The company newsletter for REMONDIS AG & Co. KG www.remondis.de



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WATER – QUALITY AND SECURITY THANKS TO PRIVATE SECTOR INVESTMENT

Water resources management Private sector investment welcomed

Poland New REMONDIS facilities

#### **EKO-Punkt**

Fighting 'disappearing' recycling volumes

MUE

Provision of supplies not possible without waste disposal

# Contents



#### LATEST NEWS

Many countries around the world suffer from water shortages. More than a billion people do not have access to clean drinking water. Whilst there is plenty of water available in Germany, many of the facilities are not up-to-date. Many sections of its outdated sewage networks must be modernized. Many local authorities and water boards, however, do not have the necessary funds at their disposal to carry out such work. Cooperation work with the private sector has provided a practicable way to deal with this problem.

#### Page 4



#### LATEST NEWS

Poland, too, must master a number of very different challenges in order to fulfil the standards of the European Union – and this in as short a time as possible. The road to success involves a large number of individual successful projects which, added together, can bring improvements in all areas and across the whole of the country. Three projects completed in October represent the wide range of activities being undertaken. **Page 8** 



#### LATEST NEWS

In truth, the recycling bin in Germany has more than proven its worth. Indeed so much so that 25 countries have already copied the dual system used in Germany for collecting recyclables. This system for collecting waste sales packaging separately from other kinds of waste contributes greatly towards the country's high recycling rates and has made Germany the world champion in recycling. The recycling bin, however, has become a patient in urgent need of care and attention. EKO-Punkt has taken up the challenge. **Page 12** 

#### LATEST NEWS

- 4 The path of water
- 7 Greater need for private-sector commitment
- 8 The power of change
- 10 Special container for the collection of electronic waste
- 10 For a good future
- 11 Top position in the Ukraine
- 12 Recycling bin in need of care and attention
- 14 Recycling for plastics
- 16 A directive with repercussions

#### **REMONDIS | WATER RESOURCES MANAGEMENT \_**

- 18 Modern water management in Spain
- 20 Saving costs with KoSIS
- 21 BASF: sewage network in top condition

#### **REMONDIS | ENVIRONMENTAL SERVICES**

- 22 Company starts operations in Belarus
- 24 Securing values together
- 26 A service full of potential
- 28 Protecting the environment against all eventualities
- 29 Cartel Office calls for fair competition
- 30 Energy from REMONDIS
- 32 A waste management specialist in the brown coal region
- 34 "Down Under" on course for increased recycling
- 36 Well prepared for the winter
- 38 More Recycling Now!
  - REMONDIS new managing directors for GWFA and Benelux
- 40 REMONDIS at the New Zealand waste management conference, Waste MINZ
- 41 REMONDIS Poland 'Best Service' Award for the area of waste electrical appliances
- 41 REMONDIS launches new websites in Poland and the Ukraine

#### PEOPLE \_

40

- 42 REMONDIS employee donates stem cells
- 42 REMONDIS 4-man boat at Berlin Regatta
- 43 Impressions

#### Flag

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Egbert Tölle, REMONDIS Board Member

#### **EDITORIAL**

#### **Dear Readers!**

In the last edition of our magazine, we repeatedly looked at the imminent threat of raw material shortages and the possible effects these may have on the German economy. It would appear that this message has finally been received as hardly a day goes by without the media discussing this subject. Since the publication of a strategy document by the EU on the supply of raw materials in Europe in which it identifies 14 particularly critical metals and rare earths, discussions about this problem have been taking place in Germany among those active in the world of politics and industry. ThyssenKrupp boss, Ekkehard Schulz, recently spoke out in favour of the foundation of a "Deutscher Rohstoff AG" [German Raw Material PLC] and even the liberal German Minister of the Economy, Rainer Brüderle, has indicated that he is open to such suggestions. Brüderle, however, is arguing in favour of a more efficient recycling sector as a response to the imminent raw material crisis rather than setting up monopoly-like mergers with government involvement. At the BDI Raw Materials Congress in Berlin, the Minister of the Economy said: "Recycling is the most important local source of raw materials." And he is right! In 2010 alone, the industry will have reduced their raw material import costs by 9.8 billion euros as a result of using secondary raw materials - not least thanks to REMONDIS. But even more can be achieved. REMONDIS is, therefore, arguing in favour of more ambitious recycling targets being set in the new Law on Life-Cycle Management. Higher recycling rates can be achieved by, among others, introducing recycling bins and biowaste bins throughout the whole of the country as well as collecting and using bulky waste in a more consistent manner.

Untapped supplies of metal can still be found in industrial and household waste. A mere 41 mobile phones contain the same amount of gold as found in one tonne of gold ore. The same amount of high purity copper can be recovered from 10 tonnes of waste electrical equipment as from 500 tonnes of copper ore – however without the damage to the environment and the wasted energy. Unfortunately, though, just a small amount of the 20 million tonnes of waste electrical equipment generated each year in the EU is actually recycled. This must change. Steps must be taken to prevent these resources being lost to us for ever as a result of illegal exports of waste electrical equipment and inadequate collection systems. REMONDIS operates two of the most modern WEEE recycling plants in Lünen (Germany) and in Troyes (France) and is, therefore, already playing an important role in supplying the industry with secondary raw materials.

Water is life – but only if water supply and wastewater treatment remains safe, technically sound and, above all, affordable. Our many activities in Germany, Spain, India, Turkey, Poland, Russia and other countries demonstrate that this can, above all, be secured through private sector commitment especially as many local councils find themselves having to tighten their belts. If water is supplied via REMONDIS' plants then top quality and sensible prices are guaranteed.

REMONDIS is full of energy and we mean that quite literally. Our family-run company has been active on the energy market for many years now. Today, REMONDIS is already generating considerable amounts of electricity and heat energy in its thermal recycling plants, biomass-fired power plants and biogas plants. The capacity installed in the plants amounts to around 300 megawatts. The site in Staßfurt in the German state of Saxony-Anhalt alone produces 170,000 MWh of electricity and 360,000 MWh of heat a year – most of it climate-neutral - and makes, therefore, a valuable and eco-friendly contribution towards supplying the state with electricity and increasing the attractiveness of the industrial location. REMONDIS is planning to further extend its biogas and thermal recycling plants in the future.

I hope you enjoy reading this edition of the REMONDIS aktuell.

Yours Egbert Tölle

#### Security of supply \_

# The path of water

### **REMONDIS**<sup>®</sup>

In July 2010, the United Nations declared that access to clean water was a basic human right.

#### QUALITY AND SECURITY THROUGH PRIVATE INVESTMENT

From space, our 'blue planet' would appear to have more than enough water. However, only 2.5 percent of all water supplies is fresh water and only one percent of the Earth's water is suitable as drinking water. Reason enough, therefore, for this scarce and valuable resource to be handled with great care. REMONDIS is making an important contribution towards this with its wide and varied services.

Seen from a global point of view, the situation concerning the supply of water is already critical today: more than 30 countries suffer from a water shortage and more than a billion people do not have access to clean drinking water. An improvement is not in sight. On the contrary. Experts believe that global water consumption will have increased by 40 percent by 2025. Almost one third of the world's population could then be living in regions suffering from extreme water shortages.

In view of these alarming predictions, scientists are calling for water shortage to be treated with the same urgency as climate change. The general opinion is that functional water management systems must be set up as quickly as possible to buck this trend. And at international level – for, just as with climate change, water shortages are a global challenge and every country must do its bit.

#### Private support as a solution

Take Germany as an example: it has plenty of water, the quality of the drinking water is exemplary and this vital resource is handled with great care. Not all the infrastructures, however, are up-to-date. Above all, many sections of the outdated sewage systems must be modernized. Local authorities, however, often do not have the necessary funds at their disposal to carry out such renovation work.

Cooperation work with the private sector has provided a practicable way to deal with this problem. Working together with a private partner means local authorities and utility companies do not need to carry out the complex tasks involved, they do not need to invest so much money and wastewater charges are kept in check. The Bavarian City of Gemünden am Main shows just what can be achieved here. It commissioned REMONDIS Aqua to operate its wastewater facilities as well as to manage the investments for building a sewage treatment plant. As a result of this cooperation work, wastewater charges have been reduced by more than 20 percent. The Lausitz Water Board has also enjoyed a similar success story after REMONDIS Aqua took over the technical and business operations of its waterworks.

#### **Commitment in Europe and beyond**

Today, at international level, REMONDIS Aqua provides water services for around 10 million people. It is, above all, active in the Eastern European countries. Many regions here still do not have a reliable supply of drinking water 24/7 nor do they have modern systems to collect and treat wastewater. The extent of the need to act is demonstrated by the Russian government's "Clean Water" project in which an estimated 360 billion euros will have been invested by 2020. REMONDIS entered the Russian water market in 2010. It began its activities there with a PPP company with the City of Arzamas, which is now responsible for supplying water as well as collecting and treating wastewater there.

The desire to join the EU is often an incentive to get things moving. One example here is Turkey. The country wishes to have a water management system that fulfils EU standards and is working with private sector businesses to achieve this. REMONDIS already operates ten plants there, primarily on behalf of local authorities, and is working together more and more with industrial clients offering them water management services. ► The following is also true for the water management branch: progress requires secure financing and a transfer of know-how and technology to get quick results.

#### Water is Life

As water moves along its path, it often undergoes services provided by REMONDIS. The company group sets up international water management infrastructures and plants, which are financed, planned, built, maintained and operated by them. As part of its water management activities, REMONDIS taps into sources of raw water, processes drinking water and supplies top quality water to its customers. Its comprehensive wastewater treatment activities ensure that this vital element can be used again and, at the same time, it makes use of the potential contained in the wastewater – for example to generate energy or to return recyclables to the economic cycle. "Working together with a private partner means local authorities and utility companies do not need to carry out the complex tasks involved, they do not need to invest so much money and wastewater charges are kept in check." Andreas Bankamp, managing director of REMONDIS Aqua



REMONDIS is active in all areas of water resources management – from supplying water or treating wastewater to building and operating plants.

#### Progress in the Third World

The need for action is even greater in the threshold countries. In India, for example, the demand for water will have exceeded water supply within ten years. REMONDIS has been active in India since 2009 and began work there with eleven projects to operate wastewater facilities in the Maharashtra region. The projects also included the treatment of wastewater at VW's factory in Pune. This is a good example of how water can create jobs, for large, well-known companies wish to have the right ecological standards implemented in their businesses abroad, too, and factor this in when searching for a suitable location.

Together with two partners, REMONDIS founded the Global Water Franchising Agency to provide developing and threshold countries with support. The organisation works according to the premise "help for self-help". It is also focusing on the fact here that optimized water management promotes food production and, therefore, helps to fight famine.

#### Investments promote security of supply

Whether it be the Third World or a highly developed industrialized country: each and every country needs to carry out some kind of work on their water management systems. All around the world, private-sector commitment has proven to be a driver of innovation: through targeted investments, it promotes the creation of sustainable financial bases and accelerates the successful development of projects by transferring know-how.

