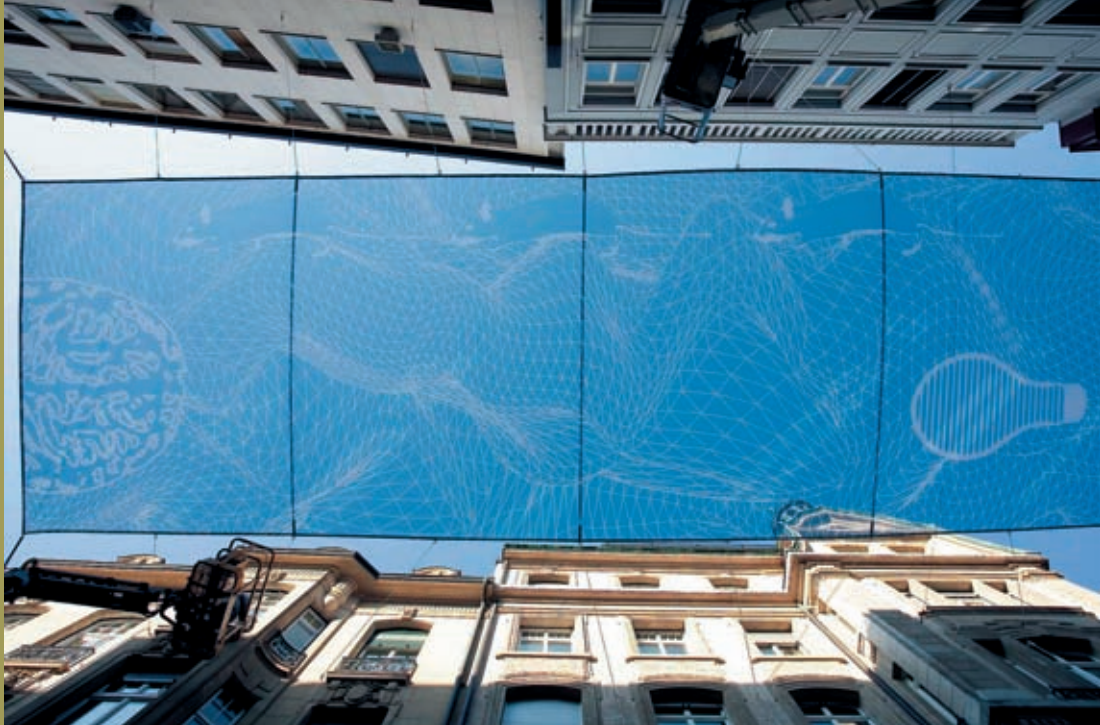


Left: Printed vinyl net for the artificial sky from a design by Hanspeter Hofmann. He also designed the motif at bottom left.

of various shapes hang between the buildings at various heights and create an atmospherically exciting and emotional world of images. The tarpaulins have a translucency of approximately 50 percent. This conveys a high degree of transparency and creates the impression of lightness: advantages of the artificial City Sky which create a relaxed atmosphere below the firmament.

# NEW SKY FOR BASEL

The organisers of this year's Art Basel are more than satisfied. In mid-June, approximately 60,000 art enthusiasts met for what is now the 39th edition of the world-renowned international art event. However, Basel is also a centre for art this summer beyond the art fair. A sky made of vinyl net covers a section of the city centre. It was developed from proposals by international artists.



tural organiser Klaus Littmann. He had the idea for this sensational art project and then implemented it. Similar to the ceiling paintings in ecclesiastical buildings, the firmament over Basel transforms itself into an art cathedral. As a model for the new horizons, Littmann drew upon classical antiquity because at that time Romans extended cloth over the streets, squares, and inner courtyards to protect the population from the intensive rays of the sun. This is a solution which can still be found today in the pedestrian areas of Madrid.

## Transparency and Lightness

Extremely tear-resistant, the wind-permeable PVC-coated material from Verseidag Indutex extends over electrical street car lines and street lighting. In the process, celestial bodies

## Universe of Art

Klaus Littmann, who made a name for himself with innovative exhibitions and artistic city projects, recruited nine internationally renowned artists for this large-scale art project: Daniel Buren, Renate Buser, Nathan Carter, Subodh Gupta, Hanspeter Hofmann, Peter Kogler, Shuvina Ashoona/John Noestheden and Katharina Sieverding. Through various creative techniques, each artist depicts his/her stories from the inexhaustible universe of art. Printed on the smooth structure of the tarps, the artistic impressions provide an unusually intensive brilliant display of colours. This is an extraordinary sight for all visitors to Basel.

[www.klauslittmann.com](http://www.klauslittmann.com)

Photos: Nils Fisch/Littmann Kulturprojekte