

## WELCOME XERVON – A STRONG ADDITION TO THE REMONDIS GROUP

### Latest news

XERVON and Buchen – together  
Germany's first fully integrated industrial  
service provider

### Latest news

The new German recycling law –  
Is free competition a phase-out model?

### Environmental services

Helping to prevent climate change –  
compost and biogas create the perfect  
synergy

### International environmental services

Poland – REMONDIS now active in  
Olsztyn, too

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XERVON is one of the world's leading companies providing technical services in the area of constructing and maintaining industrial plants. The former ThyssenKrupp subsidiary is, therefore, the perfect addition to Buchen. Welcome to the REMONDIS Group. **Page 4**



## HELPING TO PREVENT CLIMATE CHANGE

"Nature knows no waste – nor does REMONDIS". Just how far-sighted this sentence is can also be seen in the area of modern compost and biogas plants. They create the perfect duo for protecting the environment and preventing climate change in the area of biowaste. **Page 12**



## REMONDIS IN POLAND

Around 20 years ago, REMONDIS took the plunge and entered the market in Poland. Since then, it has set up 40 locations in this Central European industrial nation and this list is growing continuously. The company's latest addition is in the City of Olsztyn in the north-east of the country.

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**Editor:** REMONDIS AG & Co. KG, Brunnenstr. 138, D-44536 Lünen, Germany  
 Tel.: +49 2306 106-515, Fax: +49 2306 106-530, [www.remondis.com](http://www.remondis.com), [info@remondis.com](mailto:info@remondis.com)  
**Press officer:** Michael Schneider  
**Layout:** [www.atelier-14.de](http://www.atelier-14.de) **Print:** Lonnemann, Selm

## EDITORIAL



Bernhard Heiker,  
REMONDIS Board Member

### Dear Readers!

Good things come to those who wait. With the closing of the transaction on Wednesday, 30 November 2011, REMONDIS successfully completed its purchase of the XERVON Group from ThyssenKrupp. XERVON has, with retrospective effect from 01 April 2011, now become part of the REMONDIS Group and will be working closely together with the industrial service provider Buchen, which also belongs to REMONDIS. Following the takeover by REMONDIS, XERVON will be able to further expand its range of services and thus generate growth. The independence of the XERVON brand shall remain unaffected by the purchase. The company, which will be run under the name XERVON GmbH within the REMONDIS Group, is the perfect strategic addition for the area of industrial services. The integration of XERVON into the REMONDIS Group will mean that XERVON will become the first fully integrated service provider for the industrial sector. There is nothing comparable to this on the market. Industrial customers from the energy sector, the steel industry, chemicals and petrochemicals, shipbuilding, the construction industry and other industries will, for the first time ever, be able to receive all services directly from just one company. The services, which REMONDIS can now provide, range from scaffolding, insulation work, surface technology and pipe construction work, to carrying out all maintenance measures at process plants on rotating equipment, E-MSR equipment, fittings and devices, to comprehensive site management and infrastructure services, to shutdown management. In this edition of REMONDIS aktuell, we take a detailed look at this new addition to our company group.

Whilst REMONDIS is continuing to enjoy healthy growth, those in Berlin are fighting to put the finishing touches to the new recycling law, the 'Kreislaufwirtschaftsgesetz'. All parties and market players do seem to agree about one thing at least: the recycling bin is coming – at some time or other. This is where the agreement ends, for once again the public and private sectors are battling to win political concessions about who should provide which services in the future. And the politicians are sending contradictory signals

as far as what waste local inhabitants will be obliged to hand over to their local authorities and how the new set of rules should be implemented. A quick look back at the history of the water and environmental service branch makes it very clear that it was the private sector firms in the branch – and first and foremost REMONDIS – that have always led the way developing new, innovative recycling processes and logistical concepts and establishing them on the market. Looking at the difficult financial situation that local authorities are facing, it is highly unlikely that local councils and districts will be able to master the increasing recycling challenges resulting from the impending shortage of raw materials on their own.

It is simply not possible without the private sector, which, over the last 50 years, has ensured that Germany is the world champion in recycling. The branch's largest trade association, the BDE, has also contributed towards this and it recently celebrated its 50<sup>th</sup> anniversary in Berlin in the presence of the major market players and well-known politicians. During the event, there was much recognition and praise for the branch, for example from Federal Environmental Minister Dr Norbert Röttgen and chairperson of the 'Greens' parliamentary party, Renate Künast. Both stressed the importance of the water and environmental service branch both for the environment and climate in Germany as well as for being one of the country's main export hits. REMONDIS believes the success of the past is, above all, an obligation for the future and shall continue to work towards greater stability and growth for the benefit of humans and the environment.

I hope you enjoy reading this edition of REMONDIS aktuell!

A handwritten signature in black ink, appearing to read 'Bernhard Heiker'. The signature is fluid and cursive, written on a white background.

Yours  
Bernhard Heiker

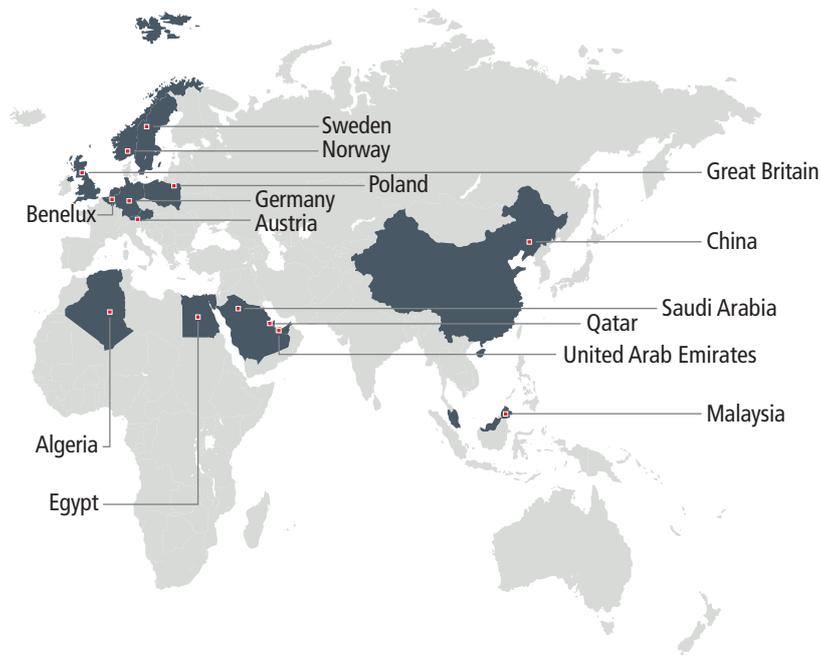
Latest news



XERVON is one of the world's leading companies providing technical services in the area of constructing and maintaining industrial plants

A new company has further strengthened the RETHMANN Group: with retrospective effect from 01 April 2011, REMONDIS purchased the service provider XERVON from ThyssenKrupp AG. The closing of the transaction took place on 30 November. Martin Stillger, chairman of the executive management team at the XERVON Group welcomed the successful closing. With REMONDIS, a reliable partner has been found to further develop XERVON. "REMONDIS is an experienced and well-positioned service company with strategic foresight. XERVON is an excellent addition to the portfolio for REMONDIS and this purchase provides security for the future for our customers, business partners and employees." Olaf Karrass, former management team member at BUCHEN and the new managing director at XERVON, is really pleased with the new addition: "Both XERVON and its service portfolio fit in perfectly with BUCHEN and REMONDIS. Together we shall further develop and optimize the range of technical industrial services for our customers."

XERVON has an excellent international set-up and, besides its European activities, also focuses on the Middle East and Asia



### A global player with local presence

XERVON is one of the world's leading companies providing technical services in the area of constructing and maintaining industrial plants. The company offers bespoke services to meet the specific requirements of the different branches, in particular of the process industry – chemicals, petrochemicals, energy and the steel industry – as well as the construction sector. Its services range from individual services such as scaffolding, insulation, surface technology and pipe construction work to carrying out all maintenance measures at process plants. This involves installing, maintaining, inspecting and repairing rotating equipment, E-MSR equipment, fittings and appliances to carrying out comprehensive site management including budgeting as well as planning and carrying out maintenance work. Its portfolio is rounded off with the provision of infrastructure services and the operation of ancillary facilities. Moreover, one of XERVON's specialities is shutdown management, which it has been carrying out for more than 30 years, and has successfully planned and implemented countless international large-scale projects in this field. With this portfolio, XERVON is the perfect addition to the BUCHEN Group, which also belongs to REMONDIS.

Another company division is active in the area of building preservation work. This comprises of comprehensive services covering large engineering projects as well as residential and commercial buildings: from roofing and insulation work, to façade paint and plaster work, to concrete repair work, to the full refurbishment of housing complexes to

**“The integration of XERVON into the REMONDIS Group will mean that XERVON and BUCHEN will together become the first fully integrated service provider for the industrial sector in Germany.”**

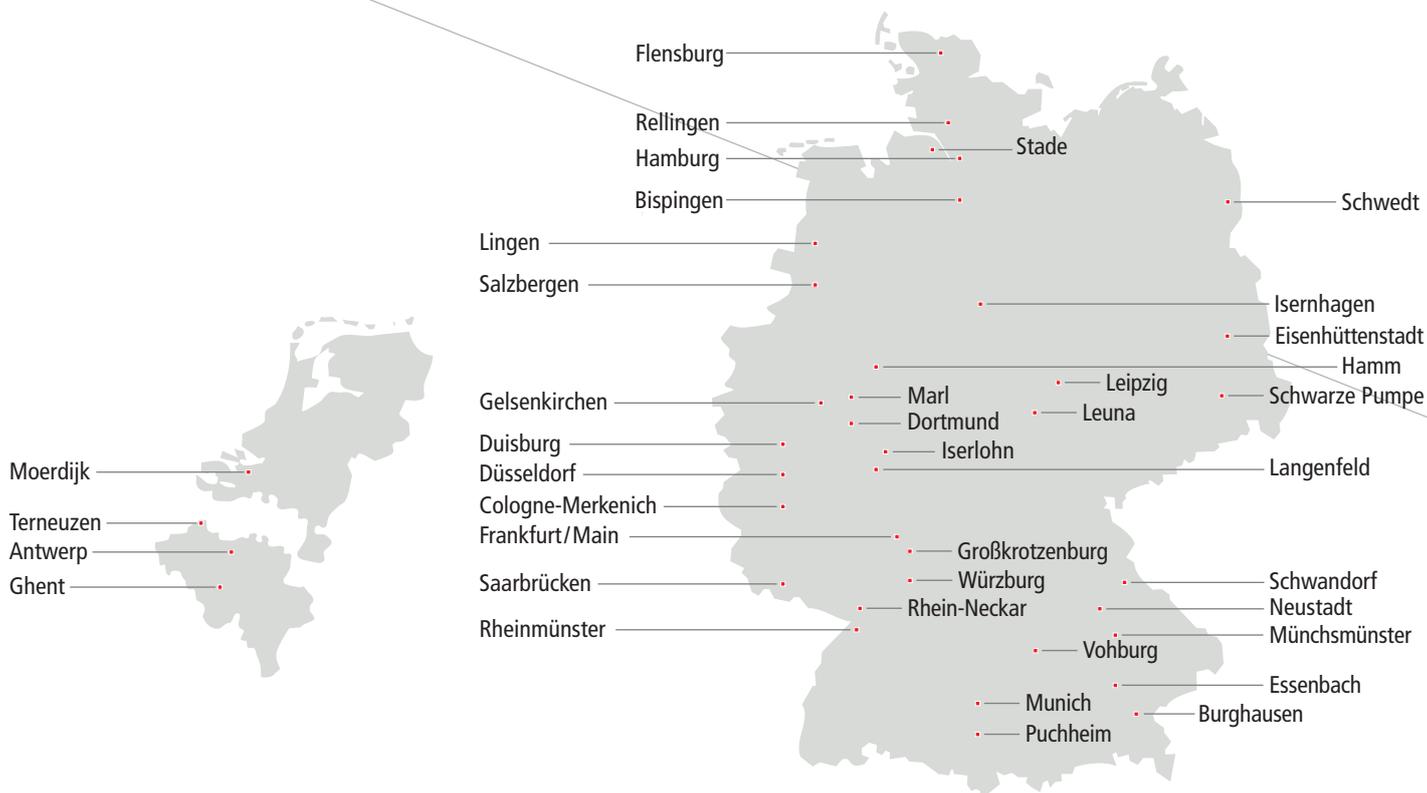
Thomas Breitkopf, REMONDIS Board Member

reduce energy costs. Approx. 8,500 people work for XERVON around the world. The company has a nationwide network of 30 locations in Germany and has international subsidiaries in Scandinavia, the Benelux countries, the UK, Austria, Poland, Algeria, Egypt, the Middle East and Asia.

