

MORE WATER – REMONDIS AQUA CONTINUES TO GROW

The code to the film

You can now watch REMONDIS' corporate film on your mobile. Just activate the appropriate app, take a picture of the code and you're away!



Water resources management

EURAWASSER – a strong partner for local authorities now belongs to REMONDIS Aqua

Latest news

Sustainability certificates from REMONDIS

Environmental services

On the way to a raw materials economy

International environmental services

Poland and the Ukraine – everything's clean for EURO 2012

Contents



EURAWASSER – A STRONG PARTNER FOR LOCAL AUTHORITIES

REMONDIS Aqua continues to grow – in Germany, too. Its recent acquisition EURAWASSER is primarily active in Germany working for city and district authorities. For REMONDIS Aqua, which up to now has been active above all on international markets, this acquisition is a perfect symbiosis. **Page 4**



KROSNO RELIES ON REMONDIS

Two are better than one – in Poland, too! The Polish city of Krosno has now founded a public private partnership with REMONDIS. The aim of the new PPP is to restructure the waste management region and extend its catchment area. And the local authorities in Krosno will be able to make use of REMONDIS' experience of being part of over 100 PPP companies. **Page 12**



WORKING TOGETHER FOR MORE RECYCLING

The recycling bin is coming! And it is already being used in Meißen and the Rhein-Sieg district. As part of two pilot projects, REMONDIS is working together with the local authorities there to gain experience about the new recycling bin. **Page 16**

LATEST NEWS

- 4 EURAWASSER – a strong partner for local authorities
- 8 2000 to the present – on the way to becoming a raw materials economy
- 12 Waste management partners in the south east of Poland
- 14 Sustainability thanks to recycling
- 16 Working together to increase recycling
- 17 Out of the drawer, into the mobile phone recycling bin

REMONDIS | WATER RESOURCES MANAGEMENT

- 18 Clear water and clean energy for Oettinger
- 19 REMONDIS Aqua further extends its business in Germany
- 20 20 years of the Rostock Model

REMONDIS | ENVIRONMENTAL SERVICES

- 22 A dangerous legacy in the "Gartenreich"
- 24 Rhenus grows business with high-tech logistics
- 26 Clean mobility
- 28 Systematically extending services
- 30 Temporary scaffolding replaces outer wall
- 32 Recycling with a vision
- 34 The foundations of the recycling sector
- 35 Sustainability – signed and sealed
- 36 Rapid progress in China
- 38 Close to the football at all times
- 40 News in brief

PEOPLE

- 42 REMONDIS fights youth unemployment
- 43 Impressions

Flag

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

EDITORIAL



Thomas Conzendorf,
REMONDIS Board Member

Dear Readers!

Following lengthy negotiations, the German houses of parliament, the Bundestag and Bundesrat, have reached a compromise via a mediation committee on the new Recycling Law ("Kreislaufwirtschaftsgesetz"). This new law will probably come into force on 01 June 2012. It will supersede the recycling and waste management law of 1996 which has had to be amended as all EU member states are obliged to harmonise their national laws in line with the European Waste Directive of 2008.

The aim of the directive is to move the European recycling sector into a new era in which, across the EU, materials recycling is given clear priority over the climate-damaging disposal of residual waste in landfills. One reason why the compromise now reached in Germany is disappointing is because recycling rates have not been significantly increased. Plans are for the recycling rates of municipal waste to have increased from 64% to just 65% by 2020. A rise of just one percentage point within eight years is anything but ambitious. Considering the level of know-how already achieved by the environmental service branch in Germany, these targets must be seen as a step in the wrong direction. Germany is in danger of losing its pioneering position here. Being a country with few natural resources of its own, Germany needs to significantly improve the supplies of valuable secondary raw materials to its local industry – this new law will not meet these requirements.

One of the specific goals of the coalition agreement in 2009 was to achieve fair competition in the waste management branch but this too has fallen by the wayside. By extending the obligations of local inhabitants to hand over their waste to local authorities, municipal waste management monopolies have been strengthened and competition that would benefit the local inhabitants has been abandoned. The result will be higher and less transparent fees. As far as the private sector waste management branch is concerned, the new recycling law is clearly in violation of EU law. Restricting the free movement of goods by extending the obligations of local inhabitants to hand over their waste to local authorities and putting recycling and incineration effectively at the same level by not adopting the five-stage waste hierarchy are both unacceptable. For this reason, an appeal is to be lodged at the EU Commission against this law and the decision handed over to the courts.

At a time in which the private sector water and environmental service branch in Germany is having to face ever greater restrictions as a result of political decisions, it is almost surprising that REMONDIS has been able to hugely increase its water management activities in Germany by taking over the EURAWASSER Group. Water is a vital growth market – and not just here but all around the world. And so, more and more, private sector companies are looking abroad to those countries where there is a significant need for improvement in both the areas of water and recycling.

I hope you enjoy reading about these and other topics in this edition of REMONDIS aktuell!


Yours
Thomas Conzendorf

Water resources management

EURAWASSER – a strong partner for local authorities

REMONDIS AQUA EXTENDS ITS ACTIVITIES IN GERMANY WITH A NEW ACQUISITION



Together with its subsidiaries and associated companies, EURAWASSER Aufbereitungs- und Entsorgungs GmbH has been supplying drinking water and treating wastewater for around 800,000 people across Germany since 1991 making it one of the most successful water management companies in the country. For 30 years, REMONDIS Aqua has been ensuring there is high quality water available with its state-of-the-art water supply and wastewater treatment systems as well as by building and operating water facilities. Private households, city councils, district authorities, water associations and companies in Germany, Poland, Turkey, India and other countries rely on REMONDIS Aqua's extensive experience. Both companies put priority on achieving efficiency and cost effectiveness as well as on the sustainable conservation of natural resources. The acquisition of EURAWASSER is, therefore, a perfect symbiosis.

EURAWASSER is active as a German company on site in cities and districts. Being the latest member of the internationally active REMONDIS Aqua group, this Berlin-based water service provider can now access REMONDIS Aqua's wealth of experience. For, regional responsibilities and services can only be successful for the local inhabitants and the city or district authorities if they are linked to international activities. EURAWASSER and REMONDIS Aqua, therefore, complement each other here perfectly. And it is the municipal partners and local customers who will benefit from this. Consumers can look forward to stable water charges and a reliable quality of water.

With its 900 employees, the EURAWASSER group is primarily active in the areas of water supply and wastewater treatment via public private partnerships and associated companies at its various business locations including EURAWASSER Nord (in and around Rostock-Güstrow), Schwerin, Goslar, Kreienssen, Leuna, Saale-Unstrut (Freyburg and Leuna), Cottbus, Graftschaft and Rheingau. For over 15 years now, EURAWASSER has been seen as a pioneer throughout the whole of Germany in the area of public private partnerships (PPP) in the German water sector with its "Rostock Model". In all cases, the municipal partners benefit from the extensive investments made and the rapid, low-cost implementation of renovation plans that fulfil business, ecological and social criteria. Thus, EURAWASSER stands for sustainable business commitment helping to secure jobs in the regions and helping municipal and industrial partners to fulfil their ecological responsibilities and to secure quality of life for future generations. EURAWASSER's areas of expertise also include regenerative forms of energy (e.g. biogas), sustainable development, biodiversity and innovative laboratory services in which the company is market leader in the water and wastewater sectors.

Thinking globally – Acting locally: EURAWASSER takes on ecological responsibility

Natural resources are finite. Back in 1978, the United Nations

called for "sustainable development" that achieves a better balance between economic growth, the protection of ecosystems and social development. Today, more than 30 years later, the need for sustainable development is greater than ever before. The noticeable change in our climate, the scarcity of our natural resources and the continued existence of social imbalances and disparities demand that each and every social actor must act responsibly towards their environment. This is especially true in the area of water. Whilst the supply of fresh water – just 3 percent of the world's water supplies – will, at best, remain at the same level, the world's population will grow exponentially. Today,



in some parts of the world, there are already geopolitical conflicts concerning access to clean drinking water. At the same time, Germany is having to face a completely different kind of problem due to its shrinking population and expanding 'boom' regions: how can the same quality of water be supplied in the future at affordable prices?

EURAWASSER's activities are based on its sustainable business approach and its investments in innovative solutions suitable for the local requirements of the area without losing sight of the global picture. For, water cycles are not limited to a region or a city – they are part of a global ecosystem, for which every person, every company and every

Regional services benefit from international experience.

water supplier must take responsibility every single day. EURAWASSER faces up to this responsibility and, together with its municipal and industrial partners, develops future-oriented solutions to supply high quality water and to ensure the resource water is handled in a sustainable way.

Modern technology and innovative scientific solutions are essential to be able to provide high quality drinking water and safe wastewater treatment. EURAWASSER relies on state-of-the-art technical facilities, scientific cooperation work with universities, quality management systems in accordance with ISO and uniting the company's different areas of expertise in a targeted manner. Based on all this, EURAWASSER offers technical and commercial services as well as a wide range of specialist water and wastewater services.

Supplying drinking water

In the area of drinking water supply, EURAWASSER taps into raw water sources and distributes water. This involves operating, maintaining and repairing water processing

plants and water distribution facilities. The energy consumption and working condition of the technical facilities are also important as far as protecting the environment and the climate is concerned. For this reason, EURAWASSER attaches great importance on optimising energy consumption at the water distribution facilities and on locating leaks. The management of water meters and analyses of drinking water round off its range of services.

Treating wastewater

By operating, maintaining and repairing wastewater treatment facilities, sewer networks and pumping stations, EURAWASSER ensures clean wastewater treatment can be carried out without any disruptions. This also includes drawing up and implementing sewer renovation concepts as well as optimising the energy consumption of the facilities. Customers benefit from this work in two ways. Besides providing state-of-the-art technology, EURAWASSER also carries out earnings analyses and provides advice on the subject of energy efficiency, for example on co-digestion. EURAWASSER covers all aspects of wastewater treatment

Modern technology and innovative scientific solutions are essential to be able to provide high quality drinking water and safe wastewater treatment.



REMONDIS Aqua has succeeded in concluding a very good transaction with the acquisition of the EURAWASSER Group. REMONDIS aktuell spoke to Andreas Bankamp, a member of REMONDIS Aqua's management team.

REMONDIS aktuell: Mr Bankamp, how significant is the takeover of EURAWASSER for REMONDIS Aqua?
Up to now around 85 % of REMONDIS Aqua's activities

have been carried out on international markets, among others in Turkey, Russia, Poland, Spain and other European countries as well as in India. The strategic development of the company's business will continue to focus on international activities. By taking over the water management services – the company's core areas of expertise – in, among others, the state capital Schwerin, the 'Hanse city' Rostock and in Cottbus and Goslar, REMONDIS Aqua will be able to sustainably extend and strengthen its position in Germany in the area of, for example, water supply.

REMONDIS aktuell: How is REMONDIS Aqua expecting this takeover to affect the future of the company?

By taking over EURAWASSER, we have set a clear example in the market for private sector water management businesses: more can be done by the private sector service providers in the area of water supply and wastewater treatment. The economic and social framework conditions in Germany – including the pressure on public finances and demographic change – will push forward the need to

including analysing wastewater and sewage sludge, carrying out maintenance work on septic tanks, maintaining and servicing property drainage systems, monitoring and maintaining stand-alone cesspools that are not connected to a drainage system and monitoring drainage systems as part of water pollution control.

Other services provided by EURAWASSER include planning investments, planning, carrying out and monitoring building projects, introducing geo information systems and offering engineering advice.

Local authorities need strong partners

By taking part in public private partnerships, i.e. cooperation work between the private and public sectors, EURAWASSER is able to offer city and district councils as well as water associations bespoke partnerships that are individually adapted to their needs and that offer them strong future prospects. The advantages are obvious. Pressure is taken off the public purse thanks to the financial and administrative flexibility of the PPP. Cities and districts can finance other important projects without their municip-

introduce more competition in the systems within the public sector infrastructure, especially in water management. I believe the private sector water management companies have a very good specialist and business set-up. Competition will, therefore, ensure that water can be supplied on a long-term basis and at affordable prices. Customers and consumers will benefit the most from this. REMONDIS Aqua demonstrates how this can be done and is, therefore, the ideal partner for local authorities.

REMONDIS aktuell: Are there any specific targets that should be reached as a result of this acquisition?

REMONDIS Aqua's goal is to achieve consistent and sustainable growth on national and international water markets. This takeover is a further logical step in this ongoing process.

REMONDIS aktuell: What important strategic changes have been brought about by this takeover?

Our current workforce of just under 2,000 highly motivated

“With EURAWASSER, REMONDIS Aqua has well and truly become one of the strongest water service providers in Germany, too.”

Andreas Bankamp, managing director of REMONDIS Aqua

pal right to govern themselves being infringed in any way. Consumers benefit by having stable prices and charges as well as water supply and wastewater treatment systems that conform to standards and are run by specialists. Thanks to EURAWASSER, water-related services will continue to be reliable and affordable in the future, too. “Everything flows” – a fact recognised centuries ago by Heraclitus. And REMONDIS Aqua and its latest family member EURAWASSER will be ensuring that everything will continue to flow in the right direction in a clean, environmentally friendly and affordable manner in the future, too.

