

RECYCLING MINERALS – CONSERVING NATURAL RESOURCES



2011 award
winner:
REMONDIS

Latest news

REMONDIS in Saransk – a town
changing its appearance

Latest news

Greater acceptance for mineral
construction materials

Environmental services

RENOX – speciality chemicals under
control

Environmental services

“Green Fleet” Award – and the winner is:
REMONDIS

Contents



THE RE-LAUNCH – A TOWN IS CHANGING ITS APPEARANCE

Thanks to its huge levels of commitment, Saransk, the capital city of the Republic of Mordovia, is completely changing its appearance. This prestigious large-scale project also includes modern environmental service systems that are being implemented together with REMONDIS within the framework of a public private partnership. **Page 4**



GREATER ACCEPTANCE FOR SUBSTITUTE MINERAL CONSTRUCTION MATERIALS

Although mineral waste forms the largest mass flow with over 200 million tonnes a year, there are no national regulations covering the handling of such material. There has been a demand for clear regulations for many years now. And yet the process of drawing up such regulations would appear to be difficult. Not only REMEX is awaiting the new Ordinance on Substitute Construction Materials with interest. **Page 14**



REMONDIS RECEIVES ENVIRONMENTAL AWARD FROM NABU AND VW LEASING

On 06 September, the management spokesman of Volkswagen Leasing, Lars-Henner Santelmann, and NABU President, Olaf Tschimpke, handed over the prizes to the winners of this year's "Green Awards – The Green Fleet 2011" in Berlin in the presence of the Federal Minister for the Environment, Dr Norbert Röttgen. REMONDIS was presented with one of these prestigious awards this year in recognition of its particularly environmentally friendly fleet strategy. **Page 35**

LATEST NEWS

- 4 The re-launch – a town is changing its appearance
- 6 Fuel from waste
- 7 Talks for mutual success
- 8 The 80s – the beginning of waste management
- 11 REMONDIS Switzerland closes product life cycles
- 12 Ordinance on hold
- 14 Greater acceptance for substitute mineral construction materials
- 16 Turkey – the Bosphorus is booming

REMONDIS | WATER RESOURCES MANAGEMENT

- 20 Well prepared for the future
- 22 Process water – a challenge for the industry
- 23 A strong initiative

REMONDIS | ENVIRONMENTAL SERVICES

- 24 Full range of safety measures from one company
- 25 RENOX – speciality chemicals well under control
- 26 Waste management with double the advantages
- 27 On the way to being the "optimizer" of operational costs
- 28 Recycling instead of a shortage of raw materials
- 29 Jubilee for the environment
- 30 Environmental protection knows no boundaries
- 32 A refreshing partnership
- 34 EKO-PUNKT Hungary: carving out a new future
- 35 REMONDIS receives environmental award from NABU and VW Leasing
- 36 Everything is shipshape in the "City of Sails"
- 36 REMONDIS Australia at the 2011 IGA Metcash Fair
- 38 EVZA – actively working to prevent climate change
- 39 Urban mining with a system
- 40 50 years of BDE – A festschrift to mark the jubilee
- 40 REMONDIS Region North expands
- 41 TOV Seltik supports campaign to separate waste in Kiev
- 41 Events – Exhibitions – Conferences

PEOPLE

- 42 Apprenticeships rather than a shortage of skilled workers
- 43 Impressions

Flag

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EDITORIAL

Dear Readers!

Many people working in economic circles believed for a long time that ecology and the economy were at odds with each other. For decades now, REMONDIS' everyday activities have proved that this isn't necessarily the case. For those firms, whose core business is sustainability and the conservation of natural resources, it is in the nature of things to unite profitability and environmental interests. At REMONDIS, this fundamental principle has already led to many kinds of innovative technology and new projects as well as to an impressive growth in business over the years. This growth has not been achieved at the expense of people and the environment but very much to their benefit. Our fleet of vehicles also contributes towards ensuring it remains this way as, as far as possible, it is run using clean and fuel-efficient technology. And as technology can only be as good as the person using it, REMONDIS has begun a bespoke drivers' course for all mobile employees in order to ensure the fuel efficiency potential of the new fleet is used to its optimum. NABU (The Nature and Biodiversity Conservation Union) and VW's leasing company have now awarded REMONDIS with the "Green Fleet Award 2011" in recognition of this.