### Company history: over 80 years of tradition

The company's roots date back to 1928 when the firm Ernst Peiniger GmbH was founded in Essen as a chimney construction business. In 1999, the company, which by then had developed into the international Peiniger Group, was taken over by ThyssenKrupp. As a result of this takeover it was merged with RöRo Bautechnik GmbH (originally founded in 1938 as Röhren- und Roheisengroßhandel GmbH in Frankfurt a.M.) to become PeinigerRöRo GmbH. The Peiniger Group contributed to the business of the new company with its skills in the areas of anti-corrosion work, concrete repair work, scaffolding and building preservation work and the RöRo Group with its extensive expertise in the area of scaffolding. In 2005, as a result of acquiring further companies, the PeinigerRöRo Group consisted of various firms each with their own specific areas of expertise ▶

Just like REMONDIS, XERVON can look back at around 80 years of company history and tradition.



Its leading international expertise in the area of scaffolding and its decades of experience of industrial maintenance work and shutdown management still form the basis of the individual, cost-efficient and, above all, future-oriented solutions that it draws up for its customers today.

- ▶ including the scaffolding business Eckert GmbH, Mannheim, and ThyssenKrupp Plant Services GmbH, Bottrop, a specialist for full-service maintenance packages.

In order to create a uniform appearance and have just one name on the market, all the companies were merged together to become ThyssenKrupp Xervon GmbH. All the foreign companies, which up to then had had their own names, gradually took on the new name as well. Its leading international expertise in the area of scaffolding and its decades of experience of industrial maintenance work and shutdown management still form the basis of the individual, cost-efficient and, above all, future-oriented solutions that it draws up for its customers today. In 2006, Xervon Energy joined the company's portfolio as a further subsidiary. This firm, with its approx. 350 employees, is active in the area of energy production, steam generator construction work as well as furnace and environmental technology

both at national and international level. Its head office is in Duisburg with the main divisions for boiler, furnace and E-MSR technology, the installation and putting into operation of equipment and flue gas cleaning.

Together with the subsidiary, Siegfried Schlüssler Feuerungs- bau, Xervon Energy rounds off the power plant business. Thanks to its service support offices in Germany, Europe, the Middle East and Asia, Xervon Energy is always close to its customers to provide them with its products and expertise.

**Future in the Rethmann Group**

Following the takeover by REMONDIS, XERVON will be able to further expand its range of services and thus generate growth. The independence of the XERVON brand shall remain unaffected by the purchase. The company will be run under the name XERVON GmbH within the REMONDIS Group.

**Background**

The name XERVON does not, as some people claim, come from XERVON, the Greek god of maintenance, but, joking aside, stands for 'x-fold' (umpteen) services at 'x-fold' locations and that the company's own innovations and successful ideas are implemented 'x-fold' in all countries. The company's motto is to always be there for the customers – i.e. always on demand or on duty. XERVON's basic services and service modules can be called up all around the world. That is X – erv – on!

# “A strong new partner for the industry!”

An interview with Thomas Breitkopf, REMONDIS Board Member

**REMONDIS aktuell:** Mr Breitkopf, REMONDIS has once again expanded considerably as a result of the purchase of XERVON GmbH. What made you notice ThyssenKrupp's former subsidiary?

**Thomas Breitkopf:** We had been looking for an opportunity to extend the service range of our industrial service provider, BUCHEN, for a long time. Large parts of XERVON's business involve activities for which BUCHEN, in the past, had to use external service providers to complete its tenders. When the first signs appeared that ThyssenKrupp wished to sell the company, we grasped the opportunity to create a perfect synergy.

**REMONDIS aktuell:** How will the customers benefit from this synergy?

**Thomas Breitkopf:** By integrating XERVON into the REMONDIS Group, a strong new partner has been created for the industry as has never been seen before. Together with BUCHEN, XERVON will become the first fully integrated service provider for the industrial sector in Germany and abroad. No other company has such a range of services united under one roof and so no other company can, on its own, offer its industrial customers such a comprehensive range of services from scaffolding, insulation work, surface technology and pipe construction work to carrying out all maintenance measures at process plants, including installation, maintenance, inspection and repair work, to shutdown



management and the cleaning and maintaining of power plants and other industrial facilities.

**REMONDIS aktuell:** Does this new addition mean that REMONDIS has entered new regions?

**Thomas Breitkopf:** Absolutely. By purchasing XERVON, REMONDIS has also expanded internationally with new locations, for example in the Scandinavian countries and in Malaysia. By the way, we will also be entering the African continent as a result of the takeover, as XERVON has been active in North Africa for many years now. So we are not only pleased to be able to extend our portfolio of industrial services but also to access new markets in countries where REMONDIS had previously not been active.

**REMONDIS aktuell:** Mr Breitkopf, thank you very much for the interview.

“What is really important for us is that there are no changes for our customers. They will continue to have the same local contact people and our regional structure will also remain unchanged. Our new owner also has both a large network and financial strength so that, with respect to financial strength, XERVON will continue to be a reliable partner in the future, in particular for large-scale projects,” commented the chairman of the XERVON executive management team, Martin Stillger.

# The 90s – the move towards recycling

## SEPARATING WASTE TO CLOSE MATERIAL CYCLES

At the beginning of the 90s, there was a new way of thinking within the German waste management branch: the linear chain with its different parts – extracting raw materials, production, consumption and disposal – was disbanded. Instead, there should be a circle whereby the consumption of a product was not the end but the start of a new beginning. This led to the creation of a successful model which was to make Germany one of the global leaders in the areas of recycling and disposal.

At the beginning of the decade, between 5 and 6 million tonnes of waste packaging was being generated in Germany each year, which although not heavy was extremely bulky. Just over a third of this material was being recycled – not enough. The arguments in favour of recycling were not only the conservation of resources and climate protection but also a purely practicable reason: the waste had to be taken somewhere. Landfill space was rare and waste incineration unpopular. Klaus Töpfer, at that time Federal Environmental Minister, looked to find the solution: he commissioned a group of experts to draw up a draft Packaging Ordinance.

### 'Polluter Pays Principle' for packaging

This ordinance was the starting signal for increased recycling activities and a revolution at the same time: with importance being put on product responsibility, responsibility was placed on traders and manufacturers. The ordinance made it obligatory for them to take back their transport, secondary and sales packaging and for them to ensure it was taken for materials recycling outside the waste management systems set up by local authorities.

This set of rules was passed by the German government on 08 May 1991. It made it obligatory for all businesses that placed packaging onto the market to take this back and

**"The idea of a recycling sector has experienced a triumphal procession around the world."**

Prof. Klaus Töpfer, former Federal Minister of the Environment



1991: Klaus Matthiesen, former NRW Environmental Minister, Prof. Klaus Töpfer, former Federal Environmental Minister, and Norbert Rethmann

1991

### 1991 | 'TA Abfall' (technical directive on the Storage, Chemical/Physical and Biological treatment, incineration and disposal of Waste Materials requiring Special Control)

Away from disposing of waste to a waste management economy: the target was to achieve recycling requirements in the style of the amendments to the Waste Law in 1985/86. This set out the principles for disposing of waste in Germany and created further regulations for those disposing of waste requiring special control.

### 1991 | 'Verordnung über die Vermeidung von Verpackungsabfällen' (Packaging Ordinance)

Introduced the obligation to avoid and recycle used packaging and named the take-back obligations for packaging. The 'Polluter Pays Principle' was used here to achieve this.



recycle it outside the public sector systems. Each individual manufacturer and trader, however, could release themselves from their obligation to charge deposits, take back and recycle these materials, if they participated in a system that fulfilled the regulations of the Packaging Ordinance.

**Grey residual waste bins get a yellow counterpart**

Even before it was passed, the ordinance was making waves. Manufacturers and traders were fighting it, in particular the obligation to take back sales packaging in shops. Instead they wanted to set up a parallel collection system with bins provided to the consumers for kerbside collection, i.e. to more than 35 million German households, and this separate collection and disposal system should be organized and financed by the private sector. And so that was how it was done – the beginning of the so-called ‘dual system’ with yellow recycling bins and bags. “The time was right for the Packaging Ordinance but its implementation required huge efforts from all those involved,” remembers Norbert Rethmann, at that time head of REMONDIS, BDE President and a visionary companion of Töpfer.

This new collection system had to be accepted very quickly if it was to achieve the stipulated recycling rates. The necessary infrastructure had to be built up at the same time. Processes had to be developed, technologies devised and facilities built – from sorting technology, to processing methods, to reusing the materials in production cycles. In addition, a suitable collection system had to be set up across the whole of Germany, including the bins and collection vehicles. All in all, huge efforts had to be made which

could only be achieved with the performance capability of the private sector and its willingness to invest. REMONDIS was one of the driving forces behind this.

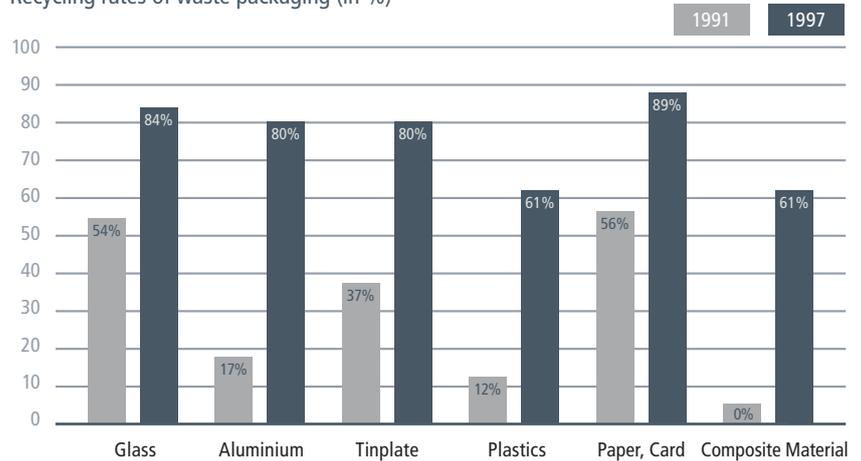
**The end of the ‘throwaway society’**

The separate collection and recycling of packaging began to make an impact: the overall recycling rate of sales packaging had soared to around 83 percent by 1997. There was also great interest in the model from abroad: Germany’s neighbours were the first to pick up the system and develop similar measures.

In the meantime, the second big step towards creating a recycling sector in Germany was made with the ‘Kreislaufwirtschafts- und Abfallgesetz’ (‘KrW-/AbfG’/Recycling and Waste Management Law) which was passed in 1994 and came into force in 1996. It was in this new set of rules that

A good 5 million tonnes each year: the ‘dual system’ companies, including REMONDIS’ subsidiary EKO-PUNKT, ensure huge volumes of packaging are sent for recycling today.

Recycling rates of waste packaging (in %)



◀ 1992 – the official opening of the Munich branch



The Lippe Plant ▶ in 1993

1993

**1993 | ‘TA Siedlungsabfall’ (TASi/Technical Directive on the Recycling, Treatment and Disposal of Municipal Waste)**

The intention here was to recycle as far as possible non-avoidable waste, to keep levels of hazardous materials as low as possible and to ensure that non-recyclable waste was treated and disposed of in an eco-friendly way. This led to the ban on untreated household, residual and commercial waste being taken to landfill which came into force on 01 June 2005.