EURAWASSER helps its municipal and industrial partners to fulfil their ecological responsibilities.

people has been joined by further highly qualified and just as motivated employees. EURAWASSER's market strategy and philosophy correspond with that of the REMONDIS Group. The focus of our attention is always put on our customers no matter what work we are carrying out. Providing the best service for everyone each and every day is both an incentive and an obligation. We also wish to carry on presenting this under the EURAWASSER name.

REMONDIS aktuell: What does the takeover of EURAWASSER mean for competition in the water management sector in Europe?

As far as competition is concerned, Germany continues to limp behind the others in Europe. Whilst private sector commitment is the norm rather than the exception in the rest of Europe, there is still much room for development on the German market.

REMONDIS aktuell: Mr Bankamp, thank you for the interview.

2000 to the present – on the way to becoming a raw materials economy

THE RECYCLING SECTOR ESTABLISHES ITSELF AS A SUPPLIER OF RAW MATERIALS

At the beginning of the 21st century, waste was discovered to be a source of raw materials. Using state-of-the-art facilities and innovative technology, private-sector recycling businesses began producing secondary raw materials for the industry. By conserving natural resources and helping to prevent climate change, they have helped to secure supplies of materials and contributed towards ensuring that life's necessities are preserved for the future.

Technological advances, the economic development of the threshold countries, the rapid growth of the world's population – all these have had a huge effect on the demand for raw materials. It became clearer and clearer at the beginning of the 21st century that the lavish use of natural resources needed to be curbed. There was a need for sustainable strategies that separated economic growth and the consumption of raw materials from one another.

Within a short period of time, the country had extensive know-how and technological advantages that still exist today. Step by step, it has achieved the world's highest recycling rates. Towards the end of the decade, more than 13 percent of the German economy's demand for raw materials was being covered by secondary raw materials, saving 8.4 billion euros worth of primary raw materials.

World champions in recycling

Promising conditions had already been put in place in Germany to ensure raw materials were handled in a responsible way: an important legal basis had been set up in the 90s with the Packaging Ordinance ('Verpackungsverordnung') and the Recycling Law ('Kreislaufwirtschaftsgesetz'). The developments made as a result of these laws meant that the country became a global pioneer in the area of recycling.

A great deal of preliminary work had to be carried out to be able to achieve such high levels of recycling. Such work was primarily done by the private sector. Water and environmental service businesses developed innovative technology and procedures to perfect the recovery process. At the same time, they built up the necessary infrastructures – including high-tech facilities where the large volumes of source material could be processed into strong marketable products. Within two decades, the private sector had spent more than 15 billion euros alone on building sorting and recycling plants.

Ecology and the economy are closely connected: companies that use secondary raw materials can greatly reduce their material and energy costs.

2006: REMONDIS opens Europe's largest and most modern dismantling centre



2001

2001 | 'Abfallablagungsverordnung' (Ordinance on the Storage of Waste)
Defined sealing systems and monitoring technology at landfills

2001 | 'Batterieverordnung' (Battery Ordinance)
Extended product responsibility and take-back obligations to include batteries; superseded by the Battery Law in 2009

2001

January | February | March | April | May | June | July | August | September | October | November | December

Important contribution towards protecting the climate

Closing an ever increasing number of material life cycles conserves natural resources and also helps to prevent climate change: industrial businesses, which use secondary raw materials, reduce their energy consumption and cut CO₂ emissions. Thus, for example, 80 percent less energy is needed to produce copper from secondary materials than from using primary sources, such as ore and concentrates, and CO₂ emissions are also further reduced.

A milestone in the move to protect the climate was the introduction of an extensive ban on the use of landfills. It has been illegal to send untreated biodegradable waste to landfill in Germany since 01 June 2005. Back in 1993, the "TASi" (Technical Directive on the Recycling, Treatment and Disposal of Municipal Waste) had already set high standards for building and operating landfills and had pronounced that it should become illegal to take untreated waste to landfill from the middle of 2005 onwards. As a result of the Ordinance on the Storage of Waste ('Abfallablagerungsverordnung'), the provisions of the TASi were set out in an ordi-

nance in 2001 which came into effect immediately and was supplemented by landfill classification criteria for municipal waste that had been mechanically/biologically pre-treated. Further regulations were then laid down in the Landfill Ordinance ('Deponieverordnung') in 2002 and the Ordinance on the Recovery of Waste at Landfills ('Deponieverwertungsverordnung') in 2005.

Energy from waste

Landfills were an important component of the waste management structures for municipal waste at the time it became illegal to take untreated waste to landfill. Alternatives had to be set up within just a few years – parallel to building up recycling opportunities. Across the country, plants were being built to increase capacity in the areas of composting, mechanical-biological treatment and using waste to generate energy. Large investments were made in these infrastructures as well as in closing or upgrading several hundred municipal waste landfills. A total of approx. 20 billion euros was spent on achieving this. And once again it was primarily the private sector that did the groundwork and prepared the way. ▶

Each year, the branch cuts the volume of CO₂ equivalents by 18 million tonnes. That is equivalent to the exhaust fumes emitted by 20 percent of all cars registered in Germany.



◀ 2006: the biomass-fired power plant in Lünen is officially put into operation by, among others, Christa Thoben, former Minister for Economic Affairs in NRW



◀ 2007: REMONDIS board member, Egbert Tölle, former Federal Minister of the Environment, Sigmar Gabriel, and chairman of the supervisory board, Dr Hermann Niehues (from left to right) tour the REMONDIS Lippe Plant and view, among others, the plastics production facility

2002



2002 | 'Deponieverordnung' (Landfill Ordinance)

Stipulated requirements concerning the construction, structure, management, closure and post-closure care of landfills

2002

“The private sector waste management and recycling companies are producing more and more secondary raw materials. This trend shall continue and intensify over the coming years. Germany will become a country of raw materials.”

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



- ▶ Besides its activities in the water and environmental service sectors, REMONDIS increasingly extended its work in the area of energy production. Many promising potential sources were systematically analysed and developed. Power plants were built that produced electricity, steam and heat from waste and production opportunities were developed for alternative sources of energy such as substitute fuels made from waste. Besides building its own plants, the company also upgraded their customers’ facilities to make them more energy efficient – to using residual waste materials in industrial wastewater treatment to generate energy.

Pushing forward global activities

These initiatives proved to be successful: between 1990 and 2006, the German recycling sector cut CO₂ equivalents by around 56 million tonnes – making up just under a quarter of the country’s overall CO₂ reductions of 235 million tonnes. Protecting resources and the climate, however,

are global tasks that need to be tackled internationally. REMONDIS has been achieving this by increasing its international commitment. During this period, the company continuously extended its activities in Europe and Australia. At the same time, it entered new fields overseas, for example in China in 2004 and in India in 2009.

It makes sense to implement the standards achieved in Germany in other countries, too. In Europe alone, recyclable materials worth 5.25 billion euros are being lost each year. Not only considerable volumes of raw materials could be recovered if they were to be recycled but CO₂ emissions could be cut by a further 148 million tonnes. Furthermore, dumping untreated waste at landfills still plays an important role in many EU member states today. A Europe-wide landfill ban for such waste would mean a big step forward being taken in this area. Up to 110 million tonnes of CO₂ emissions could be avoided by such a move.



2008: the thermal waste treatment and recycling plant in Staßfurt is put into operation

2005

2005 | ‘Elektro- und Elektronikaltgerätesgesetz’ (ElektroG/WEEE Law)
Transposed EU directives concerning waste electrical & electronic equipment into national law

2005 | ‘Deponieverwertungsverordnung’ (Ordinance on the recovery of waste at landfills)
Set the standards for recycling waste as a substitute building material for landfills

2005

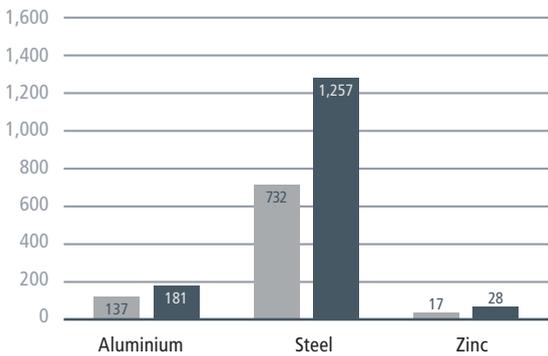


Amount of energy saved by using secondary raw materials

(Germany, savings in euros millions)



Source: Institute for Economic Research

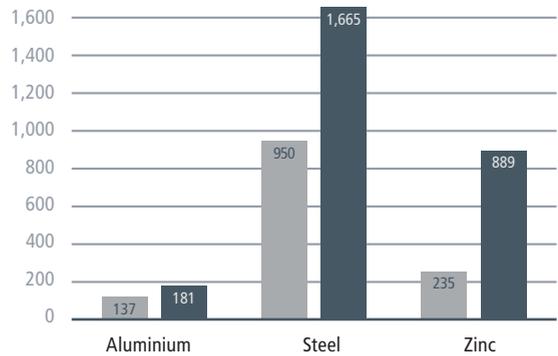


Amount of raw material imports saved by using secondary raw materials

(Germany, savings in euros millions)



Source: Institute for Economic Research



Demands continue to increase

Some raw materials will have been almost completely used up within the next few decades. Further efforts will have to be made, therefore, to ensure that strategically important materials remain available over the long term. We should also not become complacent as a result of the successes achieved in the area of climate protection. With these facts in mind, the recycling sector will become ever more important. More and more it will become a raw materials economy making an essential contribution towards ensuring supplies of materials remain available.

The new Recycling Law ('Kreislaufwirtschaftsgesetz'/KrWG) has set out the course that Germany will take over the next decade. The first draft of this law was presented in 2010; following a long debate, it was then passed in 2012. As far as the private sector is concerned, the law falls short of what could actually be achieved. Whilst the private sector is

looking to achieve recycling rates of 100 percent, the legislator has set these rates relatively low so that it can hardly be called ambitious. Moreover, it abstains from implementing a stringent waste hierarchy i.e. it does not fully take over the European regulations in the European Waste Directive. And by stipulating in law the obligation of private households to hand over their waste to their local authorities, it is also limiting fair competition and, as a result, quashing a proven instigator of progress.

Financial power, international alliances and global market activities are needed for the sector to become a raw materials economy. History has shown us that the performance of the private sector is an important driving force in tackling the problems of resource conservation and climate change. Individual solutions that end at regional borders can do little to counter these global tasks.

A survey carried out by the research institute Forsa has revealed that fifty percent of the people living in Germany believe that the country's supply of raw materials could be at risk in the future.



◀ 2009: Deputy Governor Ernest Gabmann with REMONDIS board member Egbert Tölle at the official opening of UFH-RE-cycling in Austria



◀ 2010: Opening of REMONDIS Aqua's new head office in Lünen

2009

2009 | New Landfill Ordinance

Summarises the provisions of landfill law; the existing ordinances ('Deponieverordnung', 'Abfallablagereverordnung' and 'Deponieverwertungsverordnung') and the administrative regulations ('TA Abfall', 'TA Siedlungsabfall', first general administrative regulation on groundwater protection) were codified and enacted as the new Landfill Ordinance

2012

2012 | 'Kreislaufwirtschaftsgesetz' (Recycling Law)

Superseded the Recycling Law of 1994 and aims to transpose the European Waste Directive into national law

... June | July | August | September | ... December

2009

... March | April | May | June ...

2012

Waste management partners in the south east of Poland



KROSNO MAKES USE OF REMONDIS' KNOW-HOW

Two are better than one – this is the opinion of the Polish city of Krosno, too, which has now begun a public private partnership with REMONDIS. In order to found the PPP company, REMONDIS purchased 51 percent of the municipal waste management business, KROeko; the remaining shares are owned by the municipal company, MPGK Krosno Sp. z o.o.



With this new joint venture, the REMONDIS Group is continuing on its successful course in this Central European country. Since entering the market in Poland exactly 20 years ago, over 40 business locations have been purchased and further developed to offer environmental services and water management tasks. Besides involving many large cities such as Warsaw, Lodz, Poznan and Szczecin, the company can also be found in numerous districts in rural regions.

A rich tradition and regional boom

Krosno, with its almost 50,000 local inhabitants, also lies in a region that is, for the most part, rural in nature. The roots of this city in the southern part of the Subcarpathian Voivodeship go all the way back to the Bronze Age. Later, the world's first ever oil "mine" was set up close to Krosno in the middle of the 19th century.

Over a period of 100 years, this city and its surrounding areas have developed into a centre of the oil industry. Today, drilling for oil and gas and refinery operations play a very important role in the region's economy. Other important industrial businesses, besides petrochemicals, include a large glassworks, which is well-known throughout the country, and production plants for automobile and airplane components. Krosno has good transport connections with its own regional airport which is currently being extended and modernised to satisfy demand. Furthermore, as a result of the influx of companies, an industrial area covering around 50 hectares has been established close to the airport for production, service and commercial firms.

Increase in waste management activities

As a result of deciding to set up the PPP company, Krosno has gained access to REMONDIS' many years of experience and extensive know-how. A further positive effect for the Polish city is that the revenue from the purchase of the KROeko shares can be used for investments that are urgently needed. These funds will improve the performance

of the joint venture and enable it to extend its range of waste management services.