The word has now got around about REMONDIS' lighthouse project in Russia, the successful public private partnership with the City of Arzamas. More and more local and district authorities in Russia are approaching us with the wish to enter the water and environmental service sector together with us as their German partner. Saransk, the capital city of the Republic of Mordovia is the latest example of this trend. Having celebrated its 365th anniversary, the city is looking to completely change its appearance. This prestigious large-scale project also includes modern environmental service systems that are being implemented together with REMONDIS. To this purpose, the joint venture 000 REMONDIS Saransk was founded in July and began its operations just a few weeks later at the beginning of September.



Thomas Breitkopf,
REMONDIS Board Member

Mineral materials are the largest material stream in German waste. Around 200 million tonnes are generated every year. It seems almost incredible, therefore, that there is still no uniform national regulation for this waste. REMEX is the specialist within the REMONDIS Group for processing mineral materials and producing construction materials. Each year, the company transports and processes around 10 million tonnes of mineral materials. The high quality products made from these are then used for constructing railways, roads and traffic routes, for earthworks and concrete structures as well as for building noise barriers, road embankments and landfills and for recultivation work thus contributing towards the relatively high recycling rate of 70% in Germany. The new 'Ordinance on Substitute Construction Materials' could put this achievement at risk. REMONDIS aktuell looks at this topic in detail and has an expert, namely Dr Axel Kopp, one of the senior government officials responsible at the Federal Ministry for the Environment, comment on the issue.

Climate change and the 'energy turnaround' both mean that Germany must face some huge challenges. If this turnaround is to succeed, all practicable kinds of climate-friendly environmental services and practicable ways of producing regenerative energy must play a role in the future. Investing in modern composting plants is every bit as important as extending biogas digestion. Each individual case must be looked at in detail to determine where and what makes good business and ecological sense. REMONDIS will continue to be actively involved in both areas in the future.

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

A handwritten signature in black ink, appearing to read 'T. Breitkopf', written in a cursive style.

Yours Thomas Breitkopf

Russia

The re-launch – a town is changing its appearance

SARANSK COMBINES CITY PLANNING WITH A MOVE TOWARDS MODERN RECYCLING



Restored high streets, renovated administration buildings, newly developed residential areas: modernization measures are the order of the day in many cities. It is rare, however, that they are carried out as rigorously as they are in Saransk. Thanks to its huge levels of commitment, the capital city of the Republic of Mordovia is completely changing its appearance. This prestigious large-scale project also includes modern environmental service systems that are being implemented together with REMONDIS.



For REMONDIS, the joint venture with the City of Saransk is already the fifth PPP in Russia.

One of the first things to capture the attention of visitors to Saransk is its cathedral, one of the largest Orthodox churches in the Volga region. This magnificent white and gold building is new. It was inaugurated in 2006 just in time for the city's 365th anniversary. The cathedral demonstrates perfectly the willingness of the city and its 330,000

inhabitants to change. Over the last few years, progress has been made throughout the town. The comprehensive measures taken to renew its appearance have involved constructing new housing complexes, rebuilding historical buildings and extending or smartening up whole roads of houses.

Uniting strengths

The city authorities are putting particular importance on extending and designing residential areas. These should not only stand out thanks to their architectural design but also because of their well-kept appearance. An important aspect on the way to achieving this is to ensure there is an efficient household waste collection system. The City of Saransk decided to enter into a cooperation agreement with REMONDIS in order to implement its ideas in the best possible way. As a result, OOO REMONDIS Saransk, was founded at the beginning of July 2011, a PPP company jointly owned by the municipal business, Spezavtohozjajstvo Saranskoe, and REMONDIS. The company began its operations just a few weeks later at the beginning of September.