- ▶ the hierarchy "Avoidance, Recycling, Disposal" was finally stipulated by law. The aim was, from an organizational point of view, to take the environmental principles of the recycling economy into account by ascribing waste more to the regime of the waste-producing economy to improve waste management and ecological performance. Following the principle: away from public sector obligations to making the waste producers responsible for their waste.

Today, 1.6 million tonnes of material are processed at the REMONDIS Lippe Plant each year. The plant's recovery of plastics alone means 510,000 tonnes of crude oil are saved each year.

**The "constitutional law" of the waste management sector**

Being the "constitutional law" of the waste management sector, as Environmental Minister Töpfer called it, the 'KrW-/AbfG' made the cornerstones of the Packaging Ordinance the basis for all German waste management laws. Product responsibility was further extended and the 'Polluter Pays Principle' now also included consumers. Furthermore, the hierarchy – avoidance rather than recycling and recycling rather than disposal – was explicitly written down in law.

The law also allowed additional ordinances to be passed. Using the Packaging Ordinance as its role model, this made it possible for the regulations in the 'KrW-/AbfG' to be put in more concrete terms. The Government made use of this power and passed very different kinds of ordinances – from the Waste Timber Ordinance to the Battery Ordinance to the WEEE Ordinance.

**The beginning for the Lippe Plant**

As a result of the 'KrW-/AbfG', the volumes of materials to be recycled increased once again. REMONDIS was fully prepared for this. The company had already begun its building work at the Lippe Plant in Lünen which has today become

the largest industrial recycling centre in Europe. Here waste was processed into raw materials, products and energy on a very large scale.

REMONDIS was also pushing forward the recycling sector at a decentralized level. So, for example, the WEEE dismantling centre in Selm and the composting plant in Warendorf began operations in 1994. Marketing the recovered materials was not easy to begin with but, after a lot of persuading, REMONDIS succeeded in improving the image of secondary raw materials. One main factor that led to this success was the development of brandname products with clearly defined properties.

**The same standards in the east and west**

Another event of the 90s was the reunification of Germany – on 03 October 1990, the German Democratic Republic (GDR) joined the Federal Republic of Germany. Waste management had been organized completely differently in the GDR. All kinds of waste had been sent to landfill, normally without any kind of protection measures being taken. Parallel to this, there had been SERO, a state-subsidized system for recycling waste that could be used. This waste management structure fell apart after the reunification. At the same time, the increase in consumption led to a great increase in the volumes of waste. New structures needed to be put in place very quickly. Right from the beginning of the 90s, local authorities and municipal companies in the GDR contacted REMONDIS. Agreements were reached and joint ventures founded. With its know-how and investments, REMONDIS helped to ensure that the recycling and waste management standards of the west were achieved quickly.



1996 – the official opening of PLANO in Lünen ▶

**1994 | 'KrW-/AbfG' (Recycling and Waste Management Law), came into force in 1996**  
 Achieved the final paradigm shift from waste law to waste management law.



# The PPP model in the Harz region

## ABFALLWIRTSCHAFT NORDHARZ CELEBRATES ITS 20<sup>TH</sup> ANNIVERSARY

Two years after the fall of the Berlin Wall and just one year after the reunification of Germany, there was a great spirit of optimism in the new German states in every class of society – a period like no other in the history of Germany. During these turbulent times, one of the most successful public private partnerships (PPP) in Germany was founded, namely Abfallwirtschaft Nordharz. In October, this flagship company, which became a role model for many subsequent PPPs, celebrated its 20<sup>th</sup> anniversary.

The situation of the new German states in the early 90s was, in many aspects, similar to the present situation currently being faced by Central and Eastern European countries. And it is precisely for this reason that the sustainable success of the public private partnership, Abfallwirtschaft Nordharz, is having an impact today far beyond the borders of Saxony-Anhalt and even beyond Germany. Together with REMONDIS, the recycling infrastructure was adapted to the technology standards found in Western Europe within just a few years. During that time, the whole branch benefited from the unconditional commitment to innovation, the willingness to change and the widespread support from the people living in the new German states who were all fully committed to improving their situation. It was thanks to these two main factors, on the one hand the willingness to invest and on the other hand the active support for change, that the water and environmental service branch was able to master the huge tasks within just a few years and, as a result, contribute towards uniting the country in this sector. And Abfallwirtschaft Nordharz is a prime example of this success.

### A role model for Central and Eastern Europe

Today, REMONDIS is finding, in many aspects, a similar situation in the Central and Eastern European countries where there is room for improvement in the areas of recycling infrastructure and environmental awareness. At the same time, the local authorities in these countries often lack the financial strength to tackle the challenge of setting up a modern recycling economy on their own. One practicable solution to this problem can be found in the Harz region. What appeared twenty years ago to be an unusual partnership has turned out to be such a sustainable success that nowadays the foundation of a PPP is often viewed as the most attractive model rather than at the bottom of the list



of possible options. Those living and working in the Harz region benefit from the developments that have resulted from the long-term contracts between the two partners, REMONDIS and the District of Wernigerode. Based on this long-term security, it was possible to invest in new facilities and technologies, including the construction of a new building in Reddeber with a sorting plant and a facility for processing construction waste.

Reddeber: a business location that is a role model for the whole of the country

At the end of the day quality prevails. This can be seen again and again in the water and environmental service branch where partnerships between the public and private sectors lead to the best possible kinds of synergy. Public services, and not only in the area of waste management, are provided with the highest levels of efficiency in those cities that choose to implement the PPP model which means pressure can be taken off the fee payers. Abfallwirtschaft Nordharz is showing how it's done.



# Helping to prevent climate change

COMPOST AND BIOGAS MAKING AN IMPORTANT CONTRIBUTION TOWARDS PREVENTING CLIMATE CHANGE

**REMONDIS®**

“Nature knows no waste – nor does REMONDIS” – this is one of the company’s guiding principles. Just how far-sighted this principle is can be seen, for example, in the area of modern compost and biogas plants. More and more, they are being seen as a future-oriented technology that can make an important contribution towards the planned energy turnaround in Germany as well as towards preventing climate change. And so with REMONDIS’ help, energy for 1 ½ hours of light and substrate for high-quality compost are generated from a perfectly natural kind of packaging – a banana skin. Can this be increased?

Biogas plants are carbon neutral. Furthermore, compost stores CO<sub>2</sub> in the ground on a long-term basis





Using state-of-the-art technology, biowaste can be used to produce gas, electricity and heat

The first step towards generating energy at biogas plants is to introduce household bins for biowaste across the whole of the country. A glance at a map showing the areas which already have biowaste bins reveals that much still needs to be done in Germany if this is to be achieved. There are still far too many white areas on the map, even in the more rural regions such as Bavaria where there are traditionally greater volumes of biowaste. And yet, composting and the generation of biogas are sophisticated and highly efficient methods of recycling biowaste. One example can be found in Warendorf in the Münsterland region: 40,000t of biowaste is processed into high quality compost at the local composting plant in which REMONDIS is part-owner. In 2010, the complex was extended to include a biogas plant which produces 5,000m<sup>3</sup> of biogas every day from 18,000t of biowaste. Two combined heat and power plants are directly connected to the biogas plant and each produce 340 KW of electrical energy which is fed straight into the national grid. And there is more. The heat generated as a result of the conversion process is used to heat the digester and to dry the material which further increases the efficiency of the plant. The digester residue is fed back into the compost production process as a high quality additive. And so, this eco-friendly biogas plant contributes towards the total annual output of 32,000t of quality assured compost.

It goes without saying that not a single gram of additional CO<sub>2</sub> is released into the atmosphere as a result of the energy production process with biogas from digester reactors. The input material only releases the CO<sub>2</sub> it had naturally absorbed from the atmosphere during the course of its biological growth. Overall, it is, therefore, carbon neutral.

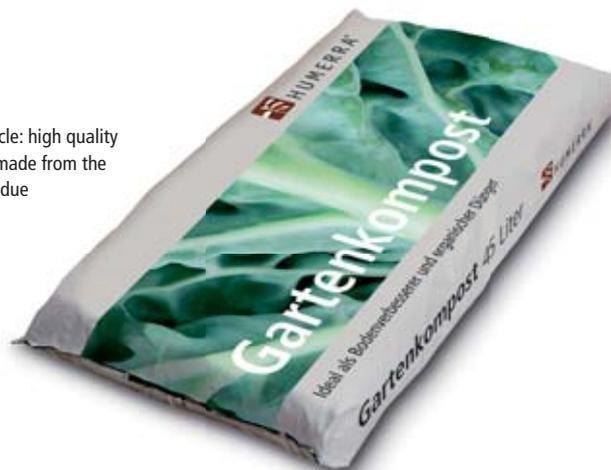
**“REMONDIS’ concept of combining biogas plants with composting technology has already really proven its worth both from an ecological and from an economical point of view.”** Aloys Oechtering, REMONDIS managing director

**Composting as a climate-friendly form of recycling**

Simply producing compost, however, is also a sensible form of recycling both from an economic point of view and as far as the environment and climate are concerned. Each year, REMONDIS recycles more than 1 million tonnes of biowaste. At more than 40 locations across Germany, organic waste is processed into soil improvers, mulch and soils. Such processing methods are a very sensible use of the raw materials and, at the same time, make an important contribution towards preventing climate change. By using compost material, CO<sub>2</sub> is stored in the ground on a long-term basis. At the same time, the existing nutrient resources are efficiently conserved. REMONDIS’ concept of combining biogas plants with composting technology has already really proven its worth both from an ecological and from an economical point of view.

A lot still needs to be done in Germany if biowaste bins are to be found right across the country.

A perfect cycle: high quality compost is made from the digester residue



# Is free competition a phase-out model?

## BUNDESRAT WISHES TO GREATLY RESTRICT PRIVATE SECTOR COLLECTION ACTIVITIES

At the end of November, the German Bundesrat thwarted the new 'Kreislaufwirtschaftsgesetz' (Recycling Law) for the second time this year. Back in May, the Bundesrat, the house of representatives of the different German states, had sent the draft law with its 63 amendments back to the Bundestag. The law has now been sent to a mediation committee and it could take months now for any progress to be made.



The original draft law had been presented by the German government in the spring of this year and since then has been the subject of intense discussions. Experts fear that the amendments to the law aim to disproportionately strengthen the position of local authorities in the area of collecting recyclables. Thus, by handing the draft law over to the mediation committee, the Bundesrat is looking to make it possible for local authorities to select collection systems for recyclables even if the quality and ecological aspects of the system chosen by them is below those of a private sector collection system. This is once again scratch-

ing at the surface of Germany's leading position in the recycling sector, as priority should always be given to the best system.

Five-stage waste hierarchy not being implemented correctly  
In the previous version of the law, the regulations concerning the waste hierarchy were confusing and hardly practicable. They did not, however, contain any immediate obligations. The five-stage waste hierarchy of the European Waste Directive has, therefore, been watered down and waste incineration effectively put at the same level as recycling. This all has the effect of reducing rather than promoting recycling.

### Inadequate recycling rates

According to the experts, the recycling rates stipulated in the law are not ambitious enough and hardly represent an ecological improvement. Thus, only 65 percent of all municipal waste should be recycled by 2020, which is not much more than the current levels today. The 70 percent recycling rate given for construction and demolition waste is also way below what is achievable. Higher rates here would not only help to protect our natural resources but also ensure that the German recycling sector maintains its technical edge.



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## Recycling economy: the history of the law

### 12 December 2008

Creation of the legal basis with the coming into force of the European Waste Directive and the obligation of the member states to transform this into national law by 12 December 2010

### 30 March 2011

German government votes in a law to restructure the 'Kreislaufwirtschafts- und Abfallrechts' (Recycling and Waste Management Law)

### 27 May 2011

Statement of the Bundesrat on the 63 changes; draft sent back to the Bundestag



© Bundesrat/Jens Wiese 2010

**Recycling bin: additional law planned for 2012**

As far as the recycling bin is concerned, the draft law only contains the regulatory basis for the introduction of a uniform bin for packaging and other types of waste made of similar materials. No statements are made about how it is to be operated or about its exact structure. Concrete legal regulations are to be passed in a supplementary law for recyclables in 2012.