#### **Guest article**

## Greater need for private-sector commitment

DR MARK OELMANN, SCIENTIFIC INSTITUTE FOR INFRASTRUCTURE AND COMMUNICATION SERVICES (WIK), ON IMPROVING GLOBAL WATER SUPPLY AND WASTEWATER TREATMENT:

According to the UN's "Human Development Report", around 2.6 billion people across the world do not have access to a sanitation system and approx. 1.1 billion people are forced to drink polluted water. Around 1.8 million children and over 3 million adults die each year as a result of not having adequate sanitation services at their disposal. The "Millennium Development Goals" specify the targets for improving water supply and wastewater treatment. How, though, can these goals be reached?

To begin with there is an obvious need for investments. Widespread opinion is that the private sector must help out here as the public sector in the threshold and developing countries cannot afford such large investments. Easier said than done as politicians' expectations of the private sector and vice versa were often not fulfilled following failed concessions in and around the year 2000. The understandable reaction of private sector businesses was to increase risk premiums. The significance of large, privately financed investment projects began to decline.

#### A look back

Does this mean that private sector businesses participating in projects to solve international water problems is a thing of the past? Certainly not – in truth the market would appear to have become "more mature". The number of new projects a year has risen from around 40 between 1996 and 2003 to about 70 between 2004 and 2008. The number of competitors has also increased. Between 1990 and 1997, the share of the 5 largest investors (according to number of projects) was 54%, and between 2002 and 2005 only

30%. The projects have become smaller as far as investment amounts are concerned. Management contracts – private sector firms attempt to improve operating procedures in a company without investing, as far as possible, their own capital – have grown in significance. This may not initially solve the problem of investments but it does increase confidence for the future.

#### The future role

Privately run companies can prove that they really are better especially in combination with benchmarking projects, which are being pushed forward in many countries. As a result of the newly found confidence resulting from the management contracts, many countries will wish to see the private sector once again playing a much greater role, also in the area of capital investment. The improved transparency from benchmarking and the increased levels of expertise in the countries to monitor performance may help to make high capital investments with an affordable return interesting once again for the private sector. Many countries will wish to see the private sector once again playing a much greater role, also in the area of capital investment.

#### Profile

Dr Mark Oelmann, Head of the "Water, Sewerage & Transport" Department at the Scientific Institute for Infrastructure and Communication Services (WIK); previously, among others, employed at the management consultancy firm Capgemini and assistant to Prof. Donges, Chairman of the German council of economic experts for many years. Ph.D., teaching work as well as many publications and lectures on water management issues; expert for the German Bundestag and the only non-British member of the Advisory Panel of the English water utility regulator, OFWAT. Main areas of activity: strategic advice, tariff and cost modelling, application of statistical procedures in the water management sector, developing concepts for water management regulatory frameworks in Germany and abroad (currently, among others, for Albania, Lebanon, Yemen, China, Kenya). Contact: m.oelmann@wik.org Poland

# The power of change

DIVERSE PROJECTS FOR A MODERN WATER AND ENVIRONMENTAL SERVICE SECTOR



Top quality drinking water and a reliable supply 24/7 cannot always be taken for granted in some parts of the country. Poland is heading towards change: the country is working intensively on creating modern structures for an upto-date water and environmental service branch. REMONDIS is proving to be one of the main drivers of innovation here with its financial and operational support.

Poland, too, must master a number of very different challenges in order to fulfil the standards of the European Union – and this in as short a time as possible. The road to success involves a large number of individual successful projects which, added together, can bring improvements in all areas and across the whole of the country. Three projects completed in October represent the wide range of activities being undertaken.

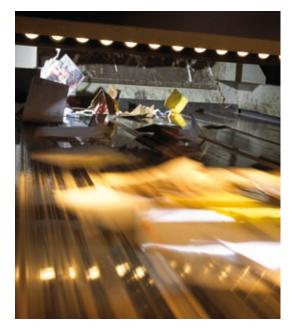
Waterworks ensures reliable supply of drinking water The Maliszewko waterworks, approx. 100 kilometres north west of Warsaw, was put into operation in the middle of October. This was an important step for the District of Drobin for its water production and water processing activities. Having undergone fundamental renovation work and had its capacity clearly increased, the plant can now supply 70 percent of the local inhabitants with drinking water. During the second phase, the Karsy waterworks, which has also been modernized, will restart its operations at the end of January 2011. Thanks to these waterworks and the extension work carried out on the distribution pipes, which has also already been completed, the supply of drinking water will then be guaranteed in this region.

Besides these activities in the area of water supply, the sewage treatment plant and sewer network in Drobin are also being updated. REMONDIS DROBIN Komunalna Sp. z o.o. is responsible for the task of reorganizing the whole of the water management sector. This PPP company was set up four years ago and had originally been a municipal business. The main argument for partly privatizing the business was the investment sums needed to modernize the existing infrastructure.

#### Recultivation: the Cieszewo landfill is becoming eco-friendly

Previously a storage site for municipal waste – now a green area: thanks to the planting plan and advanced sealing systems, it will now be possible to protect the groundwater, climate and environment. This is a good summary of the second project that was also carried out by REMONDIS DROBIN. The landfill, which lies seven kilometres away from the city, is still being used but only in a number of sections. It was possible, therefore, to recultivate the section which was used between 1993 and 2004.

One part of this project, which was completed on 15 October, involved sealing off the bottom of the 0.6-hectare landfill chamber in accordance with today's standards. Following this, the waste, which had been previously removed, was put back into the landfill in a compressed and even manner. This redundant landfill area was then sealed off at the top with a cover including a filtration layer, gas collection wells and a leachate drainage system. At the moment, the area is covered with grass. Bushes will, however, be planted on the surface once this is possible.



From optical separating facilities to automatic loading stations: the Dąbrowa Górnicza processing plant works with the latest technology.



#### Processing facility produces fuel for cement works

Further south in Dąbrowa Górnicza, a new processing plant was put into operation on the same day. With the support of innovative technology, the facility produces substitute fuel with a calorific value of between 16 and 18 megajoules per kilogramme. The fuel is to be used to produce energy in the cement production works and is made from mixed household waste as well as from waste from sorting activities. With its three-shift operation, the plant can process 120,000 tonnes per year.

Household waste makes up around 75 percent of the throughput. The waste from sorting activities comes from the nearby sorting plant in Pszczyna, which also belongs to the REMONDIS network. As there are still free capacities in Dąbrowa Górnicza, the processing plant can also accept additional volumes of material from the branches as well as from the neighbouring municipal businesses.

Following the two-year preparation and approval phase, the plant, which was planned, built and co-financed by REMONDIS, was completed within 24 weeks. With its orientation towards thermal recycling, it fully meets the strategy of the 2010 National Waste Management Plan: avoid waste, reduce volumes taken to landfill, increase recycling – with materials recycling and the waste-to-energy strategy. Poland's National Environmental Protection Fund financed 75 percent of the processing plant – clearly demonstrating the importance of this project.

More than 90 percent of all waste in Poland is sent to landfill. This should change – the country is striving towards achieving much higher rates of recycling.

#### WEEE recycling \_



In Poland, too, waste electrical and electronic equipment (WEEE) is not allowed to be thrown away with municipal waste. REMONDIS provides, among other things, a convenient kerbside collection service to push forward the separate collection of this material. New standards have been set with a new WEEE container that was developed by the company itself for housing associations.

Special container for the collection of electronic waste



The container has three individual chambers which can be filled via separate access flaps. The largest chamber is for old electrical appliances; the other two for batteries and bulbs. Conspicuous stickers with corresponding pictograms inform people where to dispose of their waste.

During the first phase, 30 containers were set up at housing associations in Warsaw. Around 100 containers will have been provided by the end of the year. The new system is also being accompanied by an information campaign. This includes a flyer informing the local inhabitants about the containers and underlining the importance of recycling WEEE.

REMONDIS has exemplary structures in place to process and return the raw materials contained in old appliances. The company runs one of the largest WEEE recycling plants in Poland in the City of Łódź.

#### Eye catcher \_

It is important for children that they learn. What is equally important is that they have an environment worth living in and that they will continue to have access to raw materials in the future, too. A campaign in the Polish city of Stettin is combining these two aspects under one roof. It shows smart children who are calling for the responsible separate

For a good future

collection of waste using cheerful rhymes. REMONDIS' vehicles began displaying these motifs at the beginning of the new school term. In addition, the pictures of the children have been published on the front pages of the local newspapers. Thus, people are being shown what to do in a friendly and memorable fashion.



Eastern Europe

# Continued growth in the Ukraine

#### REMONDIS IS ON THE ROAD TO SUCCESS SETTING UP A MODERN RECYCLING SECTOR IN THE UKRAINE

REMONDIS has been active in the Ukraine since the summer of 2007. Within just three years, it has become one of the leading water and environmental service companies in this Eastern European country. Via its branches and subsidiaries, REMONDIS provides services for seven cities there with a total of almost 2.5 million local inhabitants. Each year, it collects approx. 700,000 tonnes of household and commercial waste.

Its entry into this market began in Saporoshje with the foundation of a public private partnership (PPP), the largest of its kind in the Ukraine at that time. The joint venture formed the basis for the ensuing rapid expansion to six further locations. REMONDIS has, for example, been active in Cherkassy, a city with 280,000 local inhabitants, since March this year and had already introduced recycling bins for separate household collection by the end of May. The system for collecting recyclables is also being rapidly further expanded in the country's capital city, Kiev, where REMONDIS purchased a majority shareholding in the large waste management business, Seltik, in July.

#### Focusing on environmental services

The expansion of its business activities in the Ukraine is one important part of REMONDIS' Eastern European strategy. With its variety of commitments, the company group is playing an important role towards developing a sustainable and economical environmental service sector in the Ukraine in accordance with EU standards as well as towards creating reliable working conditions for the waste management sector. The decisive success factors here are the high level of reliability in the area of investment commitments, the excellent work performance and, in particular, the rapid realization of market opportunities.

Presentation at a trade fair in the capital city Besides providing municipal services, REMONDIS' national company, with its current workforce of 600 employees, is looking to increasingly establish itself in the area of commercial and industrial environmental services. This includes, for example, setting up branch solutions for the industry, collecting commercial waste, collecting materials from petrol stations and recycling construction waste. The KomunTech trade fair, which was held in Kiev in the middle of November, proved to be a good opportunity for the company to show potential customers its current range of innovative waste management solutions. This is the third time that REMONDIS has taken part in the Ukraine's leading municipal business event.



REMONDIS is market leader in the area of water and environmental services in the neighbouring countries, Poland and Hungary.

REMONDIS uses new rear loaders for the narrow streets in the Ukraine that are difficult to access.