Rapid development of the infrastructure

One of the Russian Federation's goals is to transform itself from being a disposer of waste to a recycler of waste. Being one of the union's most ambitious republics, Mordovia would like to set an example here, in particular in Saransk, an important economic and science regional centre situated 650km south-east of Moscow. To this effect, OOO REMONDIS Saransk has introduced a two-tonne system into the city to collect separated waste. The cooperation work with REMONDIS has created the ideal basis for this. With the support of their partner from the West, the container park was switched over to euro containers quickly and without a strain being put on the budget. Eight modern collection vehicles have been acquired to empty them. Three of the new vehicles are front loaders, an absolute novelty in the Russian Federation.

Initiatives are currently being prepared to inform the public about separating waste. "The local inhabitants are as keen as



The Lord Mayor of Saransk, Vladimir Fedorovitch Suschkov, is doing all he can to ensure there is rapid progress in his city

the city authorities and the Lord Mayor, Vladimir Fedorovitch Suschkov, to improve their city. We strongly believe, therefore, that these new structures will be a success and that Saransk will take on a pioneering role in Mordovia," commented Svetlana Bigesse, director general of OOO REMONDIS Saransk.

To be continued

All parties involved are certain that the cooperation work between the city and REMONDIS will be able to be extended in the future. Further projects are already being discussed. One of the next steps that the city would really like to see happen is to have its plants modernized – for example, with REMONDIS playing a role in renovating the existing landfill as well as building a new one. Another important factor is to optimize operations at the sorting plant. For, Saransk would like to continue to build on what it has begun and extend its recycling sector so that it can recover valuable raw materials in a professional manner. REMONDIS will make every effort to support its new partner with advice and financing as well as with services and technology.

Renovation work is proving effective: Saransk was awarded a prize in a competition assessing comfort and quality of life in which the capital cities in Russia took part.



REMONDIS is particularly active in the regions in Russia that belong to Europe

Poland

Fuel from waste

OFFICIAL OPENING OF THE PROCESSING PLANT IN DĄBROWA GÓRNICZA

The main goal of Poland's national waste management plan for 2010 is to recycle waste more intensively. The amount of waste sent to landfill across the country is to be greatly reduced in order to reach EU standards. A processing plant in the south Polish city Dąbrowa Górnicza is now contributing towards ensuring that the recycling targets aspired to are reliably reached and that primary fuel sources are conserved in a sustainable way.

REMONDIS employs just under 2,000 people in Poland and provides waste management services for over 4 million local inhabitants.

Following two years of preparation work and sorting out regulatory matters, the modern plant was built on a plot of industrial land that was formerly home to a chemicals factory. REMONDIS drew up the concept for this plant, built it and co-financed it. Operations began in the autumn of 2010. The official opening ceremony then took place in the middle of this year and was attended by a number of prominent people from the world of politics and business.

An alternative fuel for cement production is produced from household waste and sorting residue at the processing plant. Around 140,000 tonnes can be processed there each year. If necessary, production capacity can be increased at any time by adding extra plant modules. The base material is from households in the neighbouring districts of Sosnowiec, Czeladz, Bedzin, Katowice and Pszczyna. In the past, this mixed waste would have ended up in landfills.

The processing activities at Dąbrowa Górnicza are carried out using highly innovative technology. This ranges from the waste sorting facility with its optical separation system to automatic loading stations. The first stage of the process is to remove any recyclable materials ensuring, for example, that around 2,000 tonnes of metal is recovered each year. Up to 40,000 tonnes of alternative fuel is produced every year from the remaining waste. This fuel is used by cement works helping them to reduce their consumption of primary fuels such as coal, oil and gas and, as a result, to contribute towards preventing climate change. The REMONDIS plant in Dąbrowa Górnicza is already the third of its kind in Poland. The other two are located in Opole and Warsaw.



The official opening of the modern fuel processing plant in Dąbrowa Górnicza attracted a great deal of attention

Talks for mutual success

REMONDIS AT THE POLISH-GERMAN ECONOMIC SUMMIT

The Polish-German economic summit took place at the Technical University of Warsaw on 20 June. One of the focuses of the conference was bilateral progress made through economic cooperation. REMONDIS supported this high-calibre event as an active partner.