**Conclusion:**

The present 'Kreislaufwirtschaftsgesetz' reduces the chances of recycling being increased in Germany putting Germany's international role as one of the pioneers of the recycling sector at risk. The laws concerning commercial kerbside collection are not clear enough; costly court cases can be expected. The move away from fair competition by effectively extending the obligation of private households to hand over their waste to their local authorities will mean higher charges for local inhabitants.

A new law on recyclables will clarify who is responsible for the recycling bin.

**"We are convinced that the Bundesrat's attempt to massively restrict commercial kerbside collection contravenes European law and will, therefore, fail in the end."**

Peter Kurth, President of the BDE (Federal Association of the German Waste Management Industry)

**10 June 2011**

First reading in the Bundestag, no debate

**19 September 2011**

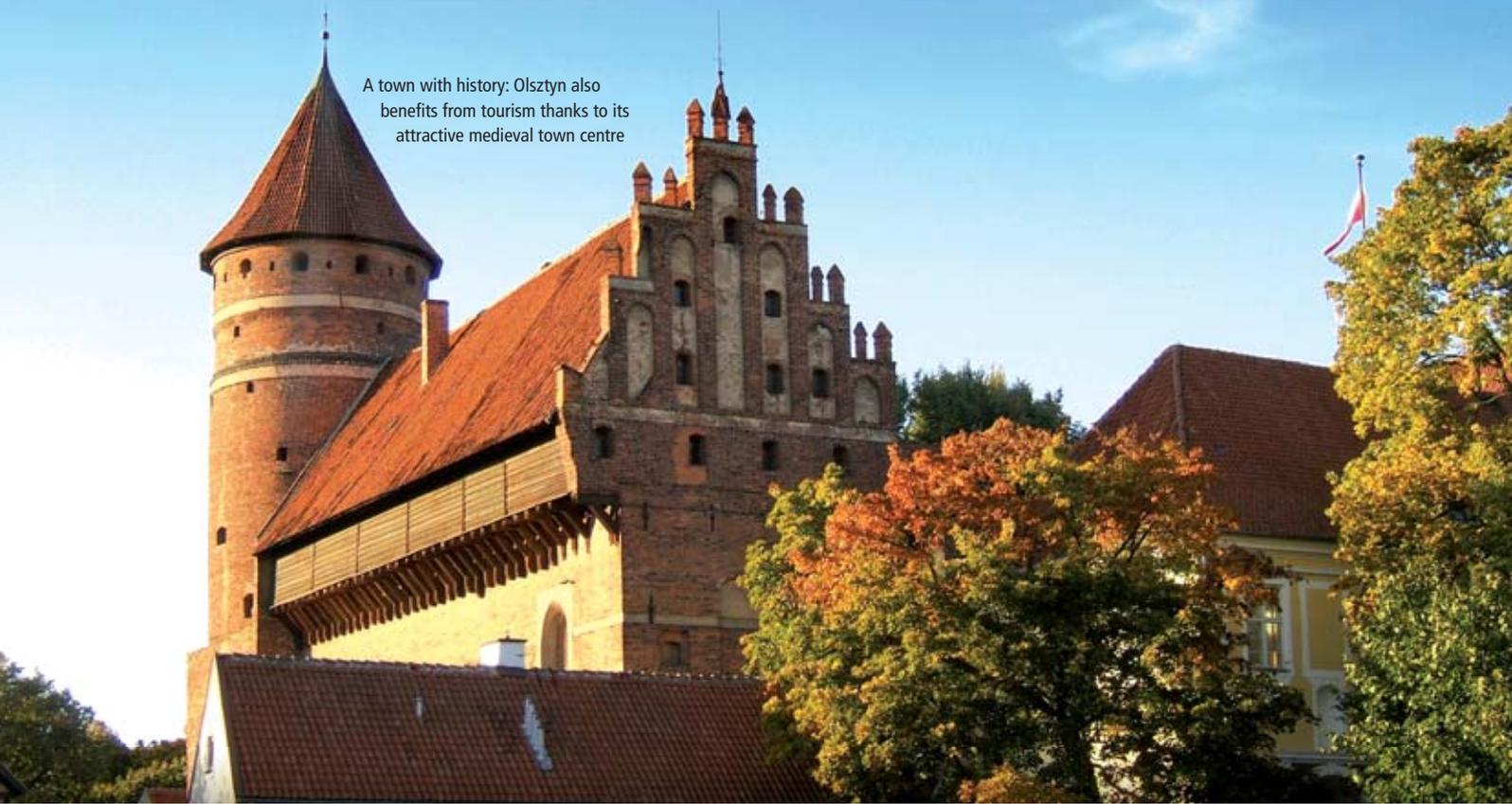
Hearing of experts in the environmental committee of the Bundestag

**28 October 2011**

Amended draft law passed by the Bundestag

**25 November 2011**

Sitting of the Bundesrat and convocation of a mediation committee



A town with history: Olsztyn also benefits from tourism thanks to its attractive medieval town centre

Environmental services



# A further business location in Poland

## REMONDIS TAKES OVER WASTE MANAGEMENT ACTIVITIES IN OLSZTYN

Around 20 years ago, REMONDIS took the plunge and entered the market in Poland. Since then, it has set up 40 locations in this Central European industrial nation and this list is growing continuously. The company's latest addition is in the north-east of the country in the City of Olsztyn, an emerging district in the Warmian-Masurian Voivodeship.



REMONDIS has been active in Poland since the beginning of the 90s and has committed itself to building up a modern recycling economy there.

With over 175,000 inhabitants, Olsztyn is not only the administrative centre but also the largest town in the Voivodeship. The timber-processing industry, food manufacturers and a well-known tyre producer provide economic stability as do the cultural and scientific institutions. And this isn't a given in this region as Warmia-Masuria is the Polish administrative region with the highest rate of unemployment.

In October, REMONDIS took over the company, PGM Olsztyn, in this east Prussian district. At present, this Polish waste management firm collects and processes around 50,000 tonnes of household waste every year. The company, which currently has 69 employees and 32 vehicles, is now being run under the name, REMONDIS Olsztyn. The first steps are being undertaken to extend the performance capability of the company, for, under the aegis of REMONDIS, its market share should be further increased. The plans are to considerably strengthen its activities in the region and to position Olsztyn as the regional waste management centre within the Voivodeship. Synergies will be able to be created as the next REMONDIS location closest to Olsztyn is only 60 kilometres away in the City of Mragowo.



For protecting the environment and creating a pleasant atmosphere: REMONDIS' head office in Poland is a low-emission building thanks to its modern insulation system

Poland

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# A head office acting as a role model

## REMONDIS' HEAD OFFICE TEAM IN POLAND MOVES INTO A PASSIVE HOUSE IN WARSAW

Following two decades of uninterrupted growth, REMONDIS Poland has built itself a new head office. This state-of-the-art office complex corresponds with the passive house standards and clearly demonstrates the company values. For, ecological and economic sustainability are the basis of REMONDIS' success in Poland, too.

Polish citizens can now find a well-functioning water and recycling economy where before, just after the collapse of the Iron Curtain, there used to be obvious environmental problems. Since its entry into the market in 1992, REMONDIS has become one of the leading companies in Poland in both these sectors. Whether it be in large cities like Krakow, Poznan and Stettin or in numerous rural districts: in many cases, it is the public private partnerships that are partly owned by the Selm-based family-run business which ensure progress is being made.

REMONDIS and REMONDIS Aqua currently have 35 locations for serving local inhabitants, local authorities and companies in this Central European industrial nation. And success needs space. And so the new head office was built in Warsaw within a period of just eleven months. With a total office space of 2,000 square metres, the building has room for 100 modern workplaces. The construction costs

amounting to 2.8 million euros are an investment that is impressive both from a business point of view and from the point of view of the climate and environment as the building corresponds with the passive house standards making it a role model for others.

The heart of the new building is its special form of insulation. The system makes air conditioning and standard heating equipment unnecessary. Instead, this sustainable technology creates a pleasant atmosphere in the rooms and the indoor temperature remains at practically the same level throughout the year. When the temperature drops outside, the heating system that has been installed, for example, provides warmth via a neighbouring combined heat and power station. In contrast, a central ventilation system cools the building down during the warm summer months and the heat generated as a result of this process is recovered.

More than 3.5 million people in Poland benefit from REMONDIS' progressive solutions in the water and environmental service sector.

# Business growth to benefit local inhabitants

PARTNERSHIP MEANS BOTH HIGHER QUALITY AND LOWER COSTS ARE POSSIBLE

REMONDIS Aqua concentrates on the business operations. The water association decides on investments, statutes and water charges.



Five years ago, Wasserverband Lausitz handed over the task of operating its plants to WAL-Betrieb, a subsidiary of REMONDIS Aqua. The cooperation work established as a result of this decision has developed into an impressive success story: by following pioneering strategies, not only were the original targets reached but a highly respected water service company created, whose services are in high demand both in Germany and abroad.

25 cities and districts in the south of Brandenburg have joined together to create Wasserverband Lausitz, a municipal water association. Its aim is to provide high quality and low-cost drinking water and wastewater treatment for the 120,000 local inhabitants as well as for the industrial

and commercial businesses in the region. Wasserverband Lausitz Betriebsführungs GmbH (WAL-Betrieb) is there at its side acting as its strong partner. Since 2006, WAL-Betrieb has been responsible for the technical and commercial operations of the association's water facilities.



Training sessions in water management and recycling: international guests and scholarship students from many different countries travel to WAL-Betrieb's training centre

## Services offered by WAL-Betrieb

- Processing and distribution of drinking water
- Wastewater treatment
- Fee management
- Drawing up of fee statutes
- Engineering services
- Geo-information systems/network management
- Recording and assessment of the condition of sewer pipes using CCTV
- Construction services in the drinking water and wastewater sector
- Training centre
- Maintenance and sale of biological septic tanks

## Signal effect for Eastern and Central Europe

What was achieved in the Lausitz can be achieved elsewhere. Marten Eger, technical managing director of WAL-Betrieb, on market position, advantages for local inhabitants and the role model effect of the public private partnership.

**REMONDIS aktuell:** Mr Eger, WAL-Betrieb has extended its activities deep into the neighbouring German states. Why?

**Marten Eger:** The structural and economic background is the same. We want to show that there are ways of breaking the vicious circle without having to push up charges. As a result, we are providing services for more than 30 local authorities and municipal bodies today.

**REMONDIS aktuell:** Your range of services has also changed.

**Marten Eger:** Existing fields of business have been further developed and strong additional services set up from scratch – for example, managing charges and fees or drawing up statutes. WAL-Betrieb now has all the important accreditations – from quality and environmental management, to the maintenance of septic tanks, to the construction of pipes and sewer systems.

**REMONDIS aktuell:** How do the people living in the Lausitz benefit from this?

**Marten Eger:** Charges have remained stable since 2000 despite the increase in energy and fuel costs. Moreover, the operations mean higher quality as technological progress

is affordable. Last but not least, the regional economy has also been strengthened: we have been awarded 70 building contracts in this year alone.

**REMONDIS aktuell:** There is a general fear that privatization leads to job cuts. What is the situation here?

**Marten Eger:** The workforce, which originally worked for the water association, was taken over by WAL-Betrieb. And as requirements have increased so has the number of employees. Between six and seven new employees have joined the company each year and our percentage of apprentices currently lies at 13 percent.

**REMONDIS aktuell:** Other regions are also having to face demographic change and the need to make large investments – for example in Central and Eastern Europe. Can the Lausitz be seen as a role model?

**Marten Eger:** I believe so. This operating model – in which local authorities continue to be the owner of the plants and responsible for providing the public services – has proven its worth. Running the operations side of the business efficiently means there are great cost advantages for the local authorities – in the Lausitz approx. 1.5 to 2 million euros each year. Money that can be used for investments and renovation work helping to keep charges at a stable level.



Marten Eger,  
Managing Director of WAL-Betrieb

### Cooperation as the road to the future

When the municipal water association opted for privatization, it seemed to be practically impossible to keep the water charges at a stable level: on the one hand, the number of inhabitants in the association's region had dropped by 12 percent in just five years. Water management costs, therefore, had to be spread among fewer and fewer households. On the other hand, large investments needed to be made, primarily to redevelop the waterworks and extend the sewer system to increase the number of households connected to the public wastewater system.