#### Latest news

## Recycling bin in need of care and attention

#### EKO-PUNKT FILES LEGAL COMPLAINT CONCERNING FRAUD WITH RECYCLING VOLUMES

In truth, the recycling bin in Germany has more than proven its worth. Indeed so much so that 25 countries have already copied the dual system used in Germany for collecting recyclables. This system for collecting waste sales packaging separately from other kinds of waste contributes greatly towards the country's high recycling rates and has made Germany the world champion in recycling. The recycling bin, however, has become a patient in urgent need of care and attention. A few market players are endangering the whole dual system by causing recycling volumes to 'disappear', probably with fraudulent intent. REMONDIS has now set out to put an end to this situation and to make the bin fit for the future.

### **EKO-PUNKT**®

EKO-Punkt is acting for the licensing industry and all honest market players.

The EKO-PUNKT" Dual System, a company belonging to the REMONDIS Group, filed a legal complaint at the public prosecutor's office in November in light of the massive decrease in volumes of licensed material handled by the dual systems in Germany. Last year alone, the amount of light sales packaging actually licensed was approx. 400,000 tonnes less than the amount the companies placing sales packaging onto the German market had declared to their chambers of commerce. This can probably be put down to fraudulent intent and is to the detriment of all those market players working in accordance with the regulations. Those affected include the licensing industry, the dual systems working according to the rules and the service providers within the waste management sector.

It is common practice of a number of market players to offer to take over all obligations stipulated in the Packaging Ordinance on behalf of their customers and to then collect the material as a kerbside collection but not recycle the material. Instead, the volumes are "redefined" and fed into

other system solutions where they neither belong nor are collected nor are recycled. Very clear proof of this, proof which is understood by everyone, is that the volumes of materials entering so-called branch solutions and self-takeback systems are increasing virtually all the time. As these volumes are collected from so-called "waste generators of similar status" such as hotels, hospitals and canteens, then the volumes collected from households should noticeably fall accordingly. The fact of the matter is, however, that the volumes of waste sales packaging collected from households have been constant and are not falling. EKO-PUNKT assumes that fraudulent intent is the reason behind this. Apparently, customers are being charged for services which are not actually being performed. One method used here is to "redefine" the volumes actually collected and add them to branch solution systems so that the companies collecting these volumes are not paid for their work. By taking this legal route, EKO-PUNKT is aiming to put an end to this practice. This measure should, therefore, help to stabilize the sales packaging collection system and make it sustainable.

#### THE INTERVIEW \_

REMONDIS aktuell spoke to Markus Mohren, managing director at EKO-Punkt, about the dual system and the reason behind the firm's legal complaint.

**REMONDIS aktuell:** Mr Mohren, just how bad is the situation with the recycling bin?

M. Mohren: "I would say that the situation is serious but not a hopeless case. If we succeed in stopping this obvious fraud with recycling volumes, the dual system may come out at the end even stronger than before."

**REMONDIS aktuell:** Would this not have been possible without the help of the public prosecutor's office?

M. Mohren: "Many attempts have been made to reach an amicable settlement. For two years now, we have been playing a leading role in introducing measures to create quality standards for the licensing process. Unfortunately, we have noticed that the overall market is becoming increasingly smaller as volumes are being fraudulently defined out of existence and as a result a few individuals are getting rich at the expense of all others. The quality assurance measures must be seen as having failed and now others must look into and judge the situation."

**REMONDIS aktuell:** In your opinion, how does this fraud work?

M. Mohren: "We believe the following method is used: customers are charged for services which are not actually performed. To begin with, customers are attracted by low prices and then the companies duck out of paying the services performed by waste management businesses to save money. This is unacceptable as it is not only harming the honest market players but is putting the whole of the dual system in Germany at risk."



**REMONDIS aktuell:** Is the legal complaint a kind of rescue operation?

M. Mohren: "That is one way of putting it. This was certainly not an easy decision to make but this is not only important for our company but also for the future of the whole of the dual system. In principle, the system has more than proven its worth. We would not have become the world champions in recycling without the recycling bins and bags. This achievement must be safeguarded. We are after all talking about one of the most important local sources of raw materials. A few black sheep, therefore, should not be allowed to endanger this source of raw materials as a result of their actions."

**REMONDIS aktuell:** Could you not get help from the authorities responsible?

M. Mohren: "We gave detailed information about this to the authorities and ministries responsible and asked for their support to tackle this. This has not yet led to a successful conclusion. The damage caused to the economy has reached a sum involving several hundred million euros, so we felt we had no other alternative but to take this measure."

**REMONDIS aktuell:** Mr Mohren, thank you for the interview.

| > Comparative data 2009           |   |                                  |             |
|-----------------------------------|---|----------------------------------|-------------|
| Dual Systems 2009                 |   |                                  |             |
| Fraction                          | acc. to Gemeinsame Stelle*                  | acc. to DIHK** (based on VEs***) | Difference  |
| Plastics                          | 711,869                                     | 1,044,617                        | -332,748    |
| Sales packaging                   | 1,226,763                                   | 1,556,197                        | -329,434    |
| * Joint office regulating payment | ** German Chambers of Commerce and Industry | ***Completeness statements       | Source: GVM |



Markus Mohren, managing director of EKO-Punkt GmbH

#### Recycling

# Recycling for plastics

#### STO AG RELIES ON REMONDIS' SERVICES

The small town of Stühlingen lies in the south of the Black Forest. This is where the international company, Sto AG, has its head office. In Germany, this traditional company's customers include around 28,000 painters, plasterers and building firms. They use Sto's products for their building work and use REMONDIS' convenient nationwide logistics to hand back their transport and sales packaging.

REMONDIS' plastics recycling processes are also run on an industrial scale and according to the highest standards of quality. Sto manufactures products to insulate facades, optimize acoustics and repair cement walls as well as to coat new and old buildings. Its total range consists of more than 1,000 different high quality products and systems.

As is the case for other producers and distributors, Sto is obliged to take back its packaging. Being an external service provider, REMONDIS fulfils all legal obligations for Sto collecting the transport and sales packaging on behalf of the company. It collects a wide range of fractions from paper and cardboard, reinforced paper and disposable sacks to waste plastic film and containers made of plastic or metal.

#### Storage containers for nationwide collection and disposal

Such packaging is collected via containers which are set up by the REMONDIS branches closest to the customers. Such collection containers, therefore, can be found in all of Sto's 90 sales centres. In addition, the painters, plasterers and building firms can choose to have such containers placed in their own business or on their large construction sites.



### "Our central concern in all our fields of business is to actively protect the environment and conserve resources." Jan Nissen, head of materials management at the Sto Group

These are then emptied by REMONDIS either at regular intervals or when requested by the customer – depending on their individual needs.

#### Millions of plastic containers

Being a full service provider with an extensive network of facilities, REMONDIS also recycles the sales packaging it has collected. One of the Sto Group's classic products and indeed one of its trademarks is its yellow pails, which were introduced by the company's founder, Fritz Stotmeister, himself. A large number of these pails can be found across Germany – the company handles more than seven million plastic pails a year at its site in Stühlingen-Weizen alone.

#### Recycling instead of oil consumption

Together with other types of plastic waste, these striking yellow pails are shredded into plastic granulates at REMONDIS' special processing plants. These can then be used as a base material for new products such as construction film, pipes, cable ducts or yellow recycling bags. An almost perfectly closed life cycle that helps to conserve our valuable natural raw materials. For, plastic is primarily made from crude oil which, as everyone knows, is becoming scarcer and scarcer and more and more expensive.

REMONDIS' resource-friendly recycling processes are fully compatible with Sto's mission statement. All of the Sto's business activities are carried out according to its motto "Building with conscience" and it looks to ensure that the world we live in is designed in line with environmental requirements and human needs. Jan Nissen, head of materials management at the Sto Group: "Our central concern in all our fields of business is to actively protect the environment and conserve resources."



REMONDIS is an ideal partner for Sto as it offers a full range of services: from nationwide logistics to customer support to processing facilities for all fractions. Sto's head office in Stühlingen – a building with exceptional architecture.

#### Background

Being one of the technology leaders, Sto AG is one of the most important and innovative international producers of products and systems for coating buildings. With a workforce of over 4,100 employees, Sto AG and its 27 subsidiaries and 21 factories across the world had a group turnover of around 925 million euros in 2009 together with its 60 partner firms in Europe, Asia and the USA.

The REMONDIS Group and its company Plano have almost 50 years' experience of plastics recycling. Legislation

# A directive with repercussions

#### IMPRACTICAL REACH REGULATIONS HINDER THE RECYCLING SECTOR

Those people who wish to protect the environment against potential risks must strengthen the position of recycling – there is no doubt about this. The EU REACH Directive follows this premise, too. However, a number of its stipulations have been structured in such an unfortunate manner that it has had the opposite effect: handling processed materials has become more difficult, more expensive and, in some cases, no longer permitted. And this will have serious ecological and economic consequences.

#### Background

REACH – chemicals directive for Europe REACH stands for the Registration, Evaluation and Authorisation of Chemicals. This EU directive came into force in 2007 and includes an implementation timeline whereby registration deadlines depend on the volume of materials handled. Its main intention is to protect humans and the environment from the effects of harmful chemicals. The dossier compiled for full registration must describe the danger of the materials, their use, recycling and return to the economic cycle as well as any potential delayed effects the substances may have.



The REACH Directive has been structured in such an inadequate manner that it is jeopardizing the EU's recycling targets rather than promoting them." Thomas Conzendorf, REMONDIS Board Member

The first transitional phase of the REACH Directive ended in November. Full registration is now required for materials which are covered by the Directive and exceed 1,000 tonnes a year. Comprehensive studies, analyses and data collection work is needed to register. The dossiers required often contain several hundred pages and can cost several million euros.

#### **Exemptions difficult to obtain**

All firms are affected by REACH that handle raw materials, secondary raw materials and possibly waste, too, because REACH comes into effect as soon as a product is made from waste. Even though recycling companies are already subject to the stipulations of the 'Kreislaufwirtschafts- und Ab-fallgesetz' (KrW-/AbfG [Waste Management and Recycling Law]), they must now also fulfil the Product Law – which includes full registration.

It is doubtful whether this really makes sense. For this reason, an exemption from registration was made for the recycling sector in Article 2 (7) (d) of the REACH directive: the proof of substance identity. Here, the recycling firm must prove that at least 80 percent of its product contains a substance that has already been registered. The data required for this must be obtained from the previous original producer – not an easy task. Furthermore, the complete composition of the recycled product must be known. In practice, however, this is very difficult to do as processed recyclables almost always contain impurities making it practically impossible to draw up a complete list of its chemical properties.

If it is not possible to furnish proof of the substance identity due to missing or incomplete data, then the authorities responsible can ban the trade, consumption, use and import of these materials. No data, no market. Here lies the crux of the problem: though unintentionally, the impractical constellation of REACH's policies may influence whole markets and, in the worst case scenario, lead to the collapse of markets.