The reason behind this summit was the 20th anniversary of the signing of the German-Polish 'Treaty of Good Neighbourship' and a joint Cabinet meeting the following day. Those attending included the ministers for economic affairs of both countries, Waldemar Pawlak and Dr Philipp Rösler. They praised the positive development of both political and business relations between Poland and Germany.

The summit talks focused on the areas of investment, environmental protection and the energy industry. During the podium discussions about investments, Torsten Weber,

managing director of REMONDIS International, underlined the company's good cooperation work with both its public and private sector partners. The existing know-how and the qualification of the Polish employees, Weber said, were the basis for continued success.

At the end of the economic summit, the German and Polish business people handed over a list of the recommendations that had been drawn up during the summit to the representatives of both governments.



Prominent political figures attended the summit in Warsaw: here the ministers for economic affairs, Waldemar Pawlak and Dr Philipp Rösler



During the podium discussions, Torsten Weber (right), managing director of REMONDIS International, talked about REMONDIS' many years of work in Poland

National competitions for secondary schools

Knowledge of environmental protection was the focus of a competition which saw entries submitted from secondary schools across the whole of Poland. The best 112 pupils from the total of 31,000 pupils that took part were invited to attend the finals that were held at the Agricultural University in Poznan. One of the main attractions of this final event was the exhibition of over 1,300 photos taken on

the subject of "Woods". The photos were entries for a photo competition, which took place parallel to the other competition and which was promoted by REMONDIS. The competition on environmental protection was under the patronage of the EU Parliament, Marek Woźniak, Marshall of the Greater Poland Voivodeship, and Prof. Grzegorz Skrzypczak, Rector of the Agricultural University in Poznan.

The 80s – the beginning of waste management

THE MAIN GOALS ARE PREVENTION AND RECYCLING

During the 80s there was a change in attitude. Whereas before, focus had been put on the disposal of waste, the first signs of a recycling economy were appearing: preventing waste became more important as did the recycling of waste. Being one of the very first pioneers in this area, REMONDIS accelerated its efforts to set up recycling channels and did all it could to improve the market opportunities for recyclable waste.

Replacement for the 50,000 unsecured dumping grounds: by the end of the 80s, there were 332 organized landfills and 48 incineration plants operating in Germany.

An important milestone for waste disposal was also reached: the local dumping grounds that had been used in the past were replaced by organized landfills and monitored incineration plants, wholly in the spirit, therefore, of the 'Abfallgesetz' (Waste Law) which had come into force in 1972. The situation, however, was not really satisfactory as the volumes of waste were rising and central facilities were often not popular among the locals. Studies such as "The Limits to Growth" and "Global 2000" both focused their attention on the fact that global resources of raw materials were finite. More and more it was becoming obvious that it was no longer sufficient to react once the waste had been generated. What was needed was forward-looking action that prevented waste and preserved valuable materials.

Priority given to prevention and recycling

Whilst private sector waste management businesses were dealing intensively with recycling tasks, the legislator was moving at a much slower rate to begin with. Regulations, that pointed the way ahead, were not drawn up until the second half of the decade. Heading the list was the "Gesetz über die Vermeidung und Entsorgung von Abfällen" (2nd AbfG/Law on the Prevention and Disposal of Waste) which came into force in 1986. Its name says it all: for the very first time, it became a legal duty to prevent the generation of waste. The term "waste disposal" was replaced with "waste management". For the legislator the term "waste management" also included waste recycling and the depositing of waste as well as all the measures needed to collect, transport and store the



◀ 1980 – mobile collection of hazardous waste

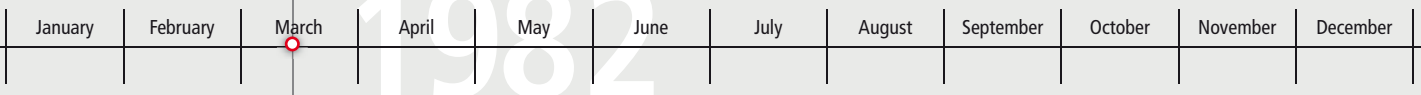


1982 – the first bottle bank ▶

1982

1982 | 2nd amendment to the "AbfG" (Waste Law)

This completed, among other things, the legal preconditions for environmentally friendly sewage sludge recycling and limited licence obligations for waste transport to the minimum necessary





“During the 80s, environmental protection was considered for the first time to be a potential stimulus for boosting business, too.” Egbert Tölle, REMONDIS Board Member

materials. Prevention and recycling were now clearly above waste disposal in the waste hierarchy.