### Goal achieved, strategy endorsed

The Europewide tender and transfer of the operations to WAL-Betrieb brought about the desired change. Together,

**“WAL-Betrieb has developed in a really positive way. The high expectations of the privatization process have been more than fulfilled.”** Marten Eger, Managing Director of WAL-Betrieb

WAL-Betrieb and REMONDIS Aqua implemented a strong future-oriented concept that is targeted towards growth. And their efforts are paying off: by expanding WAL-Betrieb, it is possible to carry out the water management tasks in a highly cost-efficient manner. As a result there are many benefits for those living in the Lausitz as the efficient organizational structures and the income from third-party business not only help to keep charges stable. They also ensure that there are high standards and even create new jobs.

Water resources management

# The detection of leaks in property drainage systems

THE WASTEWATER COMPANY OWNED BY THE CITY OF REES AND REMUNDIS AQUA ARE TO TACKLE THIS MAMMOTH TASK TOGETHER

The inspection of property drainage systems in the German state of North Rhine-Westphalia is causing much discussion – among local inhabitants, local authorities and housing associations as well as among service providers such as REMUNDIS Aqua. Positive examples can help to make such discussions more objective and provide a new opportunity for cooperation work between the public and private sectors.

In the German state of NRW, all property owners must have their drainage systems checked for leaks by experts – as laid down in the State Water Law.



In 2008, an amendment was made to the 'Landeswassergesetz/LWG' [State Water Law] and Section 61a has, in particular, sparked off discussions. This section covers the detection of leaks in privately owned property drainage systems, of which there are estimated to be around 1.5 million in North Rhine-Westphalia alone. The organisational framework conditions have been clearly defined in the law: no matter whether it involves a private or public wastewater connection, every single owner must have their property drainage systems checked for leaks and be able to provide proof that such work has been carried out – and this must have been done by 31 December 2015.

### Huge costs for local authorities

This comparatively short deadline is not only posing a great challenge for private individuals whose properties are connected to a sewer system but also for the local authorities as they are responsible for their regions. For, they must check and document the results, a task that is in itself a great challenge as the work involved here must be legally sound, citizen-friendly and cost-efficient. According to those involved in this project, the deadline is much too short to be able to solve this mammoth task and keep municipal personnel and resource expenses at a reasonable level.

This is where the experts at REMONDIS Aqua come into play. One of the latest examples is the cooperation work that the company is carrying out with the wastewater company owned by the City of Rees in the Lower Rhine region. The city's company organizes all water management activities as well as a large number of property drainage systems in the town, which is home to 22,000 people.

As far as the leak detection work is concerned, the City of Rees is making use of a special rule that has been drawn up concerning the deadline. According to this rule, each local authority in North Rhine-Westphalia is allowed to extend the period in which the leak detection work must be carried out to the end of 2023. To make use of this exception, however, they must also agree to not only examine the privately owned property drainage systems but also the publicly owned wastewater facilities. There are already signs that the market is overheating and so the legislator is hoping to counter these by offering this option.



### Informing local inhabitants to ensure success

For the people living in Rees, this means that approx. 900 privately owned wastewater connections must be examined every year over the next twelve years. What is important here is that the inhabitants are informed at an early stage about the exact details and the procedure that has been drawn up by the Kalkar-Rees wastewater association. REMONDIS Aqua will be organizing and carrying out this important task over the next few months – from preparing the information to holding public meetings to setting up a telephone hotline. To this effect, the wastewater company, Abwasserbetrieb Rees, has signed a service agreement with REMONDIS Aqua that is valid for a number of years.

### Neutrality increases levels of trust

Not only the owners of property drainage systems in Rees have questions about the expected costs and about which companies are reliable and serious. One reason for their worries are the reports in the media about the so-called 'sewer sharks' – companies that, using dubious methods, offer to undertake drain repair work at extortionate prices, in particular to senior citizens. REMONDIS Aqua, in contrast, sees itself as a market-neutral partner as it has no interests in the construction and repair work meaning it can provide local authorities with the best possible support. This is, therefore, an example that others may choose to follow, in particular small and medium-sized local authorities.

### Lively interest:

more than 250 people came to the opening event at the Bürgerhaus in Rees which had been organized by REMONDIS Aqua and the municipal wastewater company, Abwasserbetrieb Rees

REMONDIS Aqua's experts already have extensive experience of this subject through its joint ventures with municipal companies in Oberhausen and Lünen as well as in Duisburg.

# Reclaiming land

REMONDIS PROTERRA REDEVELOPS BROWNFIELD SITES

**REMONDIS®**

**REMEX**

One city, two remediation projects: REMONDIS ProTerra, a company belonging to the REMEX Group, has reclaimed land in Wuppertal this year with both cases involving highly polluted industrial sites. In both projects, special challenges had to be mastered – from protecting the natural habitat to securing the monorail system, the “Wuppertaler Schwebebahn”.

In Wuppertal-Cronenberg, the company had to clear up a site that had been home to industrial firms for many years and, at one time, to an electroplating business. By the time it closed its doors for the final time, it had left its mark on the area: the whole of the 1,400m<sup>2</sup> site was heavily polluted. Besides highly toxic chromate, the ground also contained other hazardous materials such as halocarbons and per-fluorinated tensides. The pollutants had reached a depth of up to nine metres and had also affected the groundwater.

## A polluted site transformed into a nature preserve

In order to prevent the materials (some of which were able to dissolve very easily in water) from spreading further, the contaminated earth had to be replaced with clean earth – a task for ProTerra. Before the remediation work could begin, however, a wide range of tasks had to be carried out first to protect the rare amphibians, reptiles and bird life as the site was in the middle of a nature preserve. Even an owl had to be re-homed.



Excavated earth containing tar close to one of the monorail's supports which has been secured with bored piles



“Each remediation project has its own particular challenges. One of Pro-Terra’s strengths is its ability to find efficient solutions to such challenges no matter how complex they are.”

Jens Fuhr, project manager at ProTerra

During the project, ProTerra removed 15,000t of highly contaminated earth and delivered the same quantity of replacement material. The logistics were not simple either as the area, which was on a steep slope, could only be reached by lorry through a narrow listed tunnel. The standard tipper trucks were unable to fit through the tunnel so smaller vehicles had to be used to transport the material to and from the site increasing the number of trips by 200. Having refilled the area, the reclaimed land has been left to allow grass to seed itself naturally and shall, at a later date, become part of the nature reserve.

#### **Redevelopment of a gas works site**

Europe’s first ever gas works was built in Wuppertal-Barmen in 1848. Here town gas was generated by gasifying coal and, to begin with, all of the highly toxic by-products were simply buried in the ground. At a later date, these hazardous materials were then stored in tanks but over the years they, too, began to leak out. The result: the earth at the 2,800m<sup>2</sup> site became polluted – in some cases up to seven metres below ground. Tests revealed that the groundwater contained carcinogenic polycyclic aromatic hydrocarbons as well as benzene and cyanide.

This remediation project also required a great deal of preparation work before it could begin. One particular challenge was the fact that the site was so close to the “Wuppertaler Schwebebahn”: in order to ensure that the monorail system was not at risk, the foundations of its supporting structure had to be secured. 35 holes had to be drilled into the ground – each 14 metres deep – and then filled with reinforced concrete. In Barmen, ProTerra then excavated, transported and disposed of the 24,000t of contaminated earth. Once this had been completed, these specialists then refilled the site with the same amount of new earth. As a result there are no restrictions as to how the area can be used in the future.

#### **Cooperation within the REMONDIS Group**

ProTerra worked according to the highest of safety standards during both projects. Each day, for example, measurements were taken to monitor any possible pollutant levels and the trucks used had to drive through a tyre wash system before they were allowed to leave the site. Once again the cooperation work carried out within the REMONDIS Group proved to be a great advantage. The contaminated earth, for example, was processed at the landfills run by REMEX. The UCL laboratories accompanied the analysis work and the local Rhein-Wupper branch transported the highly contaminated fractions.

During the redevelopment of the site that was once home to an electroplating business, focus was also put on protecting the natural habitat – both before and during the work.

ProTerra transported a total of around 80,000t of contaminated and clean earth during the remediation projects carried out in Wuppertal.

#### **REMONDIS and REMEX: Specialists for complex remediation projects**

REMONDIS ProTerra GmbH specializes in redeveloping contaminated areas and disposing of contaminated mineral waste. As general contractor, it coordinates all the remediation measures involved in such projects. Additional value is created thanks to the close cooperation work carried out between the specialist companies in the REMONDIS and REMEX Groups and the approved external partner firms. ProTerra carries out all the individual services independently from drawing up a concept, to managing the construction work, to collecting and transporting the materials, to carrying out all documentation work. Each year, ProTerra handles around 600,000t of material.

A practical example

# Systematic collection and recycling

## THE FRIEDHELM LOH GROUP RELIES ON REMONDIS' SERVICES



Among the group of German industrial businesses, the owner-operated Friedhelm Loh Group is considered to be one of the global growth champions. Across the world, this company group currently has 16 production plants and 63 subsidiaries as well as a workforce of 11,500 employees. Since the middle of 2010, this successful company group has been making use of REMONDIS' expertise and services at all of its locations in Germany.

This waste management partnership involves two large German family-run companies, both of which are active across the world.

"As far as the collection and recycling of waste from our company is concerned, there used to be a number of uncoordinated individual solutions provided by various different external partners. The result was a situation that was becoming increasingly confusing and, above all, expensive. For this reason, our aim was to find a central contact person and have uniform waste statistics for all services in-

volved," explained Friedhelm Utsch, head of safety, energy, the environment and company buildings at the group's central service company, Loh Services.

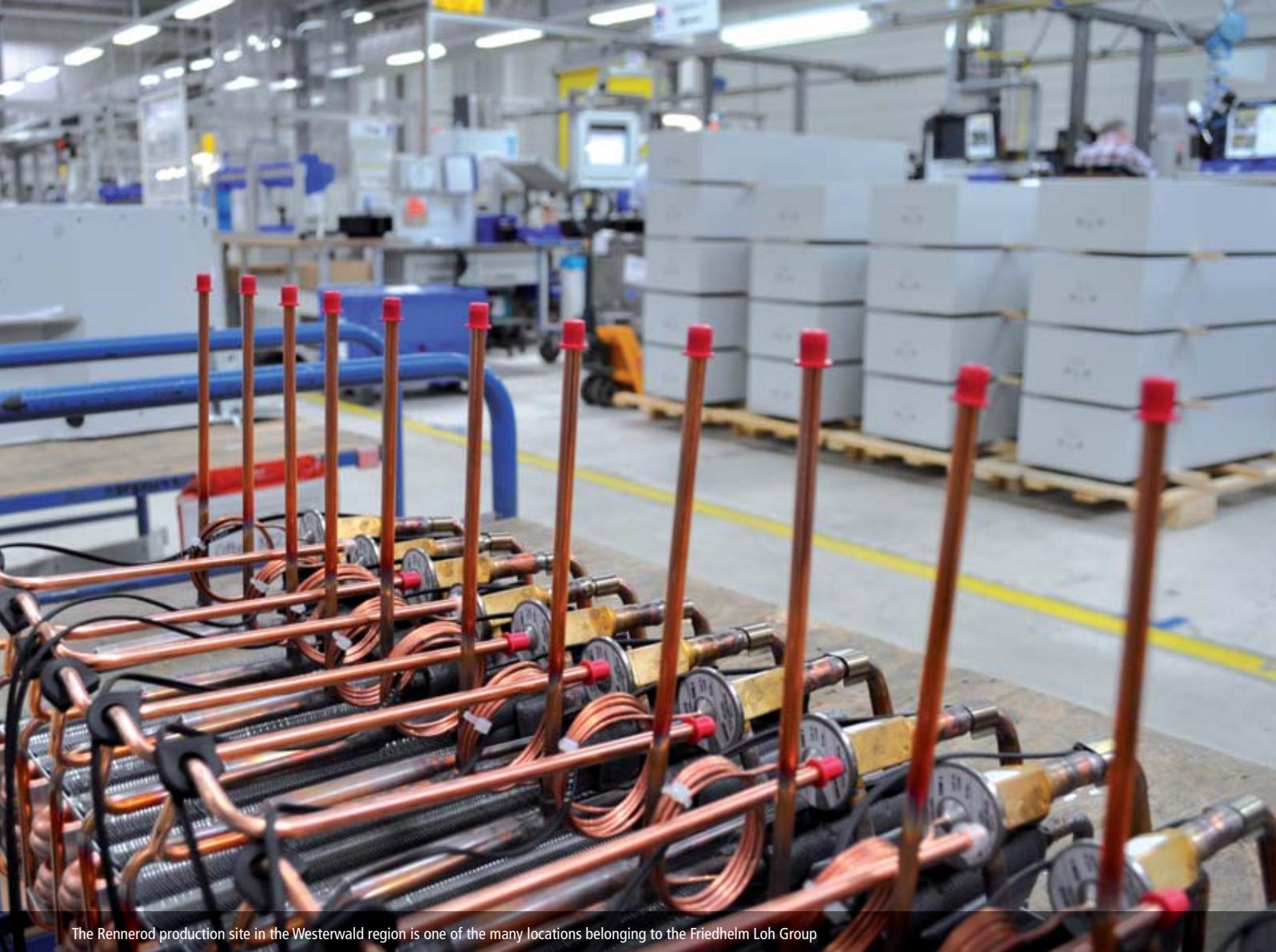
### A logical collection and recycling concept