At present, the company – with its 60 employees and 20+ vehicles – collects and disposes of waste from the households and commercial businesses in and around Krosno. Other tasks carried out by this waste management specialist include keeping the streets and paths clean throughout the year and clear of snow and ice in the winter as well as maintaining parks and other green areas.

One of the main goals of REMONDIS KROeko is to further develop its business on the local market and to extend its catchment area to include the planned newly structured waste management region. Furthermore, it aims to increase recycling rates by implementing measures to treat waste at the regional plant in Krosno. Moreover, the company wishes to extend its range of services and, in doing so, make use of offers from other companies within the REMONDIS Group. Examples here include the careful destruction of old files and data storage devices as well as the reliable disposal of hazardous and medical waste. For the City of Krosno, therefore, this close cooperation work with REMONDIS provides all the preconditions needed to set up a successful business model.

Side by side on the way to a modern recycling sector: Krosno and REMONDIS

Internationally, the REMONDIS Group has gathered experience from being part of over 100 PPP companies



In no other country outside Germany has REMONDIS got such an extensive network of businesses as in Poland

Sustainability thanks to recycling

REMONDIS AT THE IFAT ENTSORGA 2012



The world's most important environmental trade fair, the IFAT ENTSORGA in Munich, is once again opening its doors to visitors from 05 to 11 May 2012. Covering a record area of 215,000 square metres, it will be offering exhibitors from all over the world even more space to present their innovations and services in the areas of water, wastewater, waste management and raw materials. As in previous years, REMONDIS will be taking part in the event again this year presenting its range of services for a sustainable water and environmental service branch.

REMONDIS®

A look back at 2010 shows that the IFAT – after successfully merging with the ENTSORGA – has established itself as the world's leading fair for environmental technology. This was not only underlined by the percentage of international exhibitors which, compared to 2008, increased by

“The IFAT ENTSORGA provides ideal conditions for us to present our wide range of activities in the national and international water and environmental service sectors.”

Egbert Tölle, Board Member of REMONDIS AG & Co. KG

5% to a total of 37%. The number of international visitors also increased in 2010 in comparison with 2008 from 33% to 40%. Around 110,000 trade visitors travelled to the IFAT ENTSORGA 2010 from over 185 countries with the majority of visitors coming from – besides Germany – Austria, Italy, Switzerland, Spain, Poland, the Czech Republic, Denmark, the Russian Federation, the Netherlands and France. And this trend is expected to continue at this year's IFAT ENTSORGA.

The best conditions, therefore, for the REMONDIS Group to present its whole range of water and recycling products and services to both the national and international visitors. One of the main subjects of the trade fair is responsible recycling. The global consumption of raw materials is increasing rapidly due to technological, economic and demographic developments. For a long time now, the world's

population has been using more natural resources than the Earth can provide us with over the long term. Handling these valuable materials efficiently is one of the most urgent challenges we are faced with today. REMONDIS is facing up to this responsibility and is showing at the IFAT ENTSORGA how high quality secondary raw materials can be recovered from waste through systematic recycling and innovative services thus helping to prevent climate change and conserve natural resources on a long-term and sustainable basis. Based on a sustainable supply of raw materials, responsible recycling helps to create the framework conditions for a reduced use and fairer distribution of the natural resources still available.

Campaign with the Munich Trade Fair to collect mobile phones

And fully in keeping with a responsible recycling sector, a joint project is being run this year by the New Munich Trade Fair Centre and REMONDIS to collect old mobile phones which also involves a draw and iPhones as prizes. This collection campaign is being run throughout the whole of the exhibition with the containers set up at the East and West entrances and is targeted at the visitors to the IFAT ENTSORGA. The aim of the campaign is to raise awareness about the subjects of sustainability and environmental protection. People should be made more aware about which recyclable materials can be recovered from mobile phones through efficient and modern recycling processes and how, by doing so, a sustainable contribution can be made to-



No Gallium – No Satellites

From televisions to navigation systems: without raw materials, it would be impossible to use satellites to transmit data and frequencies. And so we recover resources and help to secure the future! More about this at our stand. IFAT ENTSORGA 2012 – Hall B1, Stand 241/338.



2012



2018



2024



2030?

wards conserving resources and preventing climate change. The proceeds generated from the raw materials recovered from the mobiles handed in at the IFAT ENTSORGA will be given to a charitable project.

REMONDIS to use open-air site for the first time

As in 2010, REMONDIS will be presenting its range of services in Hall B1 this year at stand 241/338 which will be covering 300m². A "dome" in the centre of the exhibition stand will provide a space for communication where guests from all over the world can talk to our expert employees and learn more about REMONDIS' latest offers.

At the same time, the "dome" is an eye-catching design element in the exhibition hall. This year, however, REMONDIS is not only using the exhibition hall but also the open-air site to present its core areas of expertise. In the outdoor area between halls A1/A2 and B1/B2, REMONDIS will be exhibiting its SafetyTruck, a special vehicle for collecting and transporting hazardous waste. Visitors to the exhibition will, therefore, be able to have a close-up view of this highly complex and sensitive waste management service and learn about the special features of handling hazardous waste.

Space for meetings and discussions will not only be available at the REMONDIS stand but also at the forums in halls A5 and C1. Besides holding special events on specific countries and subjects, these halls will also be used for podium discussions about important national and international top-

ics. Thus, for example, the Munich Trade Fair has organised special events about the countries, Russia, Turkey and the Africa Maghreb region, in cooperation with the BMU (Federal Ministry for the Environment, Nature Conservation and Nuclear Safety) and the German Water Partnership (GWP). The IFAT ENTSORGA partners will also be contributing towards the high quality programme of events discussing various special subjects. The BDE (Federal Association of the German Waste Management Industry) is, for example, organising podium discussions about EU regulations, the new recycling law, recyclables and recycling as well as biowaste.

The IFAT ENTSORGA partners, such as the BDE, will also be contributing towards the high quality programme of events discussing various special subjects.



Working together to increase recycling

REMONDIS BEGINS PILOT PROJECT TO INTRODUCE THE RECYCLING BIN INTO THE DISTRICT OF MEIßEN

REMONDIS®

Having passed the new Federal Recycling Law, two of the main projects of the German government for this year are to further develop the German Packaging Ordinance to achieve a higher collection rate of recyclables from households and to introduce the recycling bin. REMONDIS is already in the process of carrying out intensive preparation work for these new opportunities and has begun a pilot project in cooperation with the waste management association, Zweckverband Abfallwirtschaft Oberes Elbtal, in the district of Meißen. As part of this project the current collection system involving the so-called “yellow bags” for used sales packaging is to be replaced over the next twelve months with the recycling bin.

By introducing the recycling bin, waste packaging and so-called non-packaging made of similar materials can all be thrown away into the same bin.

At the moment, local inhabitants may throw away waste sales packaging made of plastic, metal and composite materials into the “yellow bags” or “yellow bins” so that it can be collected and sent for high quality materials recycling. Other types of waste made of the same materials, e.g. of plastic or metal, currently have to be thrown away into the residual waste bin with the result that these valuable secondary raw materials are being lost forever. The introduction of a uniform recycling bin – by 2015 at the latest – will mean that waste packaging and non-packaging made of similar materials such as plastic toys or metal kitchen appliances such as frying pans can all be thrown away into the same bin. This change – i.e. putting non-packaging of similar materials into a recycling bin – is expected to lead to an increase in separately collected volumes of waste of ca. 7kg per inhabitant per year which is the equivalent of an absolute annual increase in volume of ca. 570,000 tonnes.

It is likely that the appropriate law will be passed in Germany although as yet it is not possible to predict when exactly it will come into force. The branch and many experts, however, are asking the question whether it is really necessary to pass a special law for the collection of non-packaging of similar materials in a uniform recycling bin. It would be conceivable and – considering the manageable increase in volumes of materials – possibly more sensible to extend the existing Packaging Ordinance. This would simply mean extending the tried and tested licensing model of the so-called dual system to include the materials that up

ZWECKVERBAND ABFALLWIRTSCHAFT OBERES ELBTAL **REMONDIS®**

Die Wertstofftonne

für Verpackungen und ausgediente Produkte

Ja

Verpackungen + weitere Wertstoffe

Kunststoffe, z. B.

- Becher, z. B. von Margarine, Milchprodukten
- Einwickelfolien und Folien von - Verpackungen
- Tragetaschen, Beutel
- Flaschen, z. B. von Waschmittel und Getränken
- Schaumstoffe, z. B. von Obst- und Fleischbehältnissen
- CDs, DVDs
- Duschvorhänge, Folien
- Eimer, Schüsseln
- Gießkannen
- Kleiderbügel, Wäschekörbe
- Spielzeug
- Stifte
- Schnellhefter, Heftumschläge

Metalle, z. B.

- Alufolien, Aludeckel und Aluschalen
- Getränkedosen, Konservendosen
- Kronkorken, Schraubverschlüsse
- Besteck
- Eisenwaren
- Kerzenständer, Werkzeuge
- Töpfe, Schüsseln, Pfannen
- Rohre, Jalousien

Verbundstoffe, z. B.

- Getränke- und Milchkartons
- Tüten, z. B. von Kaffee, Kakao, Süßwaren
- Isolierfolien (unverschmutzt)
- Einlegesohlen

Nein

In die Wertstofftonne dürfen nicht:

- Altkleider
- Schuhe, Taschen
- Batterien
- Glas
- Holz
- Papier/Pappe
- Restabfälle, z. B. Windeln
- Bioabfälle

Nutzen Sie dafür bitte die Behälter für Restabfall, Papier, Glas sowie für Batterien und Altkleider, Schuhe, Taschen.

Haben Sie Fragen?
REMONDIS Elbe-Räder GmbH, Servicehotline 0180-2080208
0,06 €/Anruf aus dem dt. Festnetz, Mobilfunk max. 0,42 €/Min.

to now have not been collected. There is also still some uncertainty concerning the composition of the new material stream and about how the increase in volumes is to be handled.

Recycling bin also in the Rhein-Sieg district

The pilot project between REMONDIS and the Zweckverband Abfallwirtschaft Oberes Elbtal, which began in the cities of Großenhain and Radeburg on 01 February 2012, is already the second such project to introduce the recycling bin. Collection of non-packaging of similar materials in the recycling bin began on 01 January in the Rhein-Sieg district. To this effect, a defined amount of the material stream collected will be analysed in detail both in the middle of the project as well as just before the end of the project.

Scientific monitoring work will also be carried out during the sorting and recycling of the volumes of materials. By comparing the results of these analyses with the volumes being collected today, it should be possible to reach conclusions about the possible changes to the volumes and composition of the new material stream.

One decisive conclusion has already been reached today as a result of carrying out this pilot project: it will only be possible to introduce the recycling bin successfully across the whole of the country if the public sector waste management businesses and the private waste management companies work together fairly as partners. This is being shown very clearly by the projects in Meißen and the Rhein-Sieg district.



Out of the drawer, into the mobile phone recycling bin



REMONDIS' RECYCLING SYSTEM ENSURES RAW MATERIALS ARE RECOVERED

Do you own one or even several old mobile phones? If the answer is yes then we would like to congratulate you as you are a potential supplier of raw materials! The number of high-tech appliances in German households is growing all the time. Devices which can access the Internet, such as smartphones, are becoming ever more popular among consumers. But what happens to all the old mobiles? According to a recent survey carried out by the high-tech association, BITKOM, two thirds of the people living in Germany hang on to their old mobiles putting them in a drawer in their home. The number of old mobiles is currently estimated to be 83 million – a huge supply of raw materials that is just sitting around not being used. These old phones must first be collected before they can be professionally recycled. REMONDIS has developed a special recycling system precisely for this purpose: the 'handybox'. (Handy = German for mobile phone)



Since the 'ElektroG' (WEEE law) came into force in March 2006, it has been illegal to throw away old electrical and electronic appliances into the household waste bin. Collection of this equipment is carried out by municipal collection points where local inhabitants can hand in their old appliances free of charge. There has, however, been a reluctance to hand in old mobiles to these collection centres. According to the estimates, just one percent of all old mobiles are recycled. One of the main reasons for not handing these phones over is – besides the size of the appliances – the fear of the supposedly deleted data being misused. The 'handybox' mobile phone recycling bin aims, on the one hand, to recover these unused sources of raw materials from households so they can be sent for professional recycling. On the other hand, it also ensures that the hazardous materials contained in the mobiles are removed and disposed of in accordance with the law. By working together with its sister company, Rhenus Data Office, a specialist for destroying files and data storage devices, the system can guarantee that the storage media in the phones are completely destroyed.

The mobile phone recycling bin is already at various locations across Germany

Besides being placed in shops and companies, they can also be found at public buildings such as local council offices, schools and kindergartens. In order to make the best use of this collection system, the mobile phone recycling bin is not only for old mobiles but also for digital cameras, MP3 players, portable games consoles and external stor-

age media. Once the bin is full, it is transported to one of REMONDIS' dismantling centres where the appliances are processed and recycled in an environmentally friendly manner and in accordance with all regulations.

To achieve this, the mobiles undergo various dismantling stages during which they are freed of any hazardous materials and then cut up. The recovered materials are separated strictly according to type and then returned to the economic cycle as secondary raw materials.