Article 14 of the 2nd “AbfG” (Waste Law) gave a preview of how waste law would develop in the future. Labelling and take-back obligations were introduced here even if they only referred to products containing hazardous materials at this stage. At the same time, the paragraph cleared the way for additional statutory decrees with concrete regulations on handling certain groups of waste. This was the starting signal for numerous secondary legislations that regulated the transition into a recycling economy over the following years. The first was the “Altölverordnung” (Waste Oil Ordinance) which became valid in 1987. Preparation work was being carried out on other ordinances concerning old cars and waste electrical and electronic equipment but it was a long time before they were passed.

Recycling of old glass and old paper a standard activity

Recycling activities were already a normal part of the day-to-day business at REMONDIS at the beginning of the 80s. Recycling channels for old glass and old paper had already been established. The separate collection and marketing of these materials were a fixed part of the company’s range of services. The aim at that time was to extend the recycling activities to include other material flows. Besides having the necessary logistics structures in place, there were two main preconditions that had to be fulfilled: suitable processing plants had to be developed and market opportunities created for secondary raw materials and waste products.

Cooperation work as the model for success

Uniting strengths – it was according to this motto that the first public private partnership was set up in 1981 with REMONDIS as a co-owner. The PPP company set up with the City of Singen in the district of Constance was the beginning of a success story. Today, the RETHMANN Group has over 100 PPPs, one of which is still the joint venture business in Singen.



◀ 1985 – at the opening of Entsorga – Norbert Rethmann as president of the BDE



Branch and head office in Selm ▶

1985

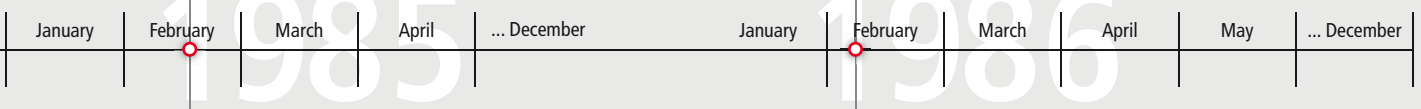
1985 | 3rd amendment to the “AbfG” (Waste Law)

This regulated the monitoring process for cross-border waste transport and established the fundamentals of waste management in Germany

1986

1986 | 4th amendment as a new “AbfG” (Waste Law): Gesetz über die Vermeidung und Entsorgung von Abfällen (2nd “AbfG”/Law on the Prevention and Disposal of Waste)

A further development of the waste law moving from waste disposal to waste management; obligation to prevent waste and recycle waste which both now had priority over the depositing of waste



► **Technological pioneers for compost and plastics**

The entry into the composting business in 1981 was marked with the acquisition of the patent to compost green waste using the 'Brikollare' method. Thanks to this innovative method of treating the materials, REMONDIS was able to considerably speed up the compost production process. At the same time, the quality criteria were strictly adhered to in order to ensure that the compost produced was accepted and, as a result, in high demand.

REMONDIS explored the possibilities of processing plastic packaging long before the Packaging Ordinance came into being.

Two years later, Norbert Rethmann had the first basic tests carried out to recycle plastic packaging. In addition, the current honorary chairman of the supervisory board and, at that time, the head of the company purchased the firm, Plastikwerke Nordwalde. Here plastics from industrial production processes were prepared for recycling including polyamide from the textile industry. From this point onwards, all of the company's plastics activities were bundled together at this plant which was gradually built up into a large-scale plastics recycling business. This was also the foundation stone for the REMONDIS PLANO division which now markets more than 160,000 tonnes of plastics every year – on an industrial scale and according to the highest standards of quality.