#### Repercussions for the environment and market

Take the example of price structures: twice the amount of time and money will be needed to fulfil the stipulations of the waste management and product laws. Companies that process waste outside Europe will increase the price of their products accordingly. This will make the materials more expensive and reduce the likelihood of them being used in production processes.

At the same time, product streams will shift. For it is questionable whether the information needed to import such goods into the internal market can be collected for all the volumes generated outside the EU. In all probability, materials will end up in countries where the regulations are not so strict and where, possibly, environmental protection laws are less stringent and processing facilities and areas of application less developed. Moreover, there will be distorted competition within the EU, as not all member states will be able to enforce REACH quickly.

Amendments will be made to the REACH Directive. One can only hope that the special features of the waste management and recycling branches will be taken into consideration in a more practical manner and thus ensure that the targets of the directive can be implemented in these areas of activity in the best possible way The Waste Directive defines the criteria to determine exactly the difference between waste and a product. More specific information is likely to be added in the amendment to the KrW-/ AbfG planned for the end of 2010.

REACH is based on the principle of placing greater responsibility on industry and actually aims to secure the free movement of materials within the EU. Water management

## Modern water management in Spain



REMONDIS AQUA COMBINES ENERGY PRODUCTION AND THE RECYCLING OF RESIDUAL WASTE IN SPAIN WITH INTELLIGENT WATER MANAGEMENT

At the end of 2009, REMONDIS Aqua International took an important step in the Spanish water market by purchasing the company, OMS-SACEDE. With this fully owned subsidiary, it now provides services for more than 1 million people in Spain. With OMS-SACEDE, REMONDIS Aqua builds and operates wastewater treatment plants in all parts of Spain. The core regions of its activities are the well developed regions of Catalonia and Valencia.

REMONDIS Aqua combines energy efficiency and wastewater treatment using intelligent water management. Compared to other European countries, Spain is still being greatly affected by the economic crisis. One reason for this is that some sections of the construction industry in Spain have suffered a dramatic decline. Today, many private and public sector firms and institutions have postponed their investment activities for the moment even though considerable investments need to be carried out in the water network across the whole of Spain. In such a situation it is even more important to further develop the existing technology and offer integral concepts with technical innovations. Subjects such as energy efficiency, the use of recyclables and the conservation of resources are, in particular, of central importance and REMONDIS Aqua is implementing these as part of its activities.

At the moment, REMONDIS Aqua operates 20 large-scale facilities as well as many smaller, decentralized sewage treatment plants in Spain. Moreover, it is building further sewage treatment facilities which will be run by REMONDIS Aqua's subsidiary once they have been completed. What is special here is: in many of its water management projects, REMONDIS has combined water treatment with energy pro"Today, REMONDIS is also an energy company. Its highly efficient power plants use very different kinds of technology to generate energy and ensure that residual waste and hazardous materials are recycled in the best possible manner as can be expected in a sustainable recycling sector." Dr Lars Meierling, managing director of REMONDIS Aqua International

duction. It has had experience of directly generating energy from wastewater in Spain since 2006 when it successfully realized a wastewater project for the WILD Group. Here, energy-efficient wastewater treatment technology is being used which generates energy in the form of biogas directly from the wastewater. This is then used to generate steam in the production process and is effectively a substitute for the fossil fuel, natural gas.

Furthermore, REMONDIS Aqua already operates a number of facilities in which the subject of energy efficiency has already been realized. One example of this is the facility in Montornes, 30km north of Barcelona, where electrical energy is generated as a "by-product" of drying sewage sludge. The heat energy needed to dry the sewage sludge (approx. 13.6 MWh) is generated in a combined heat and power facility. The generators used for this, which are run by two gas motors and have a total electrical power output of 4.6 MW, not only produce the heat needed for the drying facility but also generate approx. 16.2 MWh of electricity each year which is fed into the grid.

A further comparable project can be found in Banyoles, approx. 120km north east of Barcelona. The capacity of the sewage sludge drying process there amounts to approx. 10,000 t/a. The heat needed (11.9 MWh/a) is provided by three gas motors which run generators each with an electrical output of 1.5 MW and feed approx. 19.0 MWh/a of electricity into the grid.

Added together, around 35.2 MWh/a of electrical energy is generated at the two sewage sludge drying plants through combined heat and power. The dried sludge can also be used as a substitute fuel and has the same calorific value as brown coal. As this is used as a substitute for a fossil fuel,  $CO_2$  savings of between 0.7 and 1.1 tonnes of  $CO_2$  can be achieved per tonne of sewage sludge used compared to brown coal.

#### **REMONDIS Aqua continues to grow**

This year in Spain, plant operation projects have been realized in Vendrell (Catalonia) to treat wastewater as well as in Mas de Barberans to treat leachate. Further contracts have also been signed in the area of engineering. REMONDIS Aqua has, for example, been awarded a contract in Andalusia to carry out a project in Abla near Almeria. Besides the activities listed above, the company has also succeeded in entering new regions. The contract it won recently to operate three sewage treatment plants in the Pyrenean state, Andorra, is a further important step in the internationalization of REMONDIS Aqua. The contract has been concluded for a period of 5 years with the option to extend it for a further 10 years. Andorra is known as a popular skiing region and tax haven and is an important tourist centre between France and Spain.  $CO_2$  savings of between 0.7 and 1.1 tonnes of  $CO_2$  can be achieved per tonne of sewage sludge used.

Spain's concept for the future of water supply in its country also includes modern water processing plants.



#### Water resources management

## Saving costs with KoSIS

REMONDIS AQUA OFFERS COST-OPTIMISED RENOVATION AND INSPECTION WORK PLANNING FOR INFRASTRUCTURE NETWORKS AS A NEW SERVICE

Many private and public network operators are finding themselves having to face the challenges caused by demographic change, a decline in drinking water consumption and a changing infrastructure. To master these challenges, considerable sums of money will have to be invested in the municipal network-based infrastructures for drinking water, gas and wastewater over the next few years.





To help their customers here, REMONDIS Aqua Services offers a comprehensive service called KoSIS which involves cost-optimised renovation and inspection work planning for infrastructure networks. REMONDIS Aqua's experts choose a selection of characteristic data from the digital archives of plans, i.e. from the network operator's geographic information systems (GIS), and draw up a preview of the expected ageing process of the network. What may sound complicated is in fact not magic but a process based on a solid statistical calculation base, which has been used successfully for, for example, electoral forecasts for many years now.

Reliable data is essential if costs are to be saved.

REMONDIS Aqua has in the meantime successfully completed a number of KoSIS projects. The latest example of this is the forecast calculations for Waltrop, a city close to Lünen in the north of the Ruhr region. For this project, the company drew up an investment plan, based on its forecasts, for a sewage network approx. 100 kilometres in length. The City of Waltrop provided extensive data from the CCTV camera inspection work carried out on its sewage network as well as from its asset accounting. The experts from REMONDIS Aqua Services then evaluated the data and assigned it to different categories. The factors that have the greatest influence on the ageing process of this sewage network are the material and year of construction as well as the influences of mining activities in the region.

Based on the mathematical projection, the compaOny was able to show the City of Waltrop what funds would be needed in the future to renovate and maintain its sewage network. REMONDIS' customer was extremely pleased with the results of the project. The calculations confirmed that it had sufficient financial resources to be able to keep its sewage network in a good condition. Furthermore, the experts at REMONDIS Agua Services were also able to identify ways to improve the maintenance work carried out on the sewage network. In the last phase of the project they drew up guidelines on how future cleaning work can be better coordinated with expected future maintenance work thus reducing costs for the City of Waltrop. REMONDIS Aqua Services is also using this strategy to optimize the operations of its own drainage networks. Similar projects are being carried out successfully for REMONDIS Aqua business operations in Gemünden am Main as well as for Wasserund Abwasserbetrieb Lausitz WAL-Betrieb in Senftenberg.

Water resources managemen

# BASF: sewage network in top condition

#### REMONDIS AQUA'S SUBSIDIARY, WAL-BETRIEB, IS TO ASSESS THE CONDITION OF ALL WASTEWATER PIPES OWNED BY BASF SCHWARZHEIDE GMBH

On behalf of BASF Schwarzheide GmbH, WAL-Betrieb is drawing up a full inventory and assessing the condition of the complete network of pipes used to transport wastewater and rainwater at the company grounds of the largest chemicals firm in the German state of Brandenburg. The grounds cover an area of 230 hectares, approximately the same size as REMONDIS' Lippe Plant in Lünen, and has 21 chemical plants, twelve kilometres of roads and pipe bridges as well as 20 kilometres of railway tracks that run throughout this huge industrial site in the south of Brandenburg.



A total of 80 kilometres of sewage pipes on this site, BASF's third-largest chemicals plant in Europe, are to be cleaned, inspected and recorded. The condition of the pipes, including any leaks, will then be assessed. Cutting-edge, explosion-proof inspection and cleaning technology will be used to carry out this work including CCTV inspection vehicles, mobile, self-propelled cameras and video technology. The leak detection systems, which will be operated in a number of shifts by the highly qualified employees of the Senftenberg-based water service provider WAL-Betrieb, a fully owned subsidiary of REMONDIS Aqua GmbH & Co. KG, will provide both security and a perfect overview of the condition of the network. "When we awarded the contract, we were looking for reliability, expertise, schedule reliability and quality. The results of this inspection work will have a

## "When we awarded the contract, we were looking for reliability, expertise, schedule reliability and quality."

Jürgen Zschipke, BASF Schwarzheide GmbH

major influence on the follow-up investments in this important environmental area over the next few years," stressed Jürgen Zschipke from BASF Schwarzheide GmbH. Marten Eger, managing director of WAL-Betrieb, can already refer to the excellent references of his company from both the public sector and industrial companies. "This sophisticated project at BASF underlines once again our expertise as a service provider for major industrial customers," said Eger. BASF's Schwarzheide site is celebrating 20 years of business this year. WAL-Betrieb has established itself as a partner for the industry. Start of business

# **Company starts operations in Belarus**

#### CITY OF MINSK AND REMONDIS BEGIN OFFERING ENVIRONMENTAL SERVICES



Belarus is not a country with many natural resources of its own. With this fact in mind, this Eastern European country is looking to re-structure its classic waste management sector and create an innovative environmental service branch – with much less residual waste and more consistently used recycling activities. The capital city Minsk is setting a good example together with its partner REMONDIS.

To begin with, the joint venture is providing waste management services for the 700,000 inhabitants living in the capital of Belarus. Friday, 01 October – a cold but dry day in Eastern Europe and also a historic moment: it is the day that the newly founded company, REMONDIS Minsk, began its operations. The first collection vehicle with the internationally wellknown red REMONDIS logo left the company grounds (Ul-



iza Wanneeva 46) at 6.22 a.m. on the dot. On board: René Liese from REMONDIS International. He did not wish to miss out on this opportunity to accompany the rear-loader on its maiden voyage through the Belarus capital city. He travelled to Minsk for the first time almost two years ago to the day and is now celebrating this successful milestone together with his many other colleagues.