The collection of old mobiles is also being promoted within the REMONDIS Group. Mobile phone recycling bins have been set up at a total of eight company locations where employees can throw away their own phones as well as those of their family, friends, neighbours or acquaintances. A lottery ticket is given each time a mobile is thrown away into the bin enabling the person to take part in a draw. Increasing public awareness about recovering valuable raw materials is vital for a country such as Germany which has so few natural resources of its own. For, the future demand for raw materials will only be able to be met if we handle the raw materials we have today in a responsible manner.



Water resources management

Clear water and clean energy for Oettinger



CONSTRUCTION AND OPERATION OF A WASTEWATER PRE-TREATMENT PLANT WITH AN ENERGY RECOVERY SYSTEM

REMONDIS Aqua has been awarded a contract by Oettinger Brewery to build and operate an anaerobic wastewater pre-treatment facility. This state-of-the-art facility will also be able to recover energy from the wastewater in the form of biogas.

The company, Oettinger Brewery, which is based in Oettingen, Bavaria, produces and sells a wide range of beer and non-alcoholic drinks. A new concept had to be drawn up recently for the treatment of the wastewater at its Mönchengladbach site as a result of the plant's continuous growth and increased production capacity. REMONDIS Aqua's sophisticated process for the anaerobic treatment of wastewater will be used there in the future to ensure that wastewater is treated in a resource-efficient way: the RE²ENERGY® process guarantees a high level of cleaning efficiency and, at the same time, makes the best possible use of the contents of the wastewater by recycling them and producing energy. The biogas, which is recovered during the cleaning process, is a "renewable energy" and is converted into electricity via a combined heat and power plant (CHP). The electrical energy generated here is then fed into the grid of the local energy supplier. All of the waste heat is used for the company's production processes. By doing this, Oettinger will be able to significantly reduce its carbon footprint.

"By recovering energy from the wastewater, the RE²ENERGY® process ensures that our wastewater treat-

ment is highly sustainable which is fully in keeping with the Oettinger Brewery's high expectations as far as quality and resource-efficiency in its production processes are concerned," explained REMONDIS sales manager, Gerhard Simon. This new project from the drinks industry further underlines the level of expertise and the extensive experience of REMONDIS Aqua in the food processing industry. The company has already successfully implemented its process to recover energy whilst treating wastewater: in 2010, for example, the company first built and then operated a facility for Valensina, which also produces high quality fruit juices and premium smoothies in Mönchengladbach, and in 2006 it built and then operated a facility for the WILD Group, which produces fructose, flavour extracts and concentrates in Valencia, a region famous for its orange groves. "This contract is a further step towards extending our market position as the leading supplier of innovative contracting models in the industrial water management sector with solutions for all branches which have to deal with wastewater," commented Gerhard Simon.

RE²ENERGY® – guarantees a high level of cleaning efficiency and makes the best possible use of the contents of the wastewater by recycling them and producing energy.

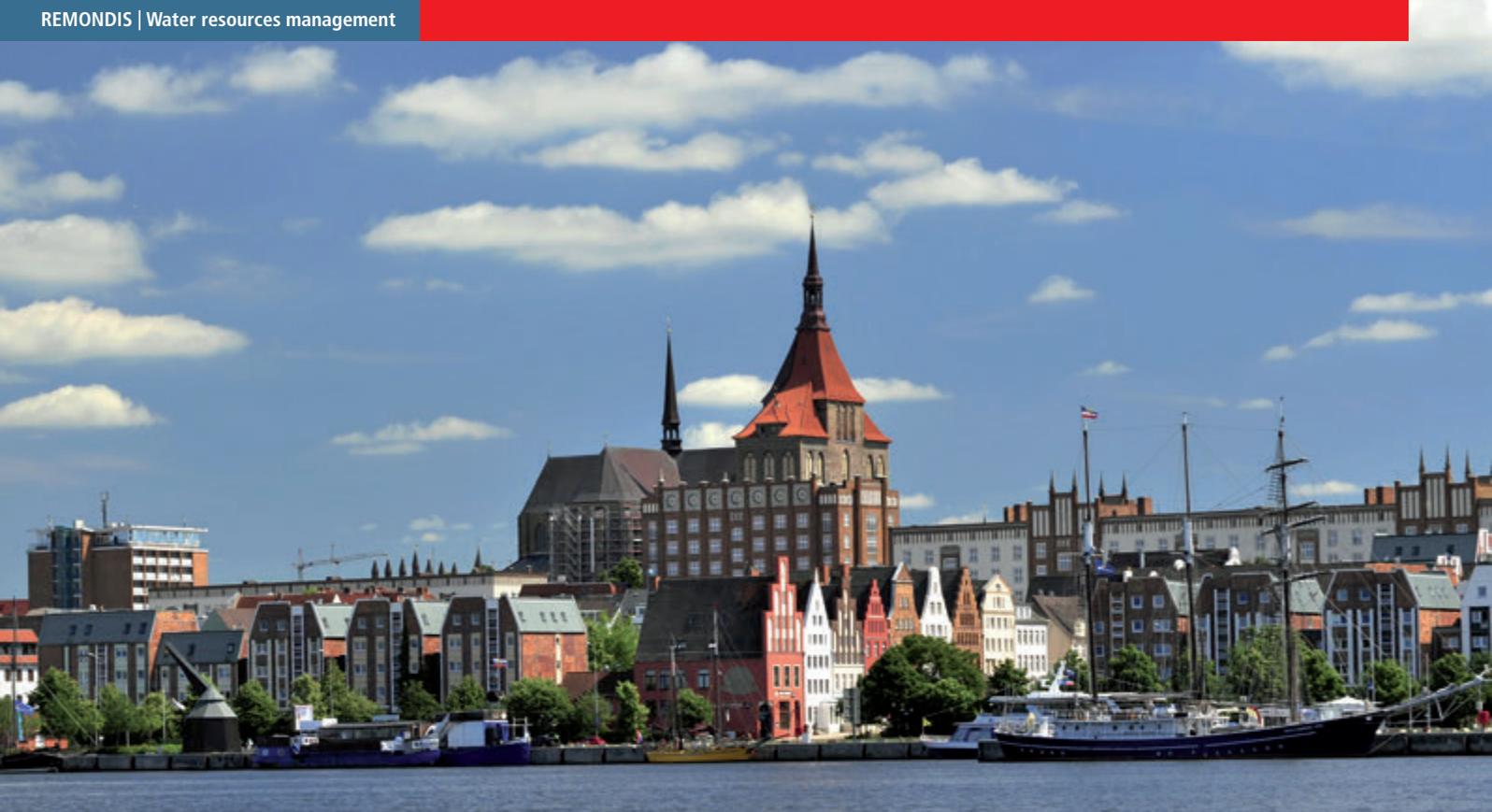
KED, the latest addition to REMONDIS Aqua, stands for project development, planning, building and financing – all from one company.

REMONDIS Aqua further extends its business in Germany

REMONDIS Aqua is continuing to grow its business in Germany. At the beginning of 2012, the company acquired a 50 percent share in KED from RWE Deutschland AG. REMONDIS Aqua is intending to further develop the company together with its co-partner, the Wegener Group.

KED is, among other things, a contractual partner of the district of Wedemark where it is responsible for managing the water for around 30,000 inhabitants in the Hannover region. Its range of services includes site analyses

and feasibility studies, managing projects and permits, technical planning and building facilities as well as operating (both from a technical and commercial point of view) and financing water management projects. As a result of this takeover of shares in the company, REMONDIS Aqua and its co-partner the Wegener Group have agreed to continue the many years of successful cooperation work between the district of Wedemark and KED as well as to develop further potential business opportunities in the areas of operating plants, maintenance work and engineering.



Water resources management

20 years of the Rostock Model

REMONDIS' SUBSIDIARY EURAWASSER IS THE LARGEST WATER SUPPLIER IN THE GERMAN STATE OF MECKLENBURG-VORPOMMERN



EURAWASSER has been working on behalf of local authorities and associations in the German state of Mecklenburg-Vorpommern as a private sector service provider since 1993. EURAWASSER's contractual partners are the municipal water and wastewater associations, Warnow-Wasser- und Abwasserverband (WWAV) and Wasserversorgungs- und Abwasserzweckverband Güstrow-Bützow-Sternberg (WAZ), as well as the public utility companies in Güstrow and Schwerin. A quarter of all inhabitants, a total of more than 400,000 people, get their drinking water from REMONDIS Aqua's recently acquired subsidiary making it the largest water supplier in this German state.



Gesine Strohmeier, managing director of EURAWASSER Nord

EURAWASSER is active in Rostock via its company, EURAWASSER Nord GmbH, the result of a merger between EURAWASSER GmbH Rostock and EURAWASSER Mecklenburg GmbH in 2003. The original contract was based on a public private partnership (PPP) with the City of Rostock, which brought into effect the first concession model for water and the first operator model for wastewater of this magnitude in Germany in 1993. The 20-year anniversary next year will highlight the sustainable success of the "Rostock Model", as this type of contract is now referred to,

where EURAWASSER brings in its know-how as a service provider and the local authorities continue unhindered to carry out their official tasks as they remain the owner of all the water facilities.

As a result of the merger of the companies into EURAWASSER Nord, administrative regions were set up in and around Rostock-Güstrow which are in charge of operating and maintaining the 63 waterworks and the approx. 2,400-kilometre drinking water pipe network as well as the 65 sewage treatment plants and the ca. 2,000-kilome-

tre sewer network. EURAWASSER Nord is responsible for ensuring there is a stable supply of drinking water of the correct quality and that wastewater is collected and treated without interruption. As a result of the contract, renovation work and investments amounting to ca. 400 million euros have been carried out to modernise and extend the drinking water and wastewater pipe networks and the processing facilities. The extensive reconstruction and extension work carried out on the Rostock waterworks – combined with the introduction of complex processing technology, such as the ozonation facility – has meant that, since 1995, a quality of drinking water has been achieved that had never been reached before in accordance with the strict standards of the 'TrinkwV' (German Drinking Water Ordinance). Surface water is taken directly from the River Warnow and processed into drinking water. In 2009, EURAWASSER Nord was awarded the accreditation DIN EN ISO 22.000 – the first ever water supplier in Germany to receive this.

State-of-the-art technology for wastewater treatment

The centrepiece of the investment was the modernisation and extension work carried out on the central sewage treatment plant in Rostock in 1994/1995. 85 million euros was spent on extending the 1st and 2nd biological treatment stage as well as on building a complex sewage sludge treatment plant. Using state-of-the-art technology such as the biological upflow filtration process BIOFOR (BIOlogical Fixed film Oxygen Reactor), a stable and highly efficient treatment process has been achieved with excellent discharge values. As a result of putting the central sewage treatment plant into operation, Rostock has been removed from HELCOM's list of "Hot Spots". HELCOM is the international commission set up in 1974 to protect the Baltic Sea.

Investing in research and technology

Special mention should be made of the cooperation work carried out between EURAWASSER Nord and the Institute for Environmental Engineering at the University of Rostock in the area of research and development which began back in 1994. What began as cooperation work to fulfil an of-



EURAWASSER Nord's management team together with agents from DEKRA

icial task – the scientific monitoring of the activities at the central sewage treatment plant in Rostock – has developed into something extremely successful. So far EURAWASSER has invested over one million euros in research work and this has proven to be profitable: numerous research results from the pilot sewage treatment plant have been put into practice that have led to reduced electricity consumption and a more efficient use of materials at the central sewage treatment plant. Focus is being put on further optimising energy consumption to counter rising energy costs and to reduce CO₂ emissions to help prevent climate change. By building its own combined heat and power plant (CHP) in 2009, EURAWASSER Nord now produces approx. 65 percent of the central sewage treatment plant's electricity requirements itself helping to reduce its dependency on the electricity market. Furthermore, practically all of the sewage treatment plant's heat requirements are covered by the CHP. The close cooperation work carried out with the university will be further extended over the coming years, for example with an endowed professorship for water management which EURAWASSER Nord initiated at the University of Rostock in 2011. Besides being responsible for ensuring operations and water supply run smoothly, the company is also involved in further extending customer relationships in the region. A customer service centre was set up in Rostock which handles around 80,000 customer leads a year in a competent and service-oriented manner. EURAWASSER Nord currently employs around 400 people, 24 of whom are apprentices. EURAWASSER Nord is, therefore, able to rely on a wide range of highly qualified specialists for its water supply and wastewater treatment tasks in the Rostock-Güstrow area.

Numerous research results have been put into practice and today contribute towards lowering energy consumption and increasing efficiency.



Sewage treatment plant, waterworks

Military contamination

A dangerous legacy in the "Gartenreich"

REMONDIS PROTERRA REMOVES DAMAGE CAUSED BY ARMS PRODUCTION FACILITY

The small town of Oranienbaum with its parks and castles from the 17th and 18th centuries is part of the so-called "Dessau-Wörlitz Gartenreich". The past, however, had also left some traces that were not so welcome: ammunition involving chemical agents used to be produced in the woodland close by. The contaminated weapons site had been causing worry for decades. REMONDIS ProTerra has now cleared up the site and mastered a project that was truly extraordinary.

REMONDIS®

REMEX

During the project, 73,000 tonnes of contaminated soil and construction waste was removed and dealt with as well as 1,200 tonnes of decontamination sludge and the many containers and barrels and their contents.