Setting the course for the future

In addition to the progress made in his own company, Norbert Rethmann campaigned for a modern waste management sector by joining trade associations. Between 1984 and 1990, he held the position of President of the BDE (Federal Association of the German Waste Management Industry) during which time he had a considerable

Towards new continents

In 1982, REMONDIS founded its first branch in Australia realizing that the global challenge of protecting the environment, climate and resources could only be solved with global initiatives. Five years later, the Brundtland report, initiated by the United Nations, confirmed that this had been the right move to make. The report, entitled "Our Common Future", calls for global strategies to promote sustainability to ensure there is a "development which meets the needs of current generations without compromising the ability of future generations to meet their own needs."

influence on the drafting of waste laws in Germany. One of the politicians with whom he worked closely at that time was Prof. Klaus Töpfer who was appointed Environmental Minister in 1987.

Töpfer and Rethmann were visionaries who realized early on that there was no future for the throwaway society. And they were realists who knew that sustainability also had economical aspects and needed committed, high performance companies. The development of society in the 80s also made a contribution here: protecting the environment entered the public domain in this decade and initiatives made in this direction were no longer viewed as being economic barriers but as a potential stimulus for boosting business. All this was setting the course for an impressive success story: Germany set out to become pioneers in the area of environmental issues – in Europe and across the world.



◀ 1987 – the head office in Selm is extended



1987 – recycling of old oil cans ▶

1987

1987 "Altölverordnung" (Waste Oil Ordinance)
This made it obligatory for sales outlets to take back waste oil and regulated the processing of such oil



REMONDIS Switzerland closes product life cycles

ACQUISITION OF F. & R. STEBLER AG EXTENDS COMPANY'S RANGE OF SERVICES

Today, many companies in Switzerland already turn to REMONDIS when they have hazardous materials that need to be collected and recycled. Being one of the leading environmental service companies in this Alpine state, the Swiss branch provides many hospitals, doctors' surgeries and other medical institutes with clean and safe solutions for collecting and recycling all kinds of medical waste. Moreover, industrial and commercial businesses also like to use this full range of convenient services for their special waste materials and recyclables. The company has now taken over the firm, F. & R. Stebler AG, thus once again further extending its range of services.



The Swiss always place customer satisfaction and safety at the top of their list of priorities. In a modern recycling economy, importance is put on closing product life cycles in order to conserve natural resources. This also includes the safe transport and disposal of liquid waste and hazardous waste such as potash lye, silicates, soda lye and other materials generated by industrial production processes – materials that need to be transported by special vehicles and safely disposed of. REMONDIS Schweiz AG has now extended its portfolio by purchasing F. & R. Stebler AG in MuttENZ, a company specializing in the disposal and transport of liquid goods; the takeover is effective immediately. As a result of this transaction, REMONDIS will be able to further extend its leading position in the recycling sector in Switzerland and in the disposal of hazardous waste in the north west of the country.

Pierre-André Vasseur, managing director of REMONDIS Schweiz AG, is very pleased with this development: "Taking over F. & R. Stebler AG means that we have been able to extend our portfolio in the best possible way as well as to further strengthen our position on the market. Furthermore,

the experienced staff at F. & R. Stebler AG, who have been working in the market for many years, complements our company's know-how." Paul Nicolet is to take over the management of the company as co-partner for the area of sales and operations together with Manfred Portmann, who has headed the administration and finance departments for many years. The former owner, Roland Stebler, will be available to support the team during the transition phase. All F. & R. Stebler AG employees are to be integrated into REMONDIS Schweiz AG. In the future, customers in Switzerland will be able to benefit even more from this added expertise in the area of disposing of liquid and solid industrial and commercial waste.

Background

REMONDIS Schweiz AG was founded in 1999 and today employs 50 people at three locations: Schaffhausen, Basle and Geneva. With its 25 commercial vehicles and 3 processing plants, REMONDIS Schweiz AG transports more than 40,000t of material a year. Over the last 12 years, REMONDIS Schweiz AG has positioned itself as market leader for sustainable solutions for collecting and processing hazardous waste as well as for recycling. Moreover, the company works as a service partner for various local authorities including the City of Basle taking over the kerbside collection of residual waste and recyclables.