#### An attention-grabbing initiative

In July 2010, the mayor of Minsk, Nikolaj Ladutko, and REMONDIS board member, Egbert Tölle, signed the contract to found the joint venture business, REMONDIS Minsk. The aim of the company is to introduce a separate waste collection system for residual waste and recyclables in the city and surrounding areas where approx. 1.8 million people live. The start of a new era. For, this public private partnership (PPP), with its current workforce of 200 employees, is serving as a beacon in Belarus. And the great interest that is being shown across the country suggests that other towns will follow suit with similar models.



#### Separating waste and recovering raw materials

As it carried and carries out its work to help the authorities set up and operate modern recycling activities in Belarus, REMONDIS has stood out, as in other Eastern European countries, as a result of its expertise, know-how and willingness to invest. And this greatly benefits both councils and their local inhabitants. They benefit from having additional recycling containers for materials such as PET plastics, glass, metals, plastic film, Tetra paks, paper and cardboard. The separate collection of such materials is the first step to-wards processing recyclable materials and returning them to the production cycle. This helps to reduce Belarus' dependence on raw material imports and contributes towards securing supplies of raw materials for the Republic's emerging market.

#### The aim: a joint venture for environmental services

A further step to try and safeguard raw materials was made during the Belarus Investment Forum which was held in Frankfurt am Main on 17 November 2010. In the presence of the Belarus prime minister, Dr Sergej Sidorsky, and the deputy prime minister, Kobjakov Andrej Vladimirovic, a record of proceedings was signed defining the next steps to be taken to introduce recycling structures in Belarus. The signing of this document had already been preceded by a declaration of intent made by the Minister of the Environ-



Zalko Wladimir Grigorjewitsch (front row left), Minister of the Environment for the Republic of Belarus, and REMONDIS International managing director, Hendrik Vonnegut (front row right), signing the record of proceedings defining the next steps to introduce recycling structures in Belarus on 17 November 2010 during the Belarus Investment Forum held in Frankfurt am Main. Other participants included the Belarus prime minister, Dr Sergej Sidorsky, and the deputy prime minister, Kobjakov Andrej Vladimirovic.

ment for the Republic of Belarus, Zalko Wladimir Grigorjewitsch, in July 2010. With their signatures, the Belarus Environmental Minister, Zalko Wladimir Grigorjewitsch, and Hendrik Vonnegut, a member of the management team at REMONDIS International, reached an agreement on the next concrete measures that must be taken for REMONDIS to purchase a 51 percent share in the state-run company, OAO (joint-stock company) Belekosistema. Both parties are striving towards achieving a long-term contractual agreement on strategic and operational cooperation work. Such work would involve extending activities in the area of waste collection as well as in the recycling of plastics and other materials in the Republic of Belarus.

The owners of REMONDIS Minsk are REMONDIS (51 percent) and the City of Minsk (49 percent).

Environmental services

# Securing values together

**REMONDIS IS ARMACELL'S WASTE MANAGEMENT PARTNER** 



Avoid, reduce and recycle – these are the waste management targets of Armacell GmbH, a firm based in the German city of Münster. This well-known international producer of technical insulation materials, covering systems and special foams has consistently integrated the sustainable usage of resources into its business processes. The company opted to work together with REMONDIS when it decided to look for a central partner for all its waste management tasks.

Armacell also produces sports mats using special foam which it sells under its ArmaSport brand.

Armacell put its first on-site recycling facility for production waste into operation back in 1996. Following the conclusion of a company partnership agreement, REMONDIS then took over all waste management services at the company's site in Münster at the end of 2008. "Our aim," André Heisterkamp from the local REMONDIS branch there explained, "was to separate as far as possible the waste according type at the point where it was generated as well as to sustainably strengthen the amount of recyclables collected and to further decrease the volumes of residual waste generated." Tasks were combined and the previous number of contractual partners decreased in order to optimize the logistics in the plant and to reduce waste management costs. An ideal solution was drawn up which was then planned in precise detail and systematically put into place. It has improved the in-house logistics system and enabled Armacell to spend more time on its core activities.

#### Background

Armacell is a producer of foam technologies and is the global market leader for flexible technical insulation. The company group, which is based in Münster/Westphalia, employs around 2,300 people and has 18 production plants in 12 countries. Armacell sells leading products such as ARMAFLEX and is active in a growth market as insulating private and commercial properties is and will continue to grow in importance due to climate change and increasing energy prices.

#### Container plan with over 30 materials

REMONDIS took over the waste management tasks according to a precisely planned schedule with each phase beginning with the provision of special containers for the individual materials. In spring 2009, therefore, it began its work in the area of waste metal and waste food collection. The second phase began last summer, when it took over responsibility for hazardous waste which also involves on-site visits by REMONDIS' hazardous waste collection vehicle.

A further project involved the planning and construction of a shredder facility to cut up waste vulcanized rubber. REMONDIS also collects the whole range of recyclable fractions from paper, cardboard, plastic film and wood to different metals such as aluminium, copper and steel which are returned to the economic cycle.

REMONDIS' branch in Münster has drawn up an easy-tounderstand container plan for the more than 30 types of residual and recyclable materials generated at the plant. This plan, which is provided as a digital Excel file, always provides up-to-date details on locations, types and volumes of container, costs and contact people.

#### Colour-coded guidance system provides clarity

Both Armacell and REMONDIS knew that it would only be possible to introduce a successful on-site collection system for separated waste if all the employees consistently kept to the procedures. An information and colour-coded guidance system was developed to ensure this was achieved. This system provides clarity and is reflected on the many information signs located around the plant. The signs found around the plant and on the containers not only ensure that the correct waste is disposed of in the correct bins but also creates a uniform appearance.

#### Brochures for the employees

Armacell and REMONDIS have put together a brochure for the employees that summarizes the most important information about the waste management process. It describes

Team partners for exemplary waste management: André Heisterkamp / REMONDIS Münster, Wolfgang Krause / Armacell, Matthias Teuwen / REMONDIS West, Stefan Schäfer / REMONDIS Münster, Hans-Georg Neumann / Armacell (from left to right).



the materials which must be disposed of separately and also gives useful tips and advice on sorting and disposing of such materials. Each employee, therefore, learns about what materials may be placed in a container and which may not. A table has also been attached to the brochure which lists all the materials including the in-house labels in line with the law, the waste code numbers and the location of the containers. A picture of each container system is also included to make the system even clearer. All production waste generated at Armacell's plant in Münster is collected and processed by REMONDIS.

"We have placed priority on reducing our use of raw materials and energy consumption as well as the amount of waste we generate."

Wolfgang Krause, EHS manager at Armacell.

There has been a very positive reaction to the new system in Münster and the results have been very good. Plans are, therefore, to use the logistics and waste management know-how and experience gained here at other Armacell locations in Germany and abroad. Its plant in Friesenhofen in the German state of Baden-Württemberg has already started doing this and the company is planning to implement this at its production plants in Belgium and Spain.



Industrial cleaning

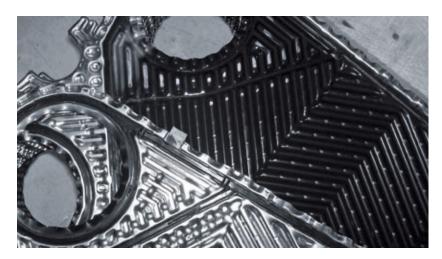
# A service full of potential

BUCHEN GROUP INSPECTS AND CLEANS PLATE HEAT EXCHANGERS

Plate heat exchangers have become an indispensable feature of modern production processes. Practically all branches of industry use these practical devices and are reliant on them working flawlessly. It is a good thing, therefore, that the Buchen Group is now offering a customer and cost-optimized plate heat exchanger service.



Whether it involves the production of cars or food, cosmetics or machinery – heat exchangers are used in practically every production process. Plate heat exchangers (PHE) are particularly popular as they involve low investment costs, take up little space and are highly efficient. These models, however, can only perform at their best if they are maintained regularly. PHEs, therefore, have become a case for the Buchen Group, specialists for all types of qualityconscious industrial services.



The centre of the temperature change: the cleaner the plates, cavities and gaps are, the better the medium in the heat exchanger can circulate.

Guarantee for the highest possible levels of efficiency At the beginning of 2009, Buchen set up a service centre at its Merseburg site specifically for plate heat exchangers. Devices of all common makes are handled here by professionals. "These heat exchangers are delicate devices because of the special way they are constructed and the demands made on them. Just a small amount of residue or minor leaks in the system can have very serious consequences," explained Jan Zimmermann, project engineer at the Buchen Group.

In a multi-stage process, the plate heat exchangers are inspected, cleaned and given a general overhaul at the centre in Merseburg. Important steps include the cleaning process in a chemical dip tank, carrying out checks in accordance with DIN EN ISO 3452 and reliably sealing the devices which involves replacing the seals in OEM quality.

The Buchen Group is now active across the whole of Germany with its high quality PHE service working for many major customers, primarily from the energy sector and food industry. Besides offering its services at its service centre, Buchen also offers a 'Cleaning-In-Place' service, i.e. the heat exchangers are cleaned on site at the customers'. And not only in standard production surroundings but also in explosion protected zones.

## Industrial customers appreciate the full range of good value services

The Buchen Group's decision to offer this heat exchanger cleaning service corresponds with its self-image and market orientation. For the company has developed a range of services with the aim to provide solutions, optimize processes and reduce downtime. If heat exchangers are not maintained regularly then operational disruptions and productivity losses are guaranteed. The PHE service, therefore, fits into its portfolio perfectly.

From a customer's perspective, the option of being able to have heat exchangers maintained by a company other than the original manufacturer means reduced costs. Haiko Köhler, departmental head: "Compared to the initial investment, plate heat exchanger maintenance work is often disproportionately expensive. We wish to help our customers here to reduce their costs to an economically acceptable level." Other advantages are Buchen Group's quick reaction times thanks to its Europe-wide presence and its ability to clean a large number of devices in a short period of time.

#### Forward-looking expansion of service range

Heat/cold exchange is already a standard task today in energy-efficient and eco-friendly production processes. And new areas of application are still being found for PHEs. These flexible devices and Buchen's plate heat exchanger service will, therefore, become even more important in the future. Production processes may be brought to a standstill if plate heat exchangers do not function properly. There is, therefore, great interest in the expert and good value PHE maintenance work.





**Environmental services** 

difficult to treat, disposed of.