An army munitions factory with facilities both above and below ground was set up close to Oranienbaum in the 30s. Large volumes of chemical warfare agents were stored here in tanks, homogenised in a mixing facility and then filled into grenades at the neighbouring filling plant. The Soviet Army took over this bunker facility at the end of the war. It was then used as a central handling facility for weapons found elsewhere. Over the years, several attempts were made to clean up the contaminated site. Attempts, however, to get rid of the site using dynamite and destroy the ammunition directly in the woods and fields resulted in just one thing: further contamination of the area. The efforts of a special squad to empty the grenades and incinerate them in a facility set up on the site proved to be just as unsuccessful.

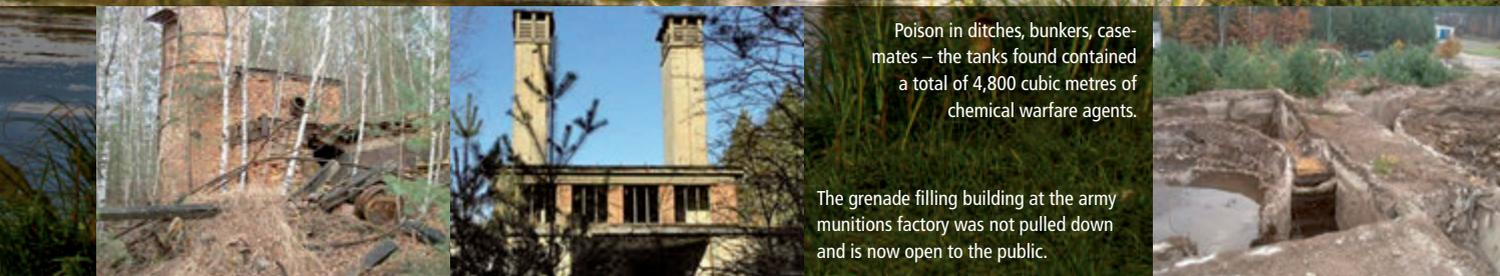
2002 to 2005: risk assessment and initial remediation activities

This contaminated site was a constant source of worry for those living in the area. And when breaks appeared in the dams in 2002 and it was discovered that these were connected to the site, one thing became clear: something had to be done. REMONDIS ProTerra, a company belonging to the REMEX Group and a specialist for complex remediation

projects, was commissioned to investigate, assess and take samples of the sludge which was presumed to be in the ammunition depot's cellar. An analysis of these samples revealed that some of the substances were still in their original state. These presented some great challenges as far as the remediation measures were concerned. Disposing of the material was also a challenge as treatment facilities are generally not equipped to accept such materials. In 2004, following extensive preliminary tests, the sludge, which was contaminated with arsenic compounds and other residual warfare agents, was conditioned, stabilised and then placed under an activated carbon layer in special containers in an underground hazardous waste storage facility.

2005 to 2007: removal of contaminants from the centre of the polluted area

Exploratory tests were carried out to prepare for the systematic cleaning up of other dangerous areas. Bit by bit, REMONDIS ProTerra dismantled the pumping and mixing equipment, took apart the weapons storage area built similar to a bunker and removed any deposits. By carrying out research work, it was possible to locate the highly contaminated pipe between the storage area and the filling plant.



Poison in ditches, bunkers, case-mates – the tanks found contained a total of 4,800 cubic metres of chemical warfare agents.

The grenade filling building at the army munitions factory was not pulled down and is now open to the public.

This, too, was emptied and dismantled. Once this had been completed, remediation work was carried out on the unsaturated soil all the way down to groundwater level. A water treatment facility was then set up to remove the organic arsenic contaminants from the groundwater – a task which took two years. From 2006 onwards, REMONDIS ProTerra worked on a follow-up project recovering poisonous sludge from the decommissioning zones and seepage trenches and managing the disposal process of this material. Furthermore, piles of contaminated construction waste were removed from the area – in the 90s, the leftover pieces of the tanks used to store the warfare agents had been simply dumped in the wood without any form of protection.

2007 to 2011: recovering the arsenic sludge and cleaning the ground

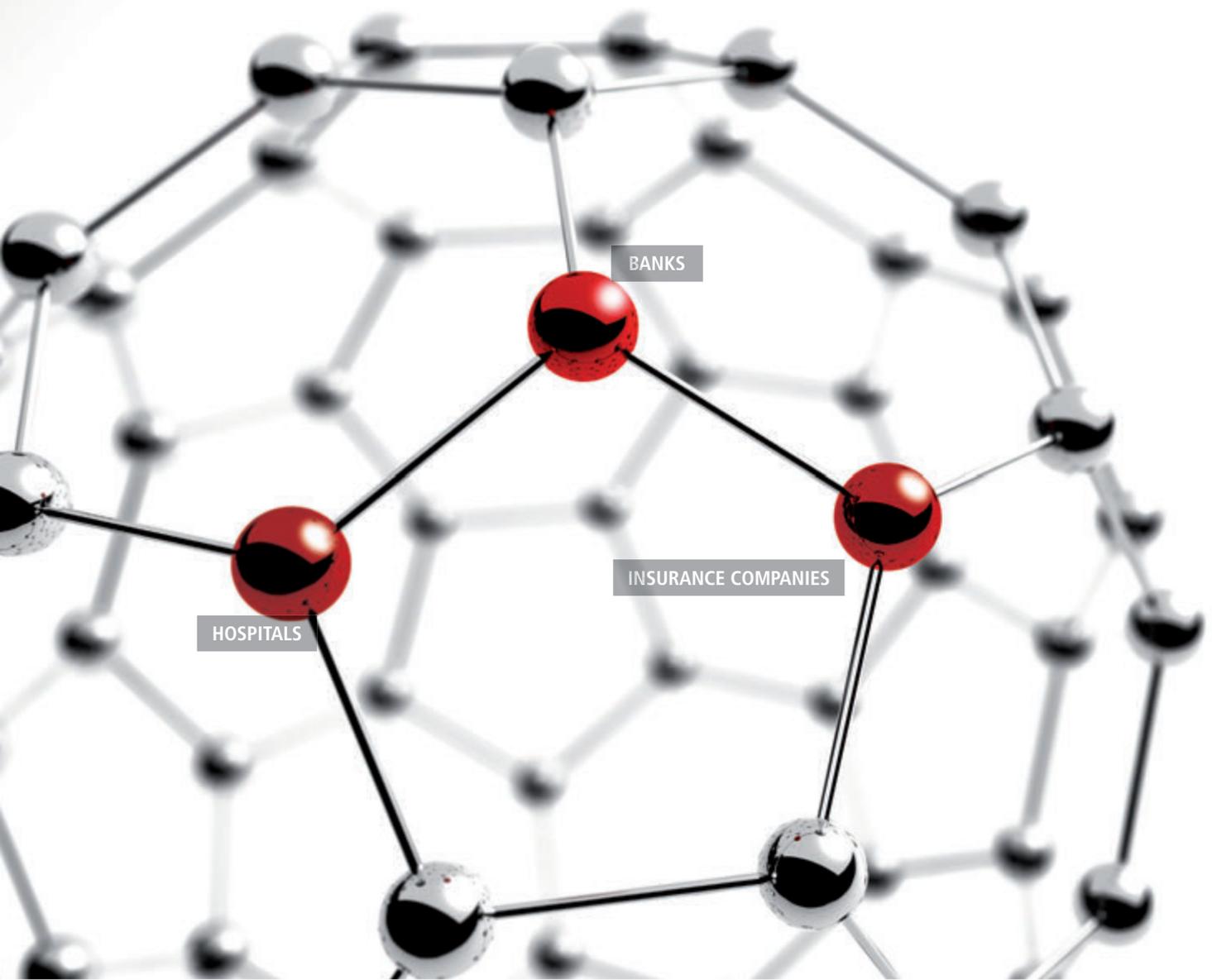
From the middle of 2007 to the middle of 2008, the work focused on dismantling the buildings and technical equipment of the wastewater treatment facility that had belonged to the filling plant. This included cleaning up the ground of the contaminated areas which also contained several decontamination trenches. These trenches were found to have sludge containing arsenic in them (up to 100g/kg). REMONDIS ProTerra developed special processes

to ensure that this residue could be removed and handled safely. Moreover, exploratory shafts had been sunk into the ground which revealed the presence of yet more trenches. The remediation project also included removing the facility which had been used to incinerate the weapons and which had been partially blown up in the 60s. The leftover rubble and fragments were removed – as well as the contaminated soil and the containers and barrels found on the site.

Ten years were needed to complete this complex remediation project. And it was well worth the effort: the local inhabitants and visitors to the Gartenreich region can feel safe now. At the same time, conditions there are such that more companies can now move to the local industrial estate. The only sign of the old site is, therefore, the striking grenade filling building which has been returned to its original form.

The remediation work was financed by LAF Saxony-Anhalt, the state government office responsible for handling contaminated sites.

“The services we provided led to us being recommended for other projects involving military sites. As a result, we have been able to carry out several other similar such projects.” Dr Hans-Jörg Täglich, authorised signatory and head of the REMONDIS ProTerra branch in Leipzig responsible for the project



Transport and logistics

Rhenus grows business with high-tech logistics

TAKEOVER OF WINCANTON'S MAINLAND EUROPEAN ACTIVITIES



The Rhenus Group, a sister company of REMONDIS, has purchased the German and French activities of the British logistics firm, Wincanton. Together these new divisions have 3,000 employees working at 68 locations and an annual turnover of approx. 550 million euros. One of the main areas of business of this recently acquired service portfolio is high-tech logistics.

Thanks to this takeover, Rhenus has strengthened its position within Europe as an innovative provider of a full range of logistics services. Klemens Rethmann, Board Chairman of Rhenus, commented, "This acquisition fits in perfectly with our growth strategy. Together with our new employees, we will further develop these new company divisions under the Rhenus flag." The technical distribution and installation services previously run by Wincanton are to be continued as an independent, specialist company unit. This company division has been operating under the name Rhenus Midi Data GmbH since the beginning of the year. The company, which has its own distribution network for complex technical products, has been active in the area of high-tech logistics for over 40 years. It is the market leader in its field and is today a part of Rhenus' contract logistics division.

Leading specialist for Europe-wide logistics services

Rhenus Midi Data focuses on technical distribution and installation services. The company's main area of business here is installing technical products and ensuring they are ready for immediate use. The clients that primarily use such high-tech logistics are banks, insurance companies and hospitals. The company's strengths lie in the exact planning processes it uses and its Europe-wide network ensuring it can distribute the high-tech products within the schedule agreed on. Using these strengths as its basis, the firm develops bespoke technical transport and logistics solutions which it draws up in close cooperation with its customers.

The Rhenus Group

The Rhenus Group is a global logistics company with over 18,000 employees at around 300 locations and an annual turnover of more than 3 billion euros. Specialising in the management of complex supply chains and innovative value-added services, the Group has four business divisions: contract logistics, freight logistics (worldwide transport), port logistics (logistics involving bulk goods) and public transport. As a result of the takeover of Wincanton, two companies have got together in the Rhenus Group that are considered to be pioneers in the area of inland shipping in Europe: Rhenus and Rhenania. Rhenania, which was founded in Mannheim in 1908, belonged to the British P&O Group from 1989 onwards. In 2003, Wincanton took over the shares of the P&O Group and continued to run the port and shipping activities under the name Rhenania Intermodal.

"As a result of acquiring the European activities of the Wincanton Group, we have created a broader base for ourselves both regionally and in a specific product market and have been able to expand our existing business."

Dr Stephan Peters, Board Member of Rhenus AG & Co. KG

Focus on the environment

The chains of transport, in which different transport carriers are linked together, are exemplary for the full-service solutions offered by Rhenus. Its "Green Logistics" concept ensures that emphasis is put on the transport not only being economical but also environmentally friendly. Whilst lorries



are still the main type of transport currently being used, an increasing number of alternative transport solutions are being developed involving railways and waterways. Thus, for example, pressure could be taken off the roads by transporting containers on the Rhine.

Added-value services

As part of its logistics solutions, Rhenus Midi Data also offers comprehensive technical added-value services. These comprise services such as setting up and installing the high-tech products. Examples here are medical technology equipment as well as the majority of cash dispensers in Germany for which the company is responsible. Its wide range of services is rounded off with its systematic user training courses for these complex pieces of equipment.

Rhenus Midi Data offers banks, insurance companies and hospitals additional technical services for their sophisticated products.

Clean mobility

HEIDE REFINERY KEEPS THE NORTH MOBILE AND RECYCLES WITH REMONDIS' HELP



The economy would come to a standstill without mineral oil. And it is, above all, the Heide Refinery that ensures this does not happen in north Germany. The site of the refinery in the district of Dithmarschen has a history stretching back over 150 years and is located where oil sand was once discovered. Today this state-of-the-art plant produces a range of fuels such as diesel and kerosene as well as other raw materials based on crude oil for manufacturing cosmetics, washing detergents, food packaging, insulation and cables. The quality of the products and the environmental impact of the whole of the production process play a decisive role here. REMONDIS is making an important contribution in the area of sustainability.



(from left to right) Thomas Gerber, managing director of the Heide Refinery, René Jurock, manager for the north region at REMONDIS Industrie Service, and Andreas Lange, branch manager of REMONDIS' branch in Lübeck, are the architects of this long-term waste management partnership

With 517 employees, 39 apprentices and a large number of partner firms, the Heide Refinery is one of the most important employers in the district of Dithmarschen. The company supplies, among others, Hamburg Airport with high quality kerosene and – with a processing capacity of 4.5 million tonnes a year of gasoline, diesel fuel and heating oil – it ensures that there is both mobility and energy on the streets and in the towns throughout the whole of the north German region.