The Friedhelm Loh Group decided to work together with REMONDIS. An ideal partnership as both family-run companies are present throughout the country. As a result the best conditions were in place to ensure REMONDIS can provide all services and be located close to the sites to provide support as needed. As part of the cooperation, REMONDIS first developed a waste collection concept together with its customer which was then implemented within a short space of time. The result is a uniform system that has been adapted precisely to meet the requirements and fit in with the work processes.

The aim of this system is to continuously optimize processes and costs. It saves the company's employees time which can then be spent on the core business instead. The main cost advantages are created by the steps being taken to fur-



(from left to right) Christoph Haub, key account manager at REMONDIS, and Friedhelm Utsch, departmental head of work safety, energy, environmental affairs and company buildings at the Friedhelm Loh Group



The Rennerod production site in the Westerwald region is one of the many locations belonging to the Friedhelm Loh Group

ther reduce the amount of residual waste. This is achieved by systematically sending recyclable fractions for efficient and eco-friendly materials recycling. To ensure the materials are thrown away strictly according to type, REMONDIS has placed bins of differing sizes at the Friedhelm Loh Group's branches across the country to cover their individual needs. A sign-age system has also been put in place so that the employees know which bin is for which material.

#### **Involvement of other European countries**

The sorted and separated waste ranges from paper, cardboard and card to plastic film to timber to waste electrical and electronic equipment. Suitable containers are also available for mineral waste such as construction waste or mixed construction and demolition waste. Furthermore, plastic straps and polystyrene are collected in special bags and transported from the sites. There are set collection times for all the fractions. If necessary, the branches can inform REMONDIS by fax that there is further material for collection and arrange a suitable date for this to happen.

#### **An innovative and fast-growing company group**

The Friedhelm Loh Group, which is based in Haiger in Hessen, is expecting to have a turnover of around 2.2 billion euros in the 2011 business year. The group has won a number of prizes for being a top employer as well as for its innovations. In 2010, for example, the company's owner, Friedhelm Loh, was presented with the prestigious "Diesel Medal" from the German Institute for Invention. The largest company within the group is RITTAL which was founded in 1961 and is a leading global provider of systems covering electronic packaging, power distribution, climate control and IT as well as software and services.

The waste management system also involves the two partners carrying out an inspection of the locations every six months. Christoph Haub, key account manager at REMONDIS: "This allows us to identify and implement potential optimization measures quickly." According to Friedhelm Utsch, the company has also already agreed on its next target: to extend this successful system across Europe. This will mean that production plants in, for example, France, Italy and the UK will be able to benefit from this scheme.



Environmental services

# The sustainable use of animal by-products

A COMPANY PROFILE OF THE SARIA GROUP

**SARIA®**

The specialist subsidiaries of the SARIA Group are internationally active as manufacturers of high quality products for human or animal consumption, for agricultural businesses, for aquaculture as well as for industrial applications. Around 5,000 employees work for the company at its 116 locations in 11 countries. Via its share in the Dutch Teeuwissen Group, SARIA has recently become active on growth markets such as Brazil and China. The business fields of this innovative RETHMANN subsidiary: the sustainable use of animal by-products as well as of residual waste from the food supply chain.

## Facts & Figures for 2011:

- 5,000 employees
- 116 locations in 11 countries

Not all animal by-products from the meat industry and agricultural sector are suitable for human consumption nor can they all be processed into pet food. On the contrary: the European Union has classified fallen animals from farms as well as certain abattoir by-products as hazardous material that must be disposed of in accordance with strict regulations. A number of SARIA subsidiaries have been processing these residual materials quickly and hygienically for years now using highly efficient industrial facilities and uniform standards throughout the group. During the disposal process, priority is always given to protecting humans and animals. The only products made from such residual materials are alternative fuels used, for example, by power plants or the cement industry. The calorific value of animal fat is around 25 percent higher than that of hard coal. It makes a great contribution, therefore, towards conserving our fossil resources.

## By-products with many uses

A further business field of the SARIA Group: the production of high quality meal and fats from good animal by-products. Thus, for example, animal fats are used in metallic soap and ensure that freshly printed high gloss paper comes away from the printing roll or that façade plastering is impermeable to water. Farmers use bonemeal as an organic fertilizer. Furthermore, high-quality animal proteins and fats serve as a primary material for the production of pet food. When based on fish scraps, they are also a nutritious ingredient in animal feed. SARIA also processes animal skins and furs on an industrial scale. The automobile industry, for example, uses them for their car seats and fittings.

## Electricity from food waste

SARIA's subsidiary ReFood and its 17 branches in Germany are the leading service provider when it comes to recycling



food waste and used frying fat in an eco-friendly way. The company provides its customers from the restaurant sector as well as from trade and industry with 120-litre or 240-litre bins as well as with special containers for used frying oil. Each time the waste is collected, the employees exchange the containers with bins that have been cleaned both inside and out. The customers arrange when and how often the bins should be collected by ReFood. Digital scanners on site at the customers' ensure that all stages of ReFood's services can be tracked at any time.

This innovative service provider uses the organic residual waste as a sustainable raw material: climate-friendly electricity and heat is generated at ReFood's biogas plants which are only run on food waste. Furthermore, the ferment product is used by farmers as a high quality fertilizer as it contains nitrogen, phosphorus and potassium. The company hands over the used frying fats to the biodiesel industry which uses it as a sustainable base material. ReFood now also offers its services beyond the German borders in, for example, France, the UK and Spain.

### Eco-friendly biodiesel

Being one of the pioneers of the German biodiesel industry, SARIA has developed process technology to produce fuels based on animal fats. Each year, the company produces a total of 240 million litres of eco-friendly biodiesel. This is enough to fill considerably more than four million car diesel tanks helping to reduce carbon-dioxide emissions. The mineral oil industry uses the fuel to fulfil the legal regulations concerning blend ratios: it conforms to all sustainability criteria required by the EU Commission. Thus the rape seed, which is used to produce biodiesel from rape seed oil, only comes from accredited suppliers. And it is clear that the animal fats are sustainable.

### Food and pharmaceutical applications

A further business field of the Group: food. Individual subsidiaries have been processing particularly high quality animal by-products for many years, for example pork rind into shortening and frying fat for human consumption.

The Teeuwissen Group, which has been one of SARIA's cooperation partners since 2010, has a particularly innovative way of using animal by-products. It collects, among other things, pig intestines from abattoirs across the world. This by-product is not only suitable for producing sausage products. The mucosa in the intestines is essential for producing heparin. This pharmaceutical substance is used as a blood thinner in hospitals and during surgery – animal by-products are often used to make base materials for pharmaceutical products.

From fuel for power plants to the pharmaceutical substance, heparin – many different products can be made from animal by-products and all of them are sustainable.

Six ReFood biogas plants in Germany, France and the UK produce electricity from food waste for over 30,000 households





Trends

## Beneficial partnerships for local authorities

THE PRIVATE SECTOR IS DEMONSTRATING THAT IT IS A RELIABLE AND COST-SAVING SERVICE PROVIDER

In America, Asia and Europe – across the world, the number of local authorities having to cope with financial difficulties is growing and yet they must still ensure that their local inhabitants are provided with services on a long-term basis. A squaring of the circle that can be solved. For example, by putting the tasks out to tender for private sector bidders or founding public private joint ventures.

A well-functioning recycling economy not only needs high levels of specialist know-how but also comprehensive logistics and plant technology.

Cooperation work between the public and private sectors has also proven to be a success in the water management sector.

REMONDIS cooperates with the public sector in a number of very different ways within the water and environmental service sector. And millions of people are already benefiting from these tried and tested partnerships.

Such cooperation work creates tangible benefits for the cities, the district authorities and for the local inhabitants. Thus, for example, the local authorities have direct access to REMONDIS' know-how and years of experience. Furthermore, they do not need to invest large sums of money in plants and logistics as REMONDIS brings these resources into the cooperation as well as its commercial and technological expertise. The result is top quality services which are provided in an extremely cost-effective manner. Good news for the local inhabitants: this easing of the pressure on the public purse means that they can expect the charges they have to pay to remain at a stable level.

One method of cooperation that has particularly proven its worth is the public private partnership (PPP). Internationally, REMONDIS is currently involved in more than 100 such partnerships. And new examples of well-functioning PPP solutions are being continually added to this list. One of its plus points: additional contracts can be generated through public private partnerships creating the potential for more turnover. This not only increases its financial strength but also contributes towards safeguarding jobs.

The following guest article by Dr Benedikt Hüffer, President of the North Westphalian Chamber of Commerce and Industry, takes a look at the increasingly difficult situation being faced by local authorities – and the resulting need for new solutions. The situation described in the German state of North Rhine-Westphalia can be seen as an example of the situation faced by numerous cities and districts all around the world.

# A lack of money yet a long wish list – local authority budgets in trouble

A COMMENTARY BY DR BENEDIKT HÜFFER, PRESIDENT OF THE NORTH WESTPHALIAN CHAMBER OF COMMERCE AND INDUSTRY

A subject that for a long time had been lurking in the background is now top of the agenda at the State government in North Rhine-Westphalia (NRW) – the fact that municipal finances are in bad shape. In many cases, the money worries of the cities and districts have led to higher taxes or a reduced range of services.

Practically every one in ten districts in NRW has no or almost no equity capital left. 138 local authorities, therefore, are being run on an emergency budget and the total level of debt of the local authorities has increased to 57 billion euros. The buoyant economy in 2010 and 2011 has meant that the level of business tax revenue received by the local authorities has increased considerably. Moreover, many cities and districts have further increased their rates of business tax. Despite this, however, the local authorities in NRW have not succeeded in escaping their deficits because of the tasks they have to carry out by law.

It is advisable to adjust the boundaries of what is feasible and reasonable in order to leave this path of debt. To achieve this, standards must be examined and new decisions made on what tasks should be carried out by local authorities in the future. Using this as a basis, it will then be possible to cap costs. This can only succeed, however, if central government, the state governments and the local authorities all sit down around one table and reach an agreement.

## Facts & Figures

Dr Benedikt Hüffer, President of the North Westphalian Chamber of Commerce and Industry (IHK). The chamber is the seventh-largest in Germany. It represents the interests of its approx. 135,000 member firms from the Münsterland and Emscher-Lippe regions when dealing with politicians and administrative bodies. Working together with the other 80 IHKs, the Association of German Chambers of Commerce and Industry (DIHK) and the Chambers of Commerce abroad, a network has been created making it possible for them to represent the interests of their members at global level.