# Protecting the environment against all eventualities

It accepts practically every kind of waste, offers environmentally friendly solutions and masters even the most

difficult kind of waste in the shortest period of time. REMONDIS' hazardous waste disposal plant in Bramsche is a genuine multi-talented all-rounder. The plant in the Osnabrück region is considered to be one of the most versatile of its kind in Germany. A large number of customers from the chemicals industry, solar technology and other high-tech industries make use of this versatility to have their production waste, which is particularly

#### **REMONDIS INDUSTRIE SERVICE BRAMSCHE OFFERS NEW SOLUTIONS**

### **REMONDIS**<sup>®</sup>

REMONDIS' plant in Bramsche also plays an important role for the booming solar industry providing it with special waste management services. The armed forces also generate hazardous waste, which requires particular attention to ensure it is disposed of safely and cleanly. REMONDIS Industrie Service's military department helps the German Armed Forces to, among other things, execute projects in Kosovo, Afghanistan, Bosnia and Herzegovina as well as in the Azores. To begin with priority is put on making the best possible use of the transport capacities whilst taking all aspects of the Dangerous Goods Directive into account. Diverse special procedures are available at the end of the disposal chain including the high temperature incineration plant, in which this waste, too, undergoes a special process at high temperature reducing it to harmless slag.

REMONDIS in Bramsche offers solutions for hazardous waste that other waste management companies try in vain to provide, for example in the area of special chemicals. The disposal of gas cylinders is one of the specialities of the Bramsche plant. As part of its service to empty gas cylinders, which is carried out using nitrogen, the company accepts a wide range of gases – from normal workshop gases such as oxygen and acetylene, to CFCs to the highly toxic phosgene, to name just a few. The same centre also accepts highly reactive metal alkyls, which can react violently with air and water when handled incorrectly, and ensures these are disposed of safely.

A further service that should also be mentioned is the introduction of a new collection system for aerosol cans whether they be full, partly used or empty. With its "RE-SPRAY" system, the company provides its customers with a safe nationwide collection service using a standard container system that uses the best possible logistics and fulfils all aspects of the Dangerous Goods Directive.

RENOTHERM, a substitute fuel made from hazardous waste, rounds off the presentation of this highly efficient business in Bramsche. Each year, the plant produces more than 25,000 tonnes of substitute fuel for the cement industry which fulfils the highest quality standards thus making an important contribution towards protecting the environment.

# Cartel Office calls for fair competition

PRESIDENT OF THE CARTEL OFFICE, ANDREAS MUNDT: "MONOPOLIES FOR COLLECTING HOUSEHOLD WASTE ARE NO LONGER APPROPRIATE."

The private sector waste management branch has found an official advocate for one of its most important demands on politicians. The President of the Cartel Office, Andreas Mundt, is calling on the legislator to have waste collection services be put out to tender in order to be able to find the highest performing service provider among the private and public sector businesses taking part in the process.

During his speech at the 2010 annual conference of the bvse, the Federal Association for Secondary Raw Materials and Waste Management, which was held in Hamburg on 30 September 2010, the President of the German Federal Cartel Office spoke critically about the obligation to hand over waste to a public sector waste management business for disposal. In view of the successful breaking up of monopolies in the past, he is, he said, certain that "competition in the waste collection sector would also lead to lower waste charges and to a greater selection of kerbside collections for different kinds of waste." Mundt criticized the fact that "there is absolutely no competitive pressure because of the monopoly rights." "A poor performance by a monopolist is not sanctioned with a loss in market share. Complaints from dissatisfied customers and local elections effectuate only a weak form of control. The local monopolist can pass on its costs – even if they are higher than necessary – to local inhabitants via its waste charges." There is a danger here, Mundt said, that as a result of these monopolistic conditions some local authorities may charge higher fees than they could if they were facing competition and may possibly offer their local inhabitants inconvenient waste collection services or too few collections for separated recyclables. The experience with the waste paper bin has shown that these are not just theoretical dangers. Practically all households now have a waste paper bin for kerbside collection but they were only offered such bins when other competitors came onto the scene.

So as to have fair competition, Andreas Mundt is making the case for public and private sector businesses to be able to compete directly against each other for waste collection contracts. At the very least, local authorities should be obliged to put the waste management services out to tender. This would mean that the local authorities would have to put out the individual waste management subservices out to tender. It would then no longer be possible to award such contracts in-house without a tender process. Public sector waste management businesses would, of course, be permitted to take part in the tender process. Such an obligation would not undermine the autonomy of local authorities. The relation between the local authorities and their inhabitants would not change at all. Such a regulation would rule out unnecessarily high waste charges over the long term. This experience has been made abroad.



Bundeskartellamt

Andreas Mundt, President of the German Federal Cartel Office

# Energy from REMONDIS

HIGH PERFORMANCE POWER PLANT SUPPLIES SURROUNDING REGION AND INDUSTRY WITH CLEAN ENERGY AND HEAT



"Killing two birds with one stone" is the popular saying used when one work procedure can carry out two tasks at the same time. With its company, Energie- und Verwertungszentrale Anhalt (EVZA), REMONDIS carries out a minimum of three tasks at the same time: waste treatment, the generation of electricity and the production of process heat for the industry. This modern plant is a genuine multi-talented all-rounder when it comes to protecting the environment and generating energy.

EVZA's energetic recovery system can handle up to 380,000 tonnes of waste a year. During regular operation, the two incineration lines transform up to 22.5 tonnes of waste into electricity and heat every hour. EVZA uses the energy in the waste to generate up to 170,000 MWh a year. The

"With EVZA, REMONDIS is making an important contribution towards the supply of energy in the German state of Saxony-Anhalt as well as strengthening the position of the state as an industrial location." Bernd Fleschenberg, managing director at REMONDIS

> electricity is fed into the grid helping to contribute towards the basic supply of clean energy in this German state. The heat generated by the incineration process is also used efficiently. The plant supplies the neighbouring soda works with up to 360,000 MWh of heat for its production of basic chemical substances and as a result has enabled it to extend its production facilities.

Combined heat and power makes the best use of the energy found in waste. The thermal recycling of waste also helps to prevent climate change. On the one hand, it reduces the need for primary fossil fuels. The amount of waste recycled corresponds with approx. 110 million litres of heating oil or the amount of heating oil required by around 40,000 single-family homes. On the other hand, around 50% of the waste is made up of organic materials. A considerable amount of the electricity and heat production is, therefore, carbon-neutral. The flue gases are cleaned in a four-stage process and starts in the first flue of the steam generator directly above the firing installation where nitrogen oxides and carbon monoxide are transformed into the harmless products, nitrogen and water. The remaining hazardous substances are bound with the help of calcium hydroxide and hearth furnace coke (HOK), separated off in the following fabric filters and then fed into an external recycling process once they have undergone the cleaning process several times. The purity levels of the flue gases emitted by the EVZA plant are measured constantly. The Ministry for Agriculture and the Environ-



EVZA in Staßfurt is one of the most modern plants in Germany.



ment of the German state of Saxony-Anhalt has confirmed that EVZA more than fulfils the requirements of the Waste Directive thanks to its efficient recycling technology. It goes without saying that it has been awarded the relevant DIN, EN and ISO accreditation.

The region has also benefited from the 130 million euros invested by REMONDIS. 60 new and secure jobs were created to ensure the plant is run efficiently. Thanks to the supply of steam from EVZA, the neighbouring soda works has been able to expand its production facilities which has also led to the creation of new jobs. EVZA is playing an important role in a field of business that is becoming more and more important for REMONDIS: the production of energy. With its thermal recycling and biogas plants, REMONDIS currently has an electricity generation capacity of 1,700,000 MWh/a. The volume of heat produced amounts to 2,430,000 MWh/a. The total amount of energy produced by all of REMONDIS' plants is impressive, namely 7,210,000 MWh per year. REMONDIS is, therefore, not only contributing towards the provision of a clean and secure supply of energy but also towards preventing climate change. Thanks to its energy production activities, almost 1.2 million tonnes of CO<sub>2</sub> equivalents are saved. The amount of waste recycled corresponds with the amount of heating oil required by around 40,000 single-family homes Power plant services

## A waste management specialist in the brown coal region

MUEG COLLECTS AND RECYCLES RESIDUAL WASTE FROM POWER PLANTS

Local fuels are the number one source for producing electricity: around one quarter of the electricity produced in Germany is generated from brown coal. Central Germany is an important region for mining such coal and using it to produce electricity. Being a specialist for residual waste, MUEG, one of REMONDIS' associated companies, guarantees that residual waste from brown-coal fired power plants is collected and recycled safely.



32 I REMONDIS AKTUELL

"Secure waste management services are also important for security of supply. MUEG contributes greatly towards ensuring power plants operate smoothly with its extensive range of services." Bernd Fleschenberg, managing director at REMONDIS

Modern brown-coal fired power plants are run according to high ecological standards. One important component here is the flue gas cleaning process which generates a number of very different by-products. The power plants need a reliable partner for the disposal of such residual waste – preferably from the same region as unlimited availability is then guaranteed and transport requirements minimized.

#### Returning material to the economic cycle

MUEG Mitteldeutsche Umwelt- und Entsorgung GmbH, a company based in Braunsbedra, is an expert for industrial residual waste. Collecting and recycling residual waste from power plants is one of their main areas of expertise. Its range of services has, therefore, been developed to reflect this: the company can accept all by-products, from ash to gypsum and water from flue-gas desulfurization systems (FGD) to filter cake, and in large quantities, too.

Last year alone, MUEG handled around 2 million tonnes of ash as well as 1 million tonnes of FGD gypsum from the region's brown-coal fired power plants. Priority is always given to finding solutions that allow the materials to be recycled. The gypsum, for example, is processed so that it can be used by the construction industry and the treated ash is used as a filling material for mines.

#### Own location for the Lippendorf power plant

MUEG's customers include eight brown-coal fired power plants, two of which are large-scale power plants: Schkopau and Lippendorf. The Lippendorf power plant, which is located near Leipzig, is considered to be one of the most modern of its kind worldwide. With two power plant units and a net efficiency of 43 percent, it has an output of 1,800 megawatts – enough to supply 6 million households with electricity. This huge plant was put into operation ten years ago and has been served by MUEG since then.

Three of MUEG's 13 business locations process residual waste from power plants. Its Peres site is responsible for

the Lippendorf power plant. It was built specifically for this power plant and started business at the same time the power station was put into operation. The facility in Peres has been designed to handle large throughput volumes in order to guarantee the disposal of the waste from this largescale power plant. Its annual capacity allows it to process 550,000 tonnes of filter ash, 50,000 tonnes of wet ash and 275,000 tonnes of FGD water.

#### Innovations mean new opportunities

Over the last few years, MUEG has invested around 50 million euros in its facilities. The main areas of investment have been in silos and special facilities for processing ash. Furthermore, it now has one of the longest pipe conveyors in Europe. This fully enclosed belt conveyor transports the ash over four kilometres – directly from the power plant to the processing facility.

MUEG is continuously working on its processing activities to increase the number of areas in which the residual waste from the power plants can be used. Both the methods and technologies it uses are being optimized and extended – and its efforts are paying off. Today, the company uses a process that it developed itself which enables ash to be processed into a high quality material which the construction industry can use for renovating buildings. The product is also used in mining as a cement substitute to seal off cavities or for slope stabilization. Furthermore, it can be used very effectively for road or path construction work as its properties are very similar to those of concrete.