The raw product it processes primarily comes from the North Sea so is effectively extracted "right on its doorstep". Looking simply at the figures, the Heide Refinery is capable of covering all requirements of the German state of Schleswig Holstein as far as mineral oil products are concerned. In the computer-controlled facilities, crude oil is processed into many different kinds of high quality mineral oil products. And a producer of fuels also needs its own energy. This energy is generated by the refinery's own gas and steam turbine power plant with optimised combined heat and power on the site. Excess electricity is fed into the national grid. The plant's water consumption is minimised by various technical measures such as a multi-stage wastewater treatment facility and ensuring the water is recycled and reused as much as possible.

Speaking of recycling: one of the company's most important policies is to protect the environment. Today, the Heide Refinery is one of the most modern refineries in Germany. Accordingly extensive measures are being used there to ensure the water, ground and air are kept clean. The integrated environmental management system also involves working together with REMONDIS as the company's partner for managing all types of waste generated at the plant. To this ef-

"It is our task to meet the ever increasing requirements concerning the quality and environmental friendliness of our products. We want to achieve this in the area of waste avoidance and recycling as well. REMONDIS is helping us to do this." Thomas Gerber, managing director of the Heide Refinery



REMONDIS is the company's partner for managing all types of waste generated at the plant.

fact, REMONDIS Industrie Service GmbH & Co. KG has set up its own business unit on the site where it is responsible for collecting, transporting and recycling residual waste, waste paper, biowaste and waste containing oil. Besides handling the classic categories of waste, its work also includes emptying two collection tanks for used lubricating oil using a special suction vehicle. All waste is separated according to type in the different containers set up for this purpose and then taken to the appropriate recycling facilities. REMONDIS uses its own software tool REGISTA to draw up all documents using the electronic waste management certificate system as well as to create the electronic consignment notes and handover certificates. As a result, the classification, origin, volume and whereabouts of the different materials and details about the recycling system used for them is documented and can be checked at any time.

René Jurock, manager for the north region at REMONDIS Industrie Service, summarised the situation saying: "In all of its production areas, the Heide Refinery works according to the principle, 'Avoidance of waste before recycling before disposal'. Being its partner for all waste management issues, REMONDIS ensures that all waste generated at the plant is recycled in the most sustainable way possible."

One of the company's most important policies is to protect the environment.

Thomas Gerber, managing director of the Heide Refinery, is looking forward to the long-term cooperation work: "It is our task to meet the ever increasing requirements concerning the quality and environmental friendliness of our products. We want to achieve this in the area of waste avoidance and recycling as well. REMONDIS is helping us to do this."

Heide Refinery



517 employees

39 apprentices

Processing capacity: 4.5 million tonnes per year

Crude oil supplied primarily from North Sea sources via the Brunsbüttel-Hemmingstedt pipeline (32km)

Tank storage capacity: 1,010,000m³

Size of the refinery grounds: 146ha

Systematically extending services

UCL NOW ALSO OFFERS SERVICES IN THE AREA OF AIR ANALYSIS WORK



For over 70 years now, UCL has been highly regarded for its knowledge and know-how in the area of chemical analytical work. By taking over two companies, this REMONDIS subsidiary has succeeded once again in considerably extending its range of services. Its classic chemical analysis business has, in particular, been supplemented with technology for measuring air enabling it, for example, to take samples and draw up expert reports.



Last year, UCL purchased UTM, a firm of engineers for environmental technology and environmental management based in Münster, and eretecUA, an institute for environmental measuring technology and analyses located in Gummersbach. Both companies have over twenty years experience and so have extensive know-how of their field of business. As a result of these takeovers, UCL has succeeded in extending its range of services – in particular air monitoring work on behalf of industrial and commercial businesses.

as well as to provide proof that these do not exceed the legal limits. Having the official accreditations to carry out such measurement work, UCL offers the required tests and draws up the corresponding reports. Besides carrying out analyses at regular intervals or on an ongoing basis, UCL also offers many other services for increasing safety in the workplace. Such work ranges from developing concepts to reduce emissions, to assessing input materials and products, to offering advice on general aspects of environmental protection and work safety.



Extensive expertise and competent methods:
UCL provides top quality analyses and material evaluation work.

UCL Umwelt Control Labor GmbH has been one of the leading testing laboratories in Germany for many years now.

Measuring hazardous substances in working areas
It is sometimes the case that the air at workplaces in some commercial and industrial businesses contains hazardous substances. For this reason, the Federal Ordinance on Hazardous Substances ('GefStoffV') makes it obligatory for employers to measure concentrations of hazardous substances

Checking air conditioning equipment, filters and extraction systems
Not only the discharge of hazardous substances or of biological working materials is an important variable for the quality of the air in workspaces. Other activities are growing in importance as well such as carrying out checks on air extraction systems and filters or measuring the efficiency of air conditioning equipment and ensuring it is hygienic. Using high quality measuring technology and its many years of experience, UCL skilfully carries out the necessary tests.

Measuring emissions
When it comes to measuring emissions, UCL also has all the necessary accreditations and notifications. These measurements are carried out regularly in accordance with the Federal Emissions Control Act. Many companies, however, also have such tests done on a voluntary basis in order to monitor guarantee conditions or to further the quality of their processes and products. Moreover, UCL also measures air

Knowing what the contents are. UCL Umwelt Control Labor has been one of the leading testing laboratories providing chemical analysis work for more than 70 years now.



pollution levels as part of official approval procedures. Within the framework of such measurement work, the company also carries out system performance checks and calibration work on measuring equipment that is in permanent use on behalf of their customers if such services are needed.

Accompanying dismantling & remediation activities and monitoring landfills

UCL also provides extensive support for those involved in dismantling industrial plants. By carrying out measuring work, the company is able to monitor underground, demolition and remediation measures. This includes measuring concentrations of hazardous substances both continuously and intermittently, taking samples during the construction work as well as recording meteorological data to assess the emission situation. A further field of activity is measuring landfill gas. The laboratory, which has the required accreditations for this work, carries out measurements in the gas collection systems as well as measuring gas migration in accordance with the relevant standard values.

“Highest levels of precision and exact results are expected from analytical services. And it for this reason that we have been working together with UCL for so many years now – we can always rely on their expertise and know-how.”

Heinz Michael Erken, RWE Power AG

Indoor air quality and hazardous building materials

Measurement activities at workplaces often also involve taking measurements and carrying out evaluations as part of the Federal Ordinance on Building Materials, in particular, regarding exposure through inhalation. When it comes to checking hazardous building materials, priority is also put on creating a healthy working or living environment. As part of this work, workplaces – as well as schools, kindergartens and living spaces – are checked with respect to hazardous building materials such as asbestos, PCB and formaldehyde. Here, UCL measures the values in the air and analyses samples of the materials. Furthermore, it also carries out biological tests on buildings for example to check for mould infestations.

The accreditations for the Federal Ordinance on Hazardous Substances and the Federal Emissions Control Act are proof of the expertise of the company and the quality of its work.

Temporary scaffolding replaces outer wall

XERVON ENSURES EVERYTHING IS FIRMLY FIXED AT RHEINPOWER

XERVON®

Being a service provider for all aspects of scaffolding, XERVON has been developing and building all the different kinds of scaffolding needed for the large-scale "RheinPower" modernisation project at Shell's refinery in Wesseling. From simple facade scaffolding, to complex suspended constructions, to 30-metre-high temporary protective dust-proof walls – this construction site has been making use of everything that scaffolding has to offer.

XERVON was given an award by the Shell management team for implementing the project over a period of two years without a single accident.

With its large-scale "RheinPower" project, Shell AG is investing heavily in updating its power plant at its Rheinland Refinery in Wesseling. This industrial power plant produces process steam for the refinery operations and also covers a portion of its energy requirements. Building work has been going on at the power plant since 2009 both to modernise it as well as to construct some new plant facilities in order to fulfil the stricter requirements of the 13th Federal Emissions Control Act and to achieve values that are way below the legal ceiling limits. Being a service provider building all types of scaffolding, XERVON has been closely involved in the project since the very beginning and, after two years, was even given an award by the Shell management team for implementing the project without a single accident.

Protection for the interior walls

The latest highlight for the scaffolding team headed by XERVON project manager Günter Brücher has been to develop and install a temporary protective construction to protect the two 30 metre high, right-angled walls (37.50 and 17.50 metres long) of the emergency equipment storage area against wind damage. If this protective construction were not to be installed then these two walls would be exposed to the forces of the wind for two years as the outer walls and the roof of this part of the building have to be knocked down. Building measures that need to be carried out to make room for a new boiler and to enable the emergency equipment storage area to be used which up to now has remained empty.

Using scaffolding covered in tarpaulin would not be able to provide long-term protection for the two brick walls (12.50 cm thick) which themselves are far too small to act as outer walls. Project manager, Günter Brücher, therefore, suggested the professional solution of creating a temporary panel wall (Layher Protect System) held up by a modular scaffolding system. Günter Brücher commented on the

special challenges of this project: "Our original solution had been to place single-bay facade scaffolding covered with special so-called wall cassettes in front of the interior wall. A multi-bay support structure placed behind the wall would then have carried the load. However, it then became clear that the floor under the facade scaffolding would also have to be demolished. And so we had to ensure the scaffolding did not touch the floor by turning into a hanging structure." True to his motto "Everything is possible!", the XERVON scaffolding specialist, Günter Brücher, incorporated this additional requirement into his scaffolding design and had the structural engineer, Thomas Strauch, check and confirm the calculations.

Bespoke solution with a system

The result is a 16,000 cubic metre scaffolding structure which has been set up in front of the walls that need to be protected. This structure is up to 30 metres high and is covered by the Layher Protect System's cassettes which provide protection against both wind and dust. One particularly clever feature: the panel wall (1,800 square metres), which starts approx. 2.5 metres above the ground, is suspended and attached to a support scaffolding structure placed on the ground behind the walls via bar joists which have been pierced through the wall surface at five different levels. This means that the interior walls do not need to bear any loads at all.

Engineer, Thomas Strauch, (from the Pulheim-based firm of engineers, Pesch Strauch Roth) explained: "A wind load of 100 kg/m² has been estimated for the surface area of this structure. This amounts to a total of 50 tonnes along the axis of the long wall." To ensure that the scaffolding can transfer such a huge load, five scaffolding fields have been set up shaped like a staircase (max. 15 platforms) and anchored into the ground to stabilise the structure. Thomas Strauch commented on the strengths of this bespoke solu-

tion: "Whilst it is very unusual to substitute the outer wall of an industrial hall with a wall of scaffolding, there are several advantages in this case here. Using a modular scaffolding structure means there is flexibility as far as its geometrical shape is concerned. Furthermore, it can be installed quickly – an important time-saving feature for the owner of the plant. We have a stable and safe construction here that can carry a high load and ultimately – by using the "Protect System" – it is a very attractive solution." XERVON's team that put up the scaffolding, which comprised on average eight people, finished erecting the special construction within six weeks. Günter Brücher said: "Thanks to the "Protect System", we have been able to set up a safe, professional solution that is perfectly matched to the modular scaffolding used by us (also from Layher)." The individual wall cassettes – aluminium frames with an all-round rubber seal and filled with galvanised steel sheets – have mounting holders enabling them to be attached to the scaffolding. Brücher explained: "It is a push-fit system. One holder connects two of the one metre high wall cassettes with the rubber seals pressed tightly together." Furthermore, the panel wall can be extended without any problem: this protective construction is currently 1,800 square metres in size and it will be extended by a further 400 square metres once a coal bunker, which is currently in the way, has been

removed. Moreover, the wall will be extended down to the floor as soon as the new cellar roof has been built. Shell's management team in charge of the construction work was very happy with Günter Brücher's bespoke solution. "Top priority is given to safety at our company. We are looking for professional solutions that ensure each and every person working on the project gets home safely at the end of their working day," said a member of construction site management team. And so far they have proven to be very successful in this matter: 1.5 million working hours have been spent on the project so far and not a single accident has had to be reported by Shell's project management team (as of June 2011).

1.5 million working hours have been spent on the project in XERVON's area of responsibility so far and not a single accident has had to be reported by Shell's project management team.

Safety was also high on the list during the approval process of the protective scaffolding wall: the structure was set up in accordance with the structural engineer's plans who was on site to approve and record the results. Following this, the Shell project management then had the whole construction checked again by another structural engineer. To date, this temporary protective wall has fulfilled all expectations. It has kept the future boiler house dust free during the demolition work carried out so far. And, once the demolition work has been completed, the building work can begin on the new boiler – well protected behind the panel wall.



16,000 cubic metres of modular scaffolding support the 1,800 square metre panel wall – without the interior wall having to bear any of the load.

Environmental services

Recycling with a vision

INVESTMENT IN A NEW FACILITY IN HAMBURG GIVES TSR A BIG ADVANTAGE

Accelerated expansion abroad, an intensified penetration of the domestic market: the TSR Group is continuing to consistently implement its growth strategy. This leading European metal recycler is now extending its capacities in Hamburg to include a new high-tech shredder – with the best possible connections to the port there. The strengths of plant technology and infrastructure complement each other here very well indeed.