**“Standards must be examined and new decisions made on what tasks should be carried out by the local authorities in the future.”** Dr Benedikt Hüffer, President of the North Westphalian Chamber of Commerce and Industry (IHK)

The current situation of local authority finances – and this is not only the case in Germany – is, therefore, not only a question of budget but primarily a political economic problem. The core of the matter is more than a simple formal adjustment of the deficits. It is rather a question of organizing the race between the wishes of the local inhabitants, the generosity of the politicians and the actual financing opportunities in a manner that is both responsible and sustainable. What we can no longer afford to do is to expect the next generation to find the solutions to our debt problems.



Dr Benedikt Hüffer, President of the North Westphalian Chamber of Commerce and Industry (IHK)



Environmental services

# The driving force

**BDE CELEBRATES ITS 50TH ANNIVERSARY IN BERLIN – EVEN MORE RECYCLING IN THE FUTURE**

The BDE (Federal Association of the German Waste Management Industry), which has around 800 members making it the largest association within its branch in Germany and Europe, recently celebrated its 50th anniversary at the Konzerthaus at the Gendarmenmarkt in Berlin. The association, which was founded in the autumn of 1961, had originally been known as the “Verband des privaten Städtereinigungsgewerbes” (Association of privately owned city cleaning businesses).



Private-sector water and environmental service companies have committed themselves to ensuring all recyclable materials are recycled in the future.

Federal Environmental Minister Dr Norbert Röttgen addressed the 450 invited guests paying tribute to the services rendered by the branch: “The waste management industry is one of the fastest growing branches in Germany. Being the largest branch association in Europe, the BDE has made an important contribution towards the fact that Germany is now on its way to having a modern recycling economy.” The success of the waste management branch and the BDE is, the Federal Environmental Minister said, impressive: “Today, almost two-thirds of all municipal waste is recycled, around twice the amount recycled in the 90s. The waste management industry is an excellent example of a 21<sup>st</sup> century economy – of an economy that unites growth with resource efficiency. And this is the path that we wish to continue down in the future, especially as we have so few natural resources of our own and we have created the basis for this with the new Law on Life-Cycle Management.”

Renate Künast, chairwoman of the Bündnis 90/Die Grünen Bundestag parliamentary group, said, “‘Green Economy’ is a global growth market and a great opportunity for German companies. What is important now is to create the right framework conditions to ensure Germany remains at the forefront of environmental and efficiency technology.”

Karl Friedrich Falkenberg, European Commission Director General for the Environment, commented on the global

importance of the waste management branch, “If demographic change develops as we expect it to, especially in the developing countries, and production and consumption continues as it is today, then we will soon have reached the limits of our Planet. We need to rethink the way we act and create the framework conditions for growth that is both more intelligent and sustainable. The waste management branch will play a central role here in building up a sustainable recycling economy.”

During his speech, BDE President Peter Kurth took a look at the future, saying, “Private-sector water, recycling and environmental service companies have committed themselves to achieving the aim of ensuring all recyclable materials are used for materials recycling.” This long-term goal, Kurth said, deliberately goes beyond the regulations set out in the new Law on Life-Cycle Management. Kurth commented, “We continue to expect that the framework conditions for materials recycling will be improved with the new Law on Life-Cycle Management. Germany cannot afford to waste its resources.” The BDE President called on politicians not to block a liberalization of the waste management branch. The market needs fair competition and transparent tender processes, he said, and not new forms of discrimination. At the end of the day, local authorities and their inhabitants benefit from competition and transparency as they lead to lower costs and charges.



**Berlin Declaration:  
Open borders for the resource 'waste'**

To mark its 50<sup>th</sup> anniversary, the BDE has undertaken to determine a new strategic position for the branch and published its "Berlin Declaration" – a position paper on the future of the waste management branch in Germany and Europe. According to the BDE President Peter Kurth, this paper aims to think beyond the current events and developments in 2011 and outline the development of the branch over the next 10 to 15 years. Many of the proposals involve visions which private-sector businesses such as REMONDIS are also striving to achieve over the medium to long term.

Thus, for example, private-sector water, recycling and environmental service companies have committed themselves to achieving the aim of ensuring all recyclable materials are used for materials recycling. Peter Kurth said, "With this goal, we are deliberately going beyond the regulations set out in the new Law on Life-Cycle Management. The softening of the five-stage waste hierarchy in the law, i.e. recycling and incineration being given the same importance, means there is a risk that large volumes of recyclables will, in the future, end up in waste incineration plants and not be sent for recycling. Germany cannot afford to waste its resources."

In order to be able to further extend the environmental service and recycling economy, the private-sector companies

within the branch are striving to achieve stronger partnerships with the industry. The subjects, avoidance of waste and the recovery of raw materials, must, in the future, already be thought about when products are being developed and manufactured. The only real way to be able to recover the precious metals and rare earths from waste electrical appliances is to extend product responsibility and ensure there is a free movement of goods within the EU. Here, the association is expecting the government to push forward the development of processes to improve the recyclability of products and reduce material input by providing research and technology grants.

Greater attention must be paid to the subjects of avoiding waste and recovering raw materials when products are being designed.

(from left to right) BDE President Peter Kurth, Nadine de Greef from FEAD, Daisy Kroker from VÖEB, REMONDIS Board Member Egbert Tölle and Robert Gruber, also from VÖEB, during the celebrations in Berlin





Metal processing

# A shining contribution to safeguarding the future

ALUMINIUM SPECIALIST ALUNOVA RECYCLING TRANSFORMS WASTE INTO NEW SOURCES OF RAW MATERIALS

The conservation of resources, energy efficiency and security of supply: Alunova Recycling encapsulates the advantages of recycling. By recovering aluminium, this south German company creates both ecological and economical advantages. The source material used by the company includes fractions from the kerbside collection of packaging materials as well as residual waste from production processes.

Australia, Asia and South America – the most important deposits of aluminium ore are outside Europe.

From its light weight, to its attractive appearance to its excellent ductility and top chemical properties – aluminium offers a wide range of advantages. It is, therefore, hardly surprising that this shiny, silvery material plays an important role in many branches and in many production processes. The metal is also found in as wide a range of products: in cars and high voltage power lines, in drinks cans and food packaging.

## Core business: processing aluminium

One expert in the field of recycling this light metal is Alunova Recycling GmbH, which is jointly owned by REMONDIS and the Bruch family. "Recovering aluminium from waste also plays an important role within our industry," explains

Stephan Kulbatzki, commercial managing director at Alunova. "Recycling ensures that there are sufficient quantities of this sought-after metal on the market and that they are available at affordable prices."

Aluminium does not belong to the group of rare raw materials – on the contrary, it is one of the most commonly found metals on Earth. The only economic way of obtaining aluminium is using bauxite ore and this process requires huge amounts of energy. 14,000 kWh of electricity are needed to produce a single tonne of aluminium – ten times the amount required to produce tinplate. The amount of energy used to recycle aluminium is considerably less: 95 percent less energy is needed compared to that initially required to



**“What was waste yesterday, is today a sought-after raw material. Recycling aluminium needs only one-fortieth of the energy required to produce aluminium from bauxite ore.”**

Stephan Kulbatzki, commercial managing director Alunova

extract the metal from the ore. Besides conserving natural resources, important arguments in favour of systematically recycling aluminium are, therefore, energy consumption and climate protection.

#### **Source material from households and industrial businesses**

Alunova Recycling GmbH recycles packaging containing aluminium that has been collected from household recycling bins as well as production residue that contains aluminium. The material from the recycling bins and recycling bags is primarily delivered in bales and has already been put through a sorting facility before it is sent to the plant. The bales are then broken up and roughly cut up at Alunova Recycling before undergoing a pyrolysis process.

The processed scrap comes directly from manufacturing businesses. Such scrap includes, for example, wheel hubs and car bonnet emblems from well-known producers. Not only the recovery of the aluminium is important for the automobile industry – what is also important here is that the wheel hubs are made unrecognizable and are removed from circulation forever.

#### **A process with high recycling rates**

Using a pyrolysis process, Alunova Recycling first removes any deposits before producing clean aluminium fractions. The products resulting from these processes are separated into 15 different categories – from fine aluminium powder to roughly shaped pieces the size of a football. Once they are fed back into the production cycles, they can, therefore, be used for practically the same range of applications as the primary raw material.



Alunova Recycling GmbH's business location in Bad Säckingen

Thanks to the comprehensive know-how of the company's 46 employees and its state-of-the-art technology, Alunova achieves impressive recovery rates. Even the by-products generated from the processing methods can be used. Thus, a part of the material can also be handed over to further processing companies which prepare it for subsequent recycling via a float and sink process. Other fractions, including metals containing iron, are sold directly by Alunova to specialist recyclers such as TSR, a company that also belongs to the REMONDIS Group. “The more material cycles we can close the better. Let's not forget that steel and aluminium are the most commonly used metals,” said Stephan Kulbatzki. One thing is certain for him: “Recycling helps to safeguard supplies and is, therefore, playing an important role in ensuring that the quality of life of our society can be maintained.”

**In most cases, it is only worth producing aluminium where energy is cheap as the production process requires such high amounts of energy.**

# Batteries in good hands

REMONDIS INDUSTRIE SERVICE'S SUBSIDIARY, NQR, AWARDED LARGE-SCALE CONTRACT TO SORT BATTERIES

**NQR**

All of us use batteries – often without actually realizing it. Batteries are not only found in remote controls but also in watches, hearing aids and cameras and, once they have run down, they need to be disposed of correctly. The residual waste bin is also not the right place for rechargeable batteries that have reached the end of their life. Both rechargeable and non-rechargeable batteries contain valuable metals that can be recovered and returned to the production cycle.

Nordische Quecksilber Rückgewinnung GmbH in Lübeck (NQR), a fully owned subsidiary of REMONDIS Industrie Service, is a specialist for professionally disposing of rechargeable and non-rechargeable batteries. From 01 January 2012, NQR will sort over 3,000t of batteries used in devices at a sorting plant in Lübeck as well as in Loßburg in the Black Forest on behalf of the GRS Foundation (a take-back system for batteries). Twelve new jobs will be created as result of this new project. Thanks to this contract, which is initially valid for a period of three years, NQR will sort around 20 percent of all batteries used in devices that are collected in Germany and recycle them in a way that makes both ecological and economical sense.

The collection and recycling of batteries is organized in Germany by, among others, the GRS Foundation, which was established by leading battery manufacturers to fulfil their product obligations for batteries in devices as laid down in the Federal Battery Law. The GRS is a non-profit organization and is currently financed by more than 2,400 producers and importers of batteries found in devices.

After the collection boxes and barrels have been picked up by GRS from the collection points, they will then be transported to NQR where they will be separated into predefined electrochemical fractions using a special process before being transferred to a suitable recycling plant. Batteries contain metals such as zinc, manganese, iron and nickel which can be reused to manufacture new batteries or in other production processes. In 2010 alone, the GRS took back more than 14,500t of used rechargeable and non-rechargeable batteries. This means that each person living in Germany took, on average, 177 grams to the collection points – the equivalent of an average eight batteries. Practically 100 percent of all batteries can be recycled: only approx. 0.4 percent of all used batteries that are collected must be disposed of. There is, however, still potential in Germany to increase the collection rates of batteries used in devices. At present, less than 50 percent of used batteries are handed in for recycling. There is, therefore, the potential to double the number of batteries currently being recycled in Germany. NQR and REMONDIS are working towards this goal.

Rechargeable and non-rechargeable batteries should not be thrown away in the residual waste bin. They contain valuable metals and can be recycled.

NQR has, therefore, extended its portfolio of services to include the sorting of batteries. The centre piece of its processing activities is its worldwide unique mercury processing facility. For years now, the company has been processing products containing mercury including button cells, thermometers, rectifiers, industrial sludge, dental amalgam and other materials from its customers from all around the globe. The recycled mercury is then returned to the economic cycle. This high quality material is in high demand from producers of batteries, low-energy light bulbs, fluorescent tubes and medical devices as well as from universities and companies active in the area of science and research.