#### Partners that complement each other

MUEG is owned by MIBRAG Mitteldeutsche Braunkohlengesellschaft mbH and REMONDIS. MIBRAG mines approx. 19 million tonnes of raw brown coal a year at its Vereinigtes Schleenhain and Profen open cast mines. Its main customers are the Lippendorf and Schkopau power plants which are also served by MUEG.



Ongoing availability is essential if power plants are to be provided with a reliable waste disposal service. The best way to provide this is to be located close to the power plant.

Last year alone, MUEG handled around 2 million tonnes of ash as well as 1 million tonnes of FGD gypsum from the region's brown-coal fired power plants.

# **'Down Under" on course for increased recycling**

REMONDIS HAS ESTABLISHED ITSELF AS A LEADING PARTNER FOR WATER AND ENVIRONMENTAL SERVICES IN AUSTRALIA AND NEW ZEALAND



**Environmental services** 

The company's very first step overseas was to enter Australia. In 1982, REMONDIS founded its first overseas branch in Penrith. Much has happened since then and for many Australians REMONDIS is automatically considered to be an Australian company. It has also successfully pushed forward the expansion of its business in Oceania by entering the market in New Zealand. More and more, REMONDIS is establishing itself down under as the leading partner for all matters concerning water and environmental services.

### **REMONDIS**<sup>®</sup>

REMONDIS entered the Australian market almost thirty years ago with long-term plans. Over the years, a successful intercontinental partnership has been created from which everyone involved has benefited. It was, for example, an Australian innovation to use a side loader to collect waste. REMONDIS recognized the potential and imported this new technology to Europe from Australia and convinced vehicle manufacturers in the "old world" to supply such vehicles, too. A success story which began in Australia.

Today REMONDIS has business locations in all of the large cities on the continent. Today REMONDIS can be found in all of the large cities on the fifth continent. Its head office for Australia and New Zealand is located in Sydney in the state of New South Wales. From here, the company supports its business customers in all matters concerning waste management and the collection of liquid waste. It still has a business location in St. Mary's, the first location it set up when the company moved to Penrith in 1982. REMONDIS operates a modern composting plant in Port Macquarie where it uses state-of-the-art technology for its in-tunnel composting process. The branches in Melbourne in the state of Victoria, Adelaide in South Australia and Perth in West Australia are primarily active in the area of collecting commercial waste. In Brisbane in Queensland, the company also recycles old glass. In neighbouring New Zealand, REMONDIS supports its business customers and local authorities from its office in Auckland. Together with its customers and partners in Australia and New Zealand, REMONDIS is further developing the waste management branch increasingly creating a resource and climate-friendly recycling sector.

#### REMONDIS Australia conducts Greenhouse Gas and Energy Audits

REMONDIS recently conducted a Greenhouse Gas (GHG) audit and an energy audit across all of its sites in Australia. The aim of this move was to capture its carbon emissions and find measures to reduce its corporate carbon footprint on the environment. The GHG audit was conducted over

#### Background

Being a leader provider of recycling services, REMONDIS takes its responsibility to protect the environment and prevent climate change very seriously. Following a successful audit, REMONDIS Australia has been awarded the official Carbon Planet certificate. Its customers and partners in Australia can be sure now that they are working together with a very modern company that guarantees the greatest levels of environmental compatibility in each step of its work processes and that permanently optimizes its processes. Sustainability and environmental protection are REMONDIS' core business.

## Carbon Planet Remondis Pty Ltd is

Carbon Measured. Remondis Pty Ltd has undertaken a greenhouse gas

a period covering 24 months and covered all aspects of its business activities – ranging from electricity and water to paper, flights, fuels to accommodation, postage and waste. The Greenhouse Gas audit looked at emissions under the internationally accepted Greenhouse Gas Protocol Guidelines and the results clearly showed that REMONDIS Australia is well under the mandatory company reporting threshold of 50kt of  $CO_2$ -e in terms of its carbon emissions. The energy audits, too, showed that the company is already spearheading Environmental Performance.

The results of the study will help the company to find measures to further decrease its carbon footprint. Such measures include new eco-friendly fuels for its fleet. REMONDIS Australia has already successfully trialled bio-fuels and will expand their application. Considering that transport fuels make up the largest sector, such a measure alone will help to save large amounts of greenhouse gases and primary fossil fuels such as crude oil. Electricity consumption was the second largest contributor overall and REMONDIS Australia's procurement will focus on purchasing Energy Star rated equipment only. In addition, it is also looking at implementing standby power-saving settings and modernizing its air-conditioning systems. And it is taking further steps: solar radiation reflective film is to be put on north and west facing windows at all REMONDIS branches which will also clearly improve the buildings' energy efficiency. By undertaking these audits and implementing improvement measures, REMONDIS has taken a significant step forward in becoming a 'green' supplier to its increasingly environmentally conscious client base by leading by example. REMONDIS Australia is already successfully using bio-fuels.



**REMONDIS I Environmental services** 



Winter services \_

# Well prepared for the winter

AT FES, PRIORITY IS PUT ON SAFETY

Frankfurt am Main – an exhibition centre, a financial centre, a stock exchange and one of Europe's most productive cities. This business centre needs top quality winter services to ensure that everything can run smoothly. These are provided by Frankfurter Entsorgungs- und Service GmbH (FES). 24 hours a day, the company keeps pace with the winter clearing public streets, paths and squares of snow and ice.

36 I REMONDIS AKTUELL

1,050 kilometres of road need to be cleared in the city – the equivalent of travelling from Frankfurt to Florence and beyond. The FES is out clearing all these roads whenever the thermometer falls below zero and the roads and pavements become icy or covered in snow. Night and day and, in some areas, several times a day. Such work is not possible without a well thought-out deployment plan and perfect logistics. The preparation work, therefore, begins well before the cold season starts so that the company is well prepared for such activities at the beginning of November.

#### Major offensive against frost, snow and ice

The FES' city cleaning department is responsible for this work. Up to 320 employees and 146 vehicles can be deployed at any one time including heavy equipment such as snow ploughs, snow blowers and gritters. The teams work non-stop from 4am to 10pm. During this time, priority is given to the most dangerous and/or vulnerable stretches of road. They are also checked regularly throughout the night – and even when the temperature is just above zero as bridges, crossings and roads close to rivers can freeze over quickly.

#### Unexpected surprises are rare

The people responsible for road safety must be able to react quickly to different situations. The road clearing teams, therefore, are in constant contact to the control centres run by the traffic police and Frankfurt's public transport company. A well-known weather service supplies weather forecasts informing the company about weather and temperature changes that can be expected in Frankfurt and the surrounding region. The teams, however, must still be able to react at short notice – especially with freezing rain as this is very difficult for the experts to forecast.

#### Keeping the use of salt to the minimum

During a winter such as that experienced in 2009/2010, the Frankfurt winter service teams spread up to 12,000 tonnes of material around the city. For the most part, wet salt is used on the roads. Compared to dry salt, wet salt acts far more quickly and gives vehicles' tyres a better grip on the roads. The FES team only uses pumice grit on the cycle paths as it eventually dissolves and does not need to be swept up. A mixture of dry salt and grit is used to make the pavements safe.

The pedestrianized areas are not so easy: salt would leave white marks on shop floors and grit can cause escalators to break down. The FES, therefore, uses a calcium chloride deicing material. This highly effective material is also used on bridges where salt could damage the structure.

#### **Deployment controlled with GPS**

Besides these public areas, the FES also provides winter services for owners of private and commercial property. Its subsidiary, FFR GmbH, is the specialist for these tasks and is active throughout the Rhine-Main region with its approx. 324 employees and 200 ploughs and gritters. GPS systems have been installed in the vehicles and will be used for the first time this winter. This means the control centre will be able to see in real time which teams are in action and which stretches of road have already been cleared. Pictorial documentation with geo-coordinates is also available. "We are playing a pioneering role in Germany with this system," said FFR managing director, Rolf Niermann. A good position to be in – for, if the weather forecasters are right, we are going to have another cold winter this year.

#### Background

The FES is a public private partnership between the City of Frankfurt am Main and REMONDIS. Being the region's leading full service provider, it offers a complete range of waste management services from which the approx. 1 million local inhabitants living in the Rhine-Main region benefit. The winter services are just one part of the company's extensive portfolio.



The roads in Frankfurt that have heavy traffic or are particularly dangerous are given priority by the planning team. **Environmental services** 

# **More Recycling – Now!**

THE INDUSTRY IS WORRIED ABOUT THE RAW MATERIAL MARKETS – LOCAL RESOURCES SHOULD BE USED MORE CONSISTENTLY

### **REMONDIS**<sup>®</sup>

The much quoted "Deutsche Rohstoff AG" [German Raw Material PLC] is a long time coming. At the same time, German industrial companies are finding it more and more difficult and, above all, more and more expensive to procure the raw materials they need for their production processes on the global markets. China is now dominating the global raw materials market. The German industry is in danger of soon being left out in the cold and not being able to produce their goods because raw materials have become far too expensive. A more consistent recycling of the most important local sources of raw material – waste, biomass and WEEE – all across the country could ease the situation here.

For many years now, China, the world's most populous country, has been active in threshold and developing countries in order to gain long-term access to ores, coal, oil and other resources. At the same time, it has been offering its own rare earths and critical metals at dumping prices to push down prices and force producers in other parts of the world to give up their business. Being a quasi-monopolist, China is now in a position to dictate prices. Faced with the latest price developments, the industry is becoming increasingly nervous. The world's three largest ore producers alone increased their prices by around 90 percent within just three months. And what is worse: raw material suppliers



#### Waste as a source of raw materials – Examples

- 10 tonnes of WEEE replaces 500 tonnes of copper ore
- 3.1m tonnes of old glass replaces 3.3m tonnes of minerals per year
- 460,000 tonnes of iron scrap replaces 1.07m tonnes of iron ore
- 7.7m tonnes of old paper replaces 28m tonnes of timber



"The only way to counteract the imminent threat of raw material shortages and the high global market prices is to consistently use our own sources of raw materials. This is one of the reasons why are we campaigning for more recycling across the world." Egbert Tölle, REMONDIS board member

have reserved themselves the right to re-negotiate their prices every 90 days in the future. In the past, such negotiations only took place once a year. This development will in the end also affect consumers, for, if copper, aluminium, steel and other raw materials become more expensive, then the prices for the products made from such raw materials will also rise.