Using scrap steel as a secondary raw material not only helps to conserve primary resources. Less energy is needed to process it than is needed to process iron ore.

Being one of the companies to push forward innovations to close the life cycles of metal products, the TSR Group has always looked to achieve the greatest possible levels of efficiency. And this Bottrop-based company is not prepared to compromise either when it comes to selecting business locations and pieces of equipment. When looking for a location for a shredder facility, therefore, it opted for a 30,000 square metre site in Hamburg-Harburg with direct connections to the port. This area is on the grounds owned by the logistics business Rhenus, a sister company of REMONDIS. The advantages: easy to reach, short distances and the best possible access to Rhenus' logistics network.

Shorter distances for the shredded metals

TSR is currently setting up the new shredder facility on the rented land. With a power output of 2,000 horsepower, this piece of machinery shall be used, in the future, to shred end-of-life machines such as old cars, household equipment and bicycles: 16 rotating hammers tear the parts into pieces over an anvil-shaped chopping edge to create the raw product for sustainable output. For, once the parts have been separated, the individual recyclables – such as copper, aluminium and alloyed metals – can be returned to the economic cycle. This high quality accredited scrap stands out thanks to its high levels of density, purity and quality of conditioning making it the best possible kind of secondary raw material for industrial businesses.

TSR expects to have the shredder up and running before the end of the second quarter of 2012. To begin with, 35 employees will be needed to operate this facility. But this figure is likely to rise as this REMONDIS subsidiary is expecting a positive development as regards the use of its capacity. The site offers great advantages thanks to its

central position with direct connections to the port and railway system and the fact it is close to several motorways. Moreover, the loading cranes provided by Rhenus mean that seagoing vessels that can hold up to 40,000 tonnes of scrap steel can be loaded without any problems. All this clearly lends weight to TSR's plans to considerably increase the volumes of scrap steel it exports in the future.

A strong sustainable position both at home and abroad

The new volumes of shredded scrap in Hamburg-Harburg will not only strengthen TSR's export activities but also its market position in the north of Germany as it is a sensible addition to its current range of products there. Whilst this recycling company has in the past looked to have a strong presence in Hamburg, it had concentrated on non-ferrous metals and processing scrap iron using shears. It will now be rounding off its regional range of products by adding high quality shredded scrap with an iron content of at least 92 percent.

TSR also believes there are good prospects to extend its market share: the amount of land it is renting from Rhenus, therefore, is to be gradually extended to cover up to 50,000 square metres by 2015. By doing so, TSR is ensuring it is ready for the expected growth in demand for raw materials and preparing itself for the further momentum towards metal recycling created by the European Union. The EU Commission is looking to move much closer to achieving its vision of having all resources handled in a sustainable way by 2050 – and is pointing out examples of maximum efficiency that already exist on the market.

120 years' experience of the European steel industry means that TSR is a confident service provider and a reliable supplier of raw materials.

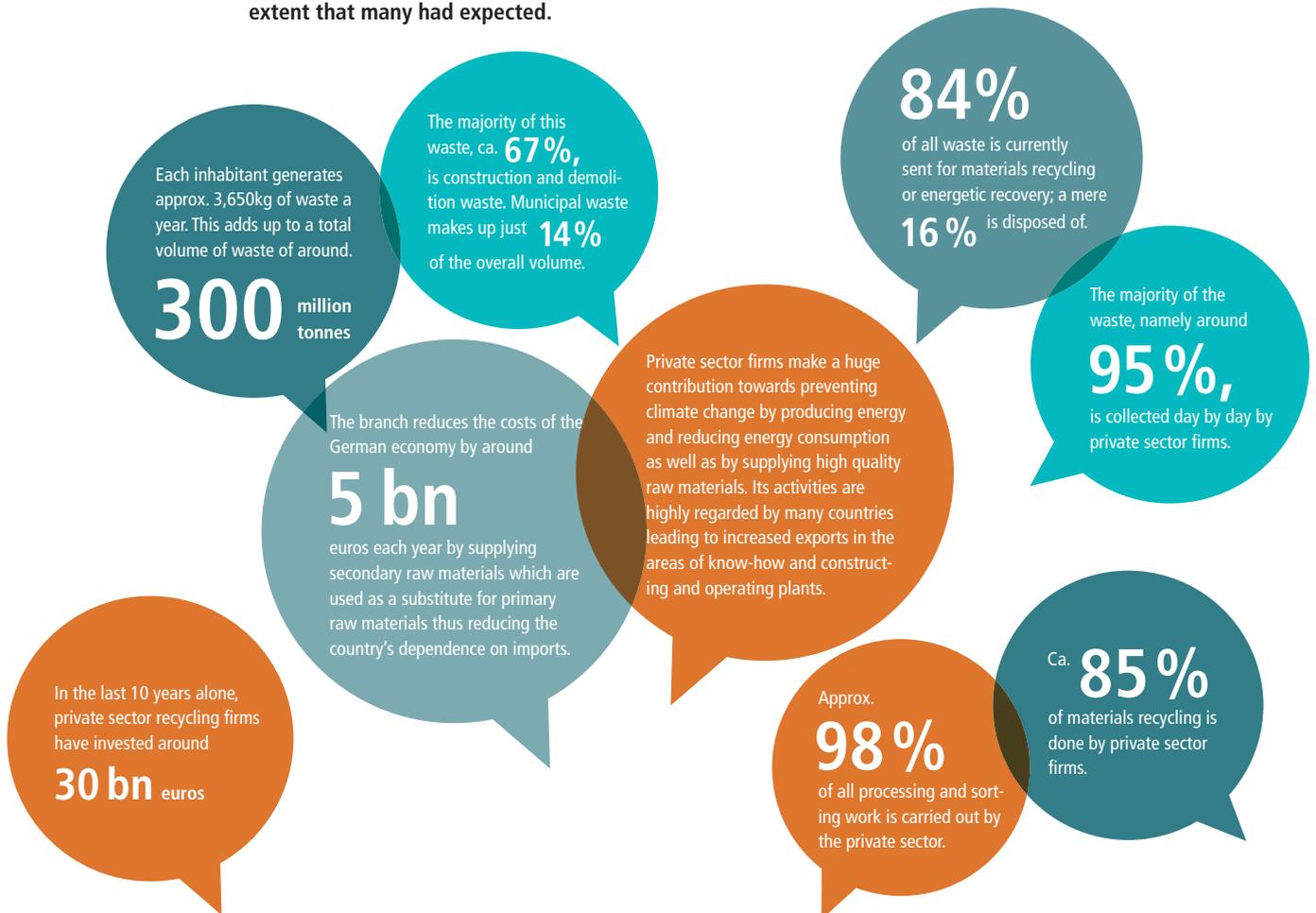
Raw materials forever

The three pillars of TSR's strategy for sustainability are sustainable added value, an intact environment and social responsibility. The company has always felt obliged to carry out its business in an integral and responsible manner. With an annual tonnage of eight million tonnes, the 2,100+ TSR employees at the 150+ locations already play an important role in ensuring that there are functioning metal life cycles in Europe.

The foundations of the recycling sector

GERMANY IS WORLD CHAMPION IN RECYCLING THANKS TO PRIVATE SECTOR FIRMS

For 40 years now, German environmental laws have been acting as an international role model. A new law has now been passed in Germany, however, that does not do justice to this pioneering role, at least not to the extent that many had expected.



It is true that Germany is already world champion in recycling standing out with its recycling rate of 64 %. And if construction and demolition waste is taken out of this equation then the recycling rate would rise to 84 %. Unfortunately, for the most part, the new German Recycling Law ignores the group which has had a determining influence on this success, namely the private sector. Companies like REMONDIS.

The global scarcity of resources is no longer a theoretical scenario. The prices for raw materials that are important for production processes continue to rise steadily despite the various financial and economic crises. In order to be able to significantly improve the supply of valuable secondary raw materials to the industrial sector, the resource waste must be used far more systematically in the future. The main aim of the EU Waste Directive of 2008 is to considerably extend

recycling activities and, at the same time, reduce waste incineration which has a negative impact on the climate. The new Recycling Law in Germany was drawn up to adopt these European regulations. As far as the recycling sector is concerned, however, the compromise which has now been passed falls well short of expectations. In view of the recycling rates that the businesses and associations believe could be achieved, the increase in recycling rates in Germany agreed on in the law from the current 64 %, which was reached some time ago, to just 65 % by 2020 would appear not to be ambitious enough. There is also the danger that fair competition will fall by the wayside as sections of the law favour the municipal waste management monopolies. A look at the actual division of responsibilities within the German recycling sector reveals that it is above all the private sector firms within the branch that are the backbone and driving force behind the recycling success in Germany.

Sustainability – signed and sealed

REMONDIS OFFERS ITS CUSTOMERS AN INDIVIDUAL ENVIRONMENTAL CERTIFICATE

Megatrends can be sustainable as well. Protecting the environment is one such megatrend. Nowadays, no company can afford to or wishes to produce at the expense of the environment and emit more CO₂ than is necessary or waste our planet's resources. In addition to this, there is the urgent need in a country such as Germany, which has so few natural resources of its own, to increase the recovery of potential recyclables from waste. And yet how can it be proven that such efforts have been made?

Industry, trade and commerce undertake great efforts and invest large sums of money to fulfil requirements to achieve sustainability, protect the environment and conserve resources. When it comes to environmental services, many companies rely on REMONDIS. In order to be able to provide concrete and binding proof of the savings achieved in the area of primary raw materials, energy production and reduced CO₂ emissions of each individual customer when requested, REMONDIS has now commissioned the independent institute, ATZ Entwicklungszentrum headed by Prof. Martin Faulstich, to develop a software-based tool with which the savings achieved by the recycling measures can be scientifically evaluated and documented.

The whole of the chain of services provided by REMONDIS will be included in the analysis from the collection of the waste at the customers', to the transport, sorting and processing, to the recycling of each fraction. An environmental balance sheet will be calculated along the whole of the recycling chain for a selection of waste types, which are generated by the customers and which REMONDIS has been commissioned to treat. Such waste includes paper, cardboard, card, plastic film, plastics, wood, glass, biowaste and green waste, kitchen and canteen waste, cooking oils and fats, food that is unsuitable for human consumption as well as cooling appliances. At the end of the analytical process, the customer receives an individual sustainability certificate from REMONDIS and ATZ, the results of which it can use for its own environmental balance sheet.

This instrument is unique within the branch and frees the REMONDIS customers from their dilemma: those who have successfully produced in Germany and who have grown their businesses have had to pay in the past for this growth with negative values in their environmental balance sheet. Now, REMONDIS can provide positive proof of the benefits gained from the additional production waste for their customers .

The REMONDIS waste management advisers are now on hand to answer enquiries from customers about ordering the new sustainability certificate.



China

Rapid progress in China



INDUSTRIAL RECYCLING SECTOR SUPPLIES RAW MATERIALS AND ENERGY

REMONDIS®

China, too, is aiming to link sustainability and economic growth together more closely. REMONDIS has been pushing forward progress here since 2004 setting up state-of-the-art treatment plants and processes. A typical example of this is its activities in Changchun, where the country's automobile industry is based. The company is also looking to become active in the Shanghai Chemical Industry Park in the future using Changchun as a model.

Environmental problems are expensive: experts estimate that China spends up to 15 percent of its gross domestic product on clearing up environmental damage.

China's economy is booming. With a growth in GDP of 9.5 percent, the country was once again one of the world's fastest-growing economies in 2011. And increasingly there is a sound basis behind this rapid upswing with the country no longer accepting environmental pollution as an unavoidable side-effect.

Quite a lot is being done nowadays to push forward recycling and waste management. This is especially true for the areas in which residual materials are handled in a responsible way to cover raw material and energy requirements. Thus, China has now begun to set up systems to produce energy from waste, for example via landfill and biogas production or energetic recovery. Projects often involve the trade in emission rights, so-called carbon credits, to reduce greenhouse gases.

This new trend towards greater sustainability is also creating favourable conditions for fundamental progress – a development which is also giving momentum to REMONDIS' activities. To be allowed to build production plants in the country, foreign companies must work together with local firms. As a result, REMONDIS is present in the country via joint ventures – always cooperating with partners who are just as ambitious and efficient. One of these is FAW, the largest automobile manufacturer in the country.

Recycling centre in the 'City of Cars'

FAW produces its own vehicles and is also connected to well-known American, European and Japanese car manufacturers via joint ventures. The company's head office is in Changchun where it manufactures up to 600,000 cars for Volkswagen and Audi alone. Together with FAW, REMONDIS is creating on-site recycling opportunities for



the industrial waste generated by the automobile production plants. A recycling plant is to be set up in which the different facilities will be working together. The site already has a plant producing substitute fuels and the capacity of this plant is currently being increased to 20,000 tonnes a year. Further facilities are due to begin operations at the end of the year: a distillation facility to process 6,000 tonnes of solvents each year as well as a facility to clean up to 40,000 barrels a year.