# Quality from gypsum

## SHG SUPPLIES INDUSTRIAL BUSINESSES WITH HIGH QUALITY SPECIALTY GYPSUM

SHG, a company belonging to the REMONDIS Group, offers its industrial customers a wide range of products based on the natural calcium sulfate base materials, gypsum and anhydrite. The companies purchasing these high quality specialty gypsums are domestic and foreign firms active in the ceramic industry as well as businesses producing roof tiles, household articles and gifts. Furthermore, the food and feed industry and the medical sector use SHG's products.

Besides the construction industry, which has traditionally been processing gypsum for centuries, industrial customers also benefit from the diversity of the product and the state-of-the-art facilities used by SHG to refine the material. The technical flexibility of the different furnaces ensures that the calcined gypsums have the best possible properties. This also includes precisely processing the gypsum products into a whole range of different particle sizes from coarse to ultrafine. Südharzer Gipswerk has decades of experience in the formulation and quality control of gypsums for the construction sector and its industrial customers.

Südharzer Gipswerk GmbH's raw products come from the large deposits of natural gypsum found close to the company's production plants in Sulzheim (Lower Franconia) and Ellrich (Thüringen). These natural deposits differ according to their geological formation, age and thickness. SHG processes this natural raw material into high quality products. These include raw products, which are anhydrous as anhydrite or with water of crystallization as dihydrate, in various stages of hydration. Special qualities of calcium-sulfate hemihydrate raw gypsum are used by SHG to produce alpha and beta-hemihydrate, which in turn is used to produce various gypsum mixtures. The gypsum experts in the REMONDIS Group also produce moulding gypsums to manufacture plaster moulds that vary according to model and quality depending on the requirements and intended application. The formulation for these moulding gypsums can be adapted to influence the drying time and expansion

properties to meet the requirements of the individual customers.

To produce liquid screed, SHG uses special types of gypsum as a binding agent. The resulting surface is practically tension-free with high compressive and tensile strength. The calcium sulfate binder used for liquid screed offers a number of advantages such as thinner layers, large surface areas without joints, very good heat conductivity for floors and underfloor heating systems, a very good surface finish as well as the fact that it can be laid very quickly.

Thanks to its production sites in central and south Germany, which also own six quarries, SHG has an excellent position on the market. The company gives priority to sustainability and environmental matters which are reflected throughout the process from the way it extracts the gypsum from the quarries to the efforts it makes afterwards to turn areas into natural habitats. Additional business is also generated by the fact that it is part of the REMONDIS Group which also markets, among other products, gypsum-based binding agents and additives. Together, the two companies are located close to their customers and guarantee the highest of qualities. Each year, REMONDIS markets approx. 350,000t of binding agents and additives under the product name RADDIBIN. SHG ensures that it has access to important raw material reserves and strengthens its presence on the market both at regional and national level.

Gypsum is a natural product; large quantities of it are also generated in the filter systems at coal-fired power plants.

News in brief

# REMONDIS launches innovative app service

## DIGITAL WASTE CALENDAR WITH COLLECTION DATES AND LOCATIONS

**NEW!**

When is the residual waste bin due to be emptied? Where is the nearest recycling centre? Which bottle bank is the closest? Those people with a smartphone can now get the answers to these questions via their mobile. REMONDIS has extended its comprehensive range of services for local inhabitants to include this special app. Once it has been downloaded, the new app provides the user with practical information about local waste management services.

The user-friendly REMONDIS app is free and can be downloaded from the Apple App-Store or Google Android-Market. It is suitable for both smartphones and tablet PCs. Once downloaded, users just add their address to receive the correct information about their area. The app is easy to use: all the functions are intuitive but, if support is needed, there is a help button on hand.

For the first stage of the launch, the REMONDIS app is available for the cities of Kreuztal and

Sprockhövel, where the system has already been successfully tested in a pilot phase. Both cities belong to the region for which REMONDIS Rhineland is responsible. For this reason, the REMONDIS app can be downloaded from the company's homepage, [www.remondis-rheinland.de](http://www.remondis-rheinland.de), or from the app stores. Preparations are already being made to extend this new digital service. Plans are for the REMONDIS app to be available across the country.



News in brief

# REMONDIS supports kindergarten in Saransk, Russia

## DONATION TOWARDS NEW COMPUTERS AND SPORTS EQUIPMENT

As part of a fundraising campaign, Torsten Weber, managing director of REMONDIS International, and Svetlana Bigesse, project manager at REMONDIS International, handed over a donation to a kindergarten in the Russian town of Saransk on behalf of the company, OOO REMONDIS Saransk. REMONDIS is supporting the kindergarten in its efforts to acquire several computers with learning programmes and the necessary child-size computer furniture as well as its goal to modernize its gym and sports facilities and to pur-

chase sports equipment such as space hoppers and similar such objects.

OOO REMONDIS Saransk was founded in July 2011 as a joint venture between the municipal company, Spezavtohozjajstvo Saranskoe, and REMONDIS International and is active in the local recycling sector which is to be gradually adapted to modern standards.

# Berlin Sports' Environmental Award

## SUPPORTING BERLIN SPORTS CLUBS

Which Berlin sports clubs are the most environmentally friendly? The LSB, the sports association for the state of Berlin, the capital's largest non-profit organisation, has decided to find the answer to this question and will be awarding the 'UMWELTPREIS DES BERLINER SPORTS' (Berlin Sports' Environmental Award) for the first time in 2012. This award will also include prize money amounting to 20,000 euros. The LSB is being supported by Berliner Stadtreinigung (BSR) and REMONDIS GmbH & Co KG. The application period began on 10 November 2011 and ends on 30 March 2012. Wherever people do sport, water and energy are being consumed and waste and CO<sub>2</sub> generated. Many of the 2,000+ Berlin sports clubs, which together have approx. 580,000 active members, have already focused on climate and environmental protection. More often than not, they are highly committed to finding ways of protecting



Bernd Fleschenberg, a managing director at REMONDIS, (2<sup>nd</sup> from left) at the press conference given to introduce the Berlin Sports' Environmental Award

the environment and preventing climate change by implementing unusual initiatives as well as to using natural resources responsibly. The sports association is looking to pay tribute to these initiatives and projects with the support of REMONDIS and Berliner Stadtreinigung (BSR).

# REMONDIS at the IFAT

The next IFAT, the world's leading trade fair for water, sewage, waste and raw materials management, is taking place in Munich from 07 to 12 May 2012. Preparations for the event are already in full swing at REMONDIS. Following its merger with the ENTSORGA, the IFAT has become even more important and will attract branch experts and customers from all around the world to the New Munich Trade Fair Centre. Around 110,000 visitors from 186 countries travelled to Munich in 2010. These figures are expected to be exceeded in 2012 as the interest of the threshold countries in efficient environmental technology and in water and recycling activities has been growing rapidly.



the world and, at the same time, will be an eye-catching feature in the exhibition hall. In 2012, the trade fair will be focusing on responsible recycling activities. Such activities create the framework conditions for a reduced consumption and fairer distribution of our natural resources and provide a sustainable supply of raw materials.

REMONDIS will be taking part again in 2012 exhibiting its range of services at its 300m<sup>2</sup> stand which will be located in Hall B1 Stand 241/338. The central part of the stand will be the REMONDIS "Dome". This area is a place where discussions can be held with the guests from all around

REMONDIS will be demonstrating at the IFAT how the company contributes towards conserving natural resources and preventing climate change through systematic recycling and innovative services to secure supplies of secondary raw materials. Welcome to Munich.

# Prevention is the best protection

No matter whether it is an industrial service, an emergency management measure or a service for a power plant: being a provider of high quality industrial services, the Buchen Group undertakes high risk work – using heavy equipment, at dangerous heights and depths and in polluted environments. Despite these extreme conditions, their accident rate is extraordinarily low and, compared to the national average, exemplary. How is this possible?



In 1995, Buchen was the first German company to be accredited according to the internationally recognized work protection management system "Safety Certificate Contractors" (SCC).

Buchen drew up its work safety principles more than 25 years ago. Since then, the protection measures have been further perfected. Dr Peter Röhrig is head of QSGU (quality, safety, health and environmental protection) for the whole company. For seven years now, he has been helping Buchen to set standards in this area: "The basis is our process-oriented management system, on which all QSGU initiatives are based. With the support of a team of QSGU specialists, we implement the initiatives in all company areas in a standardized way – Europe-wide. This is only possible with the support of the executive management team, for whom QSGU is not just lip service but an essential part of the company culture."

The risks are methodically recorded. The operating instructions are then created from these risk assessments. "Furthermore, other protection measures are added as needed and according to exact specifications for each project," explained Dr Röhrig. Buchen has put together comprehensive databases for protective clothing. A record, for example, has been made about the resistance of the gloves against



thousands of chemicals. Thus a quick glance at the list reveals whether nitrile gloves are enough or whether a multi-layer laminate model must be used.

"By providing training courses, we ensure that work and safety protection is embedded in the consciousness of our employees," explained Dr Röhrig. "The training centre in Voerde alone, which has a special practice area for using respiratory protective equipment, has trained more than 1,000 employees over the last three years." In order to keep the subject of safety in the forefront of their employees' minds, Buchen uses films, brochures and helmet stickers as well as posters, QSGU information and safety cards for project check-ups. Regular inspections are carried out to ensure the safety measures are being adhered to. Dr Röhrig commented, "Exacting demands in the areas of work safety and health protection are simply an important feature of our work – both for our employees and for our customers."

In 2011, Buchen was the first industrial service company to pass the SCCP accreditation according to the new set of rules giving it an unrestricted licence for petrochemicals.

Nothing is left to chance at Buchen when it comes to the employees' protective gear: its own workshop for respiratory protective equipment guarantees the equipment works perfectly



# > Impressions



◀ A delegation from Bremerhaven learns more about the local waste management sector during its visit to the Ukraine.

BDE President Peter Kurth with the guest speakers, chairperson of the 'Greens' parliamentary party Renate Künast and Federal Environmental Minister Dr Norbert Röttgen.

▶ Thorsten Weber, managing director at REMONDIS International, spends time with the children at the kindergarten in the Russian city of Saransk which is supported by REMONDIS.



▲ The BDE's 50<sup>th</sup> anniversary celebrations began with an evening event at the Museum of Communication.



◀ (from left to right) Stephan Krings, a managing director at REMONDIS, Elisabeth Breitkopf- Bruckschen, Ludger Rethmann, REMONDIS Board Chairman, and Dr Andreas Bruckschen, BDE, at the BDE's 50<sup>th</sup> anniversary celebrations.

▶ (from left to right) Gabriele Rohr from Abfallwirtschaft Nordharz, Norbert Rethmann, honorary chairman of the supervisory board, and Claus Michael Andreas, former press officer of the RETHMANN Group, during the 20<sup>th</sup> anniversary celebrations of Abfallwirtschaft Nordharz.





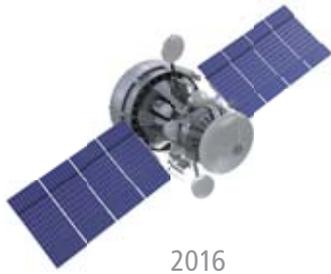
2011



2012



2014



2016



2017



2019



2021



2023



2024



2026



2028



2030?

## No Gallium – No Satellites.

### > Shortage of raw materials



Satellites make our lives safer. Besides TV programmes, they transmit important data for weather warnings or for marine navigation. The energy needed for this is provided by solar technology using gallium. By 2030, demand for this raw material – for future technologies alone – will be six times higher than total production needs today. REMONDIS is acting now and developing recycling methods. The highest levels of quality, worldwide. For a secure future. **German Qualität.**

Sources: United States Geological Survey (USGS 2010), Fraunhofer Institute for Systems and Innovation Research and Institute for Future Studies and Technology Assessment (ISI 2009)

REMONDIS AG & Co. KG, Brunnenstr. 138, 44536 Lünen, Germany, Tel.: +49 2306 106-515  
Fax: +49 2306 106-533, [www.remondiss.com](http://www.remondiss.com), [info.shortages@remondiss.com](mailto:info.shortages@remondiss.com)

Supply problems can be expected due to the economic importance of gallium and the predicted rapid increase in demand for the material.