A look at waste electrical and electronic equipment (WEEE) shows that it is certainly worth consistently pushing forward local raw material resources. Around five hundred tonnes of ore must be mined to gain one tonne of high purity copper to the detriment of the environment and because of the huge amount of energy needed – to the detriment of the climate. The same amount of copper can be gained with far less effort and without harming the environment by recycling approx. 10 tonnes of WEEE. And yet there is a huge gap between the 20 million tonnes of WEEE generated in Europe and the actual volumes taken to recycling plants. Old appliances handed in for recycling are still being illegally relabelled as used equipment and then shipped from the large European ports to African threshold countries or to India. There they are dismantled by hand under inhumane conditions which are highly damaging to the environment. Only a very small amount of the raw materials contained in the equipment can be recovered - most are lost to us forever. REMONDIS' seven WEEE dismantling centres across Europe demonstrate that there is a much better way of dealing with such equipment.

Each year, up to 100,000 tonnes of WEEE is processed in the Westphalian city of Lünen alone. The recovered raw materials – copper, aluminium, iron, stainless steel and shredded printed circuit boards with rare earths and precious metals – are returned to the economic cycle immediately. Its new plant in Troyes, France, processes around 30,000 tonnes and is run according to the same principle. Since 2009, REMONDIS Electrorecycling SAS has been recycling old cooling and electronic appliances, cathode ray tubes and flat screens in its combination plant for the largest take-back systems in France, EcoSystemes, Ecologic and ERP. Its customers also include large national and international firms such as Nestle and Unilever. In April 2010, the plant passed the "performance verification test" based on the European requirements of the Manufacturer, Take-Back and Recycling Association for Cooling Appliances. This test is an essential requirement for the take-back systems.



REMONDIS Electrorecycling SAS recycles old cooling and electronic appliances, cathode ray tubes and flat screens in its combination plant in the French city of Troyes for the large takeback systems in France.

As, faced with the growing shortages of raw materials, it is essential that the local sources of raw materials – from waste in general and from WEEE in particular – are used in a more consistent manner, it is now up to the legislator to act. We must ensure that the material is processed in the world's most efficient and eco-friendly plants by setting more ambitious recycling targets in the new Law on Life-Cycle Management and by improving controls to prevent illegal WEEE exports. This would be good news for the manufacturing industry as they would be provided with a sustainable and secure supply of raw materials.

#### News in brief \_

## **REMONDIS** – new managing directors for GWFA and Netherlands/Benelux

### **REMONDIS**<sup>®</sup>

Jeroen Vincent took up his position as the new managing director of REMONDIS Netherlands/Benelux on 01 December. In his previous position, Vincent was responsible for sales and marketing at a Dutch environmental service company. Born in Holland, he studied mechanical engineering and has extensive experience of working as a manager in the water and environmental service branch. Jeroen Vincent recently gained in-depth information about the cradle-to-cradle principle from Prof. Braungart during a visit to the EPEA Institute in Hamburg – a principle which an increasing number of Dutch and Benelux companies are applying to their business.

Thomas Block (39) began his work as managing director of the GWFA Global Water Franchise Agency GmbH in November 2010. Block, who has been active in the environmental branch for over 10 years, now succeeds Reiner Köhler, Prof. Karl-Ulrich Rudolph and Roland Ruscheweyh. The GWFA is a joint venture between Remondis, Huber SE and Prof. Dr. Dr. K.-U. Rudolph GmbH. Its activities focus on developing and implementing water franchise concepts in the international water sector.



Jeroen J. Vincent, new managing director of REMONDIS Benelux



Thomas Block, new managing director of GWFA

#### News in brief.

## **REMONDIS** at the New Zealand waste management conference, Waste MINZ

A further milestone in REMONDIS' still short history in New Zealand was reached when it took part in New Zealand's largest waste management conference held in Auckland on the North Island. After having entered the market at the end of 2009, REMONDIS New Zealand took this opportunity



to take part in the Waste MINZ and present the company's services to the representatives from New Zealand's industry and local authorities. Being the main sponsor of the 20th Waste MINZ, REMONDIS' stand focused on its innovative solutions for recycling and recovering raw materials for both the commercial and household waste markets.

Almost 600 people visited both the exhibition and the conference, which covered all aspects of the New Zealand waste management branch – entrepreneurs, consultants and guests from local, regional and central government. This year's event was the biggest in its 20-year history and was officially opened by the Environmental Minister, Dr Nick Smith. Dr Smith used this opportunity to visit REMONDIS' stand and learn more about the technology used in the international water and environmental service sector and how it could be used in the New Zealand market.



News in brief \_\_\_\_

## **REMONDIS Poland – 'Best Service' Award for the area of waste electrical appliances**

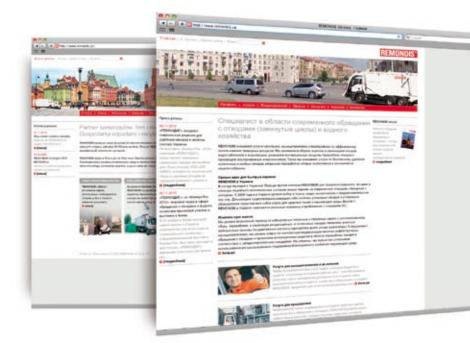
The Tarnowskie Góry Chamber of Commerce held its IPH Gala at Brynek Castle near Tarnowskie Góry on 28 August. This occasion has been used for many years now to present the best companies in the District of Tarnowskie with awards for their products and services. This top class event takes place in the castle gardens every year and is attended by those active in the world of business, culture, science and politics in Poland. The final of the "Businesserz" competition was also held during the event for the tenth time under the patronage of the President of the Polish Chamber of Commerce in Warsaw. REMONDIS Poland won the Best Service category for the second time since 2003. The company was primarily awarded the "Businesserz" prize this year in recognition of its introduction of a system of collection points for waste electrical and electronic equipment. Furthermore, Piotr Lubos, managing director of REMONDIS Tarnowskie Góry Sp., was presented with the Gold Medal of Honour in recognition of the services given to the Silesian voivodeship. He was presented with the award by the President of the Polish Chamber of Commerce in Warsaw, Andrzej Arendarski. The REMONDIS experts for hazardous and industrial waste, Barbara Głogowska and Lidia Rosocka, here at REMONDIS Sanitech's information stand, were delighted to have won the award.

REMONDIS®

#### News in brief \_

## **REMONDIS** launches new websites in Poland and the Ukraine

REMONDIS International launched its new websites for Poland and the Ukraine in November. The two homepages can now be visited at www.remondis.pl for Poland and www. remondis.ua for the Ukraine. Both online websites have been developed in accordance with REMONDIS' proven corporate design. The aim is to present the company's services in an even more transparent manner and make it easier for its partners and customers to use this digital medium. To this purpose, customers can use the map of locations to go straight to their closest branch and learn all about the services on offer. Furthermore, the Ukrainian website is the first of REMONDIS' websites to be presented in Russian. Further international websites are currently being developed.



#### People\_

## **REMONDIS employee donates stem cells**

#### 8-YEAR-OLD GIRL SAVED

### **REMONDIS**<sup>®</sup>

Helping others has always been important for REMONDIS sales employee, Thomas Lopes. As a sergeant in the German army medical corps, he worked as a trainer for twelve years. With this background, it went almost without saying that he decided to register as a potential bone marrow donor ten years ago. He could hardly believe his ears when he received a call from the DKMS in Tübingen, the central



bone marrow register in Germany. The computer had named him as a potential donor for a particularly urgent case. Normally, the donor and recipient remain anonymous. However, having received a moving letter of thanks in English from the patient's parents, Thomas Lopes knows who he was able to help with his stem cell donation even if he does not know the actual name of the person. Thanks to his donation, a procedure which lasted around four hours and from which he needed a weekend to recover, he has been able to help an 8-year-old English girl enabling her to go home for the first time after a very long stay in a London hospital. Her chances of recovery have improved dramatically thanks to Thomas Lopes.

The DKMS works at international level helping to give people suffering from certain blood diseases a new lease of life. Currently, a suitable donor is able to be found for around 80 percent of sufferers, not least thanks to people such as REMONDIS sales employee, Thomas Lopes.

#### People\_

## **REMONDIS 4-man boat at Berlin Regatta**



This year, REMONDIS GmbH & Co. KG Region East entered its four-man team in the rowing regatta held in Berlin Neukölln for the third time. The company regatta was held for the fifth year running as part of the '48-Hour Neukölln Art and Culture Festival' under the patronage of Fernheizwerk Neukölln AG and other local companies who worked closely together with the Wiking e.V. Berlin 1896 rowing club. REMONDIS' four-man boat, rowed by Dennis Warmuth, Mario Böhmer and Frank Röder and coxed by Robert Krüger, took part for the third time this summer and had its most successful race.

Each week, the REMONDIS sportsmen rowed 15-20 kilometres on the River Spree and Berlin canals to prepare for the event. The Wiking rowing club provided them with a suitable boat and the support of their coach, Paul Madalinski. 16 teams took part in the race and the four crossed the finish line in their REMONDIS logo in a respectable 6th place a full five seconds faster than last year. Next year, the team is looking to make third place as well as to enter a second four-man gig.

### > Impressions



The Environmental Minister of the Republic of Belarus, Zalko Wladimir Grigorjewitsch, (2<sup>nd</sup> from left) during his visit to the FES in Frankfurt.

REMONDIS Board Member, Egbert Tölle, with former managing director, Friedrich Buchholz, during a visit to the Ukraine.

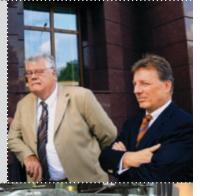


REMONDIS' exhibition team at the IFAT 🔺

Honorary Chairman of REMONDIS' Super visory Board, Norbert Rethmann, talking to former German Environmental Minister, Prof. Klaus Töpfer, at the IFAT in Munich.

exhibition in Munich.

Ulrich Bastert (right) and Michael Dietz (2<sup>nd</sup> from right) present Norbert Rethmann with the key to REMONDIS' 7,500<sup>th</sup> Mercedes Benz truck at the IFAT.





 REMONDIS employees taking part in a parade during the Water Festival in Arzamas.

REMONDIS managing director, Hendrik Vonnegut, presents the head of the kindergarten in Saporoshje, Angela Gryshchenko, with a donation from REMONDIS. Left in picture, the director of REMONDIS Saporoshje, Andriy Kozak.



AN

REMONDIS Board Chairman, Ludger ► Rethmann, during a visit to REMONDIS Aqua's branch in India.

German Defence Minister, Baron zu Guttenberg, with Norbert Rethmann and Karin Strenz, CDU MP, and his family during a visit to the Wamckow Estate.



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Clean the extreme.

CURRENTA SA







## No Water – No Life.

#### > Shortage of raw materials

Water makes up more than two-thirds of the surface of our blue planet. But only about one percent is fresh water that can be used directly by humans. Drinking water, though, is becoming ever more important as the world's population continues to grow. REMONDIS provides professional water management services to ensure there is continued access to this vital commodity. The highest levels of quality, worldwide. For a secure future. German Qualität.

Source: Alcamo 2000 (Global modelling and scenario analysis for the World Commission on Water for the 21st Century)

4 billion people will be living in countries suffering from serious water shortages in 2025.

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