Recycling for the chemicals industry

A good 2,000 kilometres south of the city, at the gates to Shanghai, is one of the world's largest chemical parks – the Shanghai Chemical Industry Park (SCIP). Bayer, BASF and Evonik can be found here as well as BP, Air Liquide and DuPont. REMONDIS would like to become active in the area of recycling industrial residual materials at this park, too. Its aim is to optimise the facilities that have already been set up there such as the facilities to process waste oil, galvanic sludge and emulsions. Moreover, further recycling facilities should be built there, too. Plans are, for example, to build a substitute fuel production plant for the chemical park which will be able to process 10,000 tonnes a year. In order

to realise this plan, REMONDIS is to acquire an interest in the recycling and waste management plant that is located in the SCIP. "From where we stand now, the process should have been completed some time during the second half of the year," explained Daniel Tweer, a member of the business development management team at REMONDIS' office in Shanghai.

Still much to do

Whether it involves recycling or waste-to-energy projects: setting up modern structures across the country is a great challenge for China. Whilst the country does have modern environmental laws, it is having problems fully implementing them – not least due to the huge geographical size of the People's Republic. There will, therefore, continue to be many different opportunities for REMONDIS in the country in the area of climate and resource protection.

"From where we stand now, the process should have been completed some time during the second half of the year," Daniel Tweer, a member of the business development management team at REMONDIS' office in Shanghai

In China, REMONDIS is primarily active in the area of recycling residual industrial waste.

Close to the football at all times

REMONDIS IS WELL POSITIONED FOR EURO 2012



REMONDIS will also be joining in when the football action begins in Poland and the Ukraine this June and the best 16 teams battle it out to be crowned the 2012 European champions. Europe's leading water and environmental service company and its team will be demonstrating just how fit they are – from the opening game in Warsaw to the final in Kiev.



Waste management partnership in Poland's capital
The company's Polish firm, REMONDIS Sp. z o.o. and its consortium partner will be lining up in the new national stadium in Warsaw. Together they are responsible for waste management in and around the stadium. The two companies have already passed the tests with flying colours: they were able to demonstrate just how good their services were during the official opening of the stadium on 29 January as well as during the international match between Poland and Portugal on 29 February. And because this is the case, the partners will continue to ensure the stadium is kept clean and orderly in the years to come – long after Euro 2012 has finished.

The REMONDIS Group has been active in Poland since 1992.

The Warsaw National Stadium was built especially for the 2012 European Football Championship. It is located on the bank of the River Vistula in the district of Praga opposite the city centre and has a seating capacity of over 50,000. The opening match is taking place there on 08 June between the host country Poland and former European champions Greece.

REMONDIS has been providing waste management services in the Ukraine since 2007.

Extended catchment area in the Ukrainian metropolis
2012 and will be hosting a number of matches including the final. Furthermore, fans from all over the world will be able to watch the matches on large screens that are to be set up in the city centre. Here, too, REMONDIS will be ensuring that everything remains clean and attractive for the tourists.

REMONDIS is well positioned in the Ukrainian capital with municipal activities. In 2010, the company took over a majority share in the large municipal waste management business, Seltik, which, previous to this, had been providing services for the local inhabitants in Kiev for ten years. In

February 2012, REMONDIS' local subsidiary there was awarded a contract extension which included a number of the inner city districts. The determining factors for this additional work were, above all, the high quality of the services and REMONDIS' international experience. As a result of this extension to its catchment area, REMONDIS is now responsible for serving a further 150,000 inhabitants in Kiev, the equivalent to an increase of just under 25 percent. The amount of household waste that now needs to be managed has increased by 50,000 tonnes a year.



Growing number of business customers

REMONDIS' activities in Kiev are also increasingly focusing on extending cooperation work with commercial and industrial customers. This year, the subsidiary there has already succeeded in concluding contracts with key customers such as Praktiker, which owns a chain of DIY stores, the manufacturer of sports articles Adidas and the gypsum factory owned by Knauf. Activities here primarily involve – besides classic collection services – providing the most economical and eco-friendly waste management system for all types of waste.

REMONDIS' business is also developing positively across the whole of the country. Over 2.4 million people living in the Ukraine already use the company's services either directly or indirectly. Besides being located in Kiev, the company can also be found in, for example, Saporoshje with its 750,000 inhabitants as well as in Cherkassy, Melitopol and Artemowsk.





The finals of the 14th European Football Championship are taking place from 08 June to 01 July 2012 in Poland and the Ukraine.

“We are pleased to be able to contribute towards a clean EURO 2012 in Poland and the Ukraine by providing our environmental services.” Egbert Tölle,
Board Member of REMONDIS AG & Co. KG

Exhibitions and events

Besides attending the IFAT ENTSORGA in Munich (see pages 14 & 15), REMONDIS and its subsidiaries will also be exhibiting their services and products at other events.



SHG at the CERAMITEC

Since its premiere in 1979, CERAMITEC has become the world's leading trade fair for the ceramics industry. As in 2009, SHG, a company belonging to the REMONDIS Group, will be taking part in the exhibition this year presenting its wide range of products at its stand 514 in Hall A6. CERAMITEC is being held at the New Munich Trade Fair Centre from 22 to 25 May 2012 and, in addition to its global perspective, will provide the international visitors with a comprehensive insight into the latest ceramics technology. CERAMITEC's new subtitle, "Technologies,

Innovations, Materials", encapsulates the whole range of the exhibition. It aims to cover all aspects of the industry from classic ceramics and raw materials to powder metallurgy to technical ceramics. In 2009, the CERAMITEC attracted 656 exhibitors from a total of 35 countries and around 15,000 visitors. With the event now having been optimised, it can be assumed that these numbers will be exceeded in 2012.

Venue: Munich Trade Fair Centre

Further information: www.ceramitec.de



O&S, Stuttgart

REMONDIS Industrie Service (UPEX division) will be attending the international trade fair for surface treatments & coatings in Stuttgart from 12 to 14 June to present their professional industrial cleaning, waste management and recycling solutions.

Venue: Stuttgart Trade Fair Centre

Further information: www.cms.messe-stuttgart.de

International Job Fair, Dortmund

REMONDIS will be attending the forum for young academics and internationally active companies located in and around Dortmund at the TU Dortmund on 14 June where it will be presenting itself as an attractive employer to potential applicants.

Venue: IBZ, TU Dortmund

Further information: www.tu-dortmund.de



Pollutec, Lyon

REMONDIS France SAS at the trade fair for future-oriented environmental and business solutions from 27 to 30 November 2012.

Venue: Lyon Eurexpo France

Further information: www.pollutec.com

ECOMONDO, Rimini



REMONDIS Industrie Service at the international trade fair for recycling, energy and sustainable development from 07 to 10 November 2012.

Venue: Rimini Fiera Expo Centre

Further information: www.ecomondo.com

Plast Eurasia, Istanbul



REMONDIS Plano at the international trade fair for the plastics industry from 29 November to 02 December 2012.

Venue: TÜYAP Fair and Convention Center, Büyükçekmece, Istanbul

Further information: www.plasteurasia.com

Successful start to international trainee programme

In 2011, REMONDIS began two new trainee programmes involving a total of 13 participants. As part of these programmes, seven of the newcomers will be prepared for their future positions in one of the six regions in Germany, whilst the other six trainees will be working abroad once the programme has finished. The international trainees come from the CIS states, China/Hong Kong and Turkey.

Each trainee programme begins with a 14-day introductory phase, during which the young employees are able to get to know the many fields of business that REMONDIS is active in. Besides lectures and training courses, the programme also includes a tour of the Lippe Plant as well as visits to some PPP companies and the GMVA in Oberhausen as well as the BEG in Bremerhaven and Buchen in Cologne. The programme has been arranged so that the trainees get to work in various fields of business and at various locations throughout Germany as well as at the head office in Lünen. Above all, the trainees learn about the work carried out by the branches and treatment plants and gather experience in sales and project



management as well as in accounting and controlling. At all stages of the programme, the trainees must take part in the day-to-day work and take on their first projects. People interested in taking part can learn more about the trainee programme by contacting the HR department at REMONDIS Assets & Services.

The international trainees will learn all about the different aspects of their respective professions at REMONDIS

REMONDIS committed to growing the recycling sector in Mordovia

At the beginning of March, Nikolai Merkushkin, President of the Republic of Mordovia (Russian Federation), and REMONDIS board member Egbert Tölle signed an agreement to build a new waste recycling centre in the Republic of Mordovia. Mordovia is an independent republic within the Russian Federation and lies in the Volga Federal District between Moscow and the Volga. The Nizhny Novgorod Oblast lies on its northern border where REMONDIS has been working successfully for several years now. Just last year REMONDIS began working in the Mordovian capital city, Saransk, as part of a PPP project. These new measures will now help to push forward the move to transform the waste management sector in this country, which has so few natural resources of its own, into a genuine recycling economy with much greater rates of recycling.



President Nikolai Merkushkin and REMONDIS board member Egbert Tölle signing the contract

People

REMONDIS fights youth unemployment

LONG-TERM SUPPORT FOR THE "JOBLINGE" INITIATIVE IN COLOGNE

JOBLINGE

No school qualifications, no apprenticeship, no job, no prospects. For many young people, their professional career is over before it has even begun. According to the latest statistics published by the Federal Employment Agency, around 650,000 young people aged between 15 and 25 have failed to find a job after leaving school. For a long time now, REMONDIS has been fulfilling its social responsibility and creating more apprenticeship places and jobs, in particular, for people with few qualifications. Furthermore, since the beginning of this year, REMONDIS has been supporting the "Joblinge" initiative which was brought into being to improve the prospects of young people from underprivileged sections of society and to give them a greater chance to earn their own living in the future.



Thomas Conzendorf, Board Member of REMONDIS AG & Co. KG

JOBLINGE, which began its work in 2008, is a non-profit-making initiative organised by the Boston Consulting Group and the Eberhard von Kuenheim Foundation set up by BMW AG. The initiative promotes cooperation work between the economy, the state and society as a whole. Following the successful introduction of the initiative, further locations were then set up in Munich, Berlin and Frankfurt between 2009 and 2011. The Cologne office began its work in January 2012. Other locations are currently in the process of being set up – and the initiative continues to grow steadily. Being one of the founding companies, REMONDIS is supporting the new location in Cologne with a grant. Over a period of three years, REMONDIS will be taking over the costs for two people to take part in the programme and is also providing internships and apprenticeship places as well as giving donations.

Approx. 600 young people have been accepted into the JOBLINGE programme since 2008. Around 60% of the participants are found jobs on the normal job market whereby focus is put on finding them apprenticeship places. The fact

that more than 90% of the young people are still employed in their apprenticeship positions after twelve months shows just how sustainable the concept is. The fact, too, that this initiative is being supported by REMONDIS' board of directors further underlines just how important it is within the company group. Thomas Conzendorf, a board member of REMONDIS AG & Co. KG, explained why this is the case:

"Ensuring the company is a success is the best way for the REMONDIS Group to fulfil its social responsibility. Thanks to this success, we have been able to create a large number of jobs over the past few years with the result that we currently have a global workforce of around 30,000 employees. What is important here is that the recycling sector is one of the few branches in today's modern knowledge society that still creates jobs for employees with lower qualifications. The cooperation work with the JOBLINGE initiative not only gives us an excellent opportunity to further extend our social commitment but also paves the way for us to find new employees. For, our employees are our most important resource – no matter what qualifications they have!"

> Impressions



◀ A delegation from the Selm City Council headed by the mayor, Mario Löhr, is welcomed by Norbert Rethmann at Gut Sternberg.



▲ (from left to right) Dr Johannes Kolkmann and Michael Figge from REMONDIS, together with Andreas Stratemeyer, head of holdings at RWE Deutschland AG, Thomas Ronge-Leiding, REMONDIS Aqua, Ulrich Altenhoff, legal adviser to RWE Deutschland AG, and Dr Günter Fehr, managing director of KED, during the signing of the contract to purchase shares in KED.



▲ Norbert Rethmann shows members of the city council round the coach museum at his adopted home town of Wamckow.



◀ President of the Republic of Mordovia, Mr Nikolai Merkushkin, (Russian Federation) and REMONDIS board member Egbert Tölle at the signing of an agreement to build a waste recycling centre in the republic.



▲ (from left to right) REMONDIS student employees and apprentices, Pascal Ressemann, Nina Handrup, Johanna Spinn and Kim Auferoth, preparing for their exams.

◀ Harry K. Voigtsberger (centre), Minister for Economic Affairs, Energy, Building, Housing and Transport in the German state of North Rhine-Westphalia, sees for himself just how efficient the private sector businesses in the state are during a visit to the Lippe Plant in Lünen. On his right, Ludger Rethmann, REMONDIS Board Chairman, and Hans Vornholt, a former managing director. To his left: Michael Viefers, Board Member of Rhenus AG und Co. KG, and Silvia Fiebig, ministerial adviser for trade, services and logistics.



2012



2021



2030



2039



2048



2057



2066



2075



2084



2093



2102



2111



2120



2129



2139?

No Titanium – No Modern Aviation

Planes are essential for many people. So titanium is, too, as it provides stability for the undercarriage, engines, fuselage and wings. The world would be a much smaller place without this metal. But, natural reserves of this material are finite and are expected to last another 137 years. REMONDIS is thinking ahead and developing processes to return titanium to production cycles. The highest levels of quality, worldwide. For a secure future. **German Qualität.**

REMONDIS AG & Co. KG // Brunnenstr. 138 // 44536 Lünen // Germany // T +49 2306 106-0 // F +49 2306 106-100
remondis.com/shortages // info.shortages@remondis.com