Legislation

Ordinance on hold

THE LONG PATH TOWARDS CLEAR REGULATIONS FOR SUBSTITUTE CONSTRUCTION MATERIALS

REMEX 

The conditions are anything but uniform when it comes to the recycling of mineral waste in Germany. Although these materials form the largest mass flow with over 200 million tonnes a year, there are no national regulations covering the handling of such material. There has been a demand for clear regulations for many years now. And yet the process of drawing up such regulations would appear to be difficult.

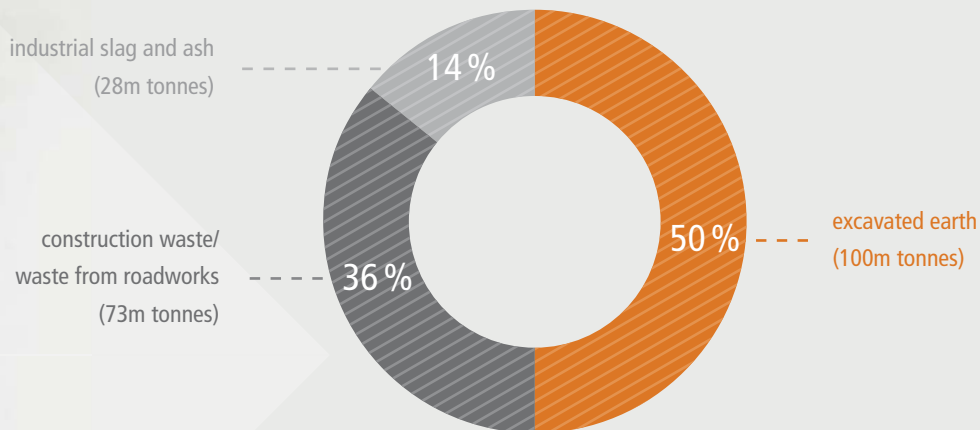
With annual volumes of over 200 million tonnes, mineral waste makes up a good 60% of all waste generated in Germany.

The recycling of mineral waste is currently based on a technical regulation, that is not legally binding, from 1997, namely Notice 20 published by LAGA (federal states' working group on waste). Over the years, this notice has been modified but only in a number of areas. As a result, not all the regulations are in keeping with scientific and legal developments – a deficiency that the federal states have dealt with by creating their own individual interpretation and implementation methods. A binding national 'Ordinance on

Substitute Construction Materials' should change this situation and ensure legal compliance, competition conditions that are uniform across the country and less administration work. The project, however, is progressing very slowly.

National regulations needed urgently

It was clear back at the end of the 90s that Notice 20 had to be revised. The attempt, however, to adapt the LAGA Notice to the latest scientific evidence and to the water and



soil protection laws in force failed. In order to push forward the harmonization process, the federal states' working groups for waste, water and soil drew up a relevant policy paper and called on central government to pass a binding national regulation based on this paper.

Central government's working drafts

The Federal Ministry for the Environment took over the task of drawing up a new Ordinance on Substitute Construction Materials. The aim of the ordinance was to lay down the requirements concerning the safe use of substitute mineral construction materials as well as set new requirements for backfilling mines and sinkholes by amending the Federal Soil Protection Ordinance. The first working draft was presented in December 2007.

The working draft of the ordinance was then revised due to the many opinions put forward by federal departments, state ministries, environmental associations and the economy. The new draft has been on the table since the beginning of 2011. It has been drawn up as a 'master ordinance' and comprises several articles. Article 1 amends the Ground Water Ordinance and establishes, in particular, norms for the safe recycling of substitute construction materials and backfilling of mines and sinkholes regarding permitted concentrations of pollutants in seepage water. Article 2 is the actual Ordinance on Substitute Construction Materials and Article 3 modifies the Soil Protection Ordinance.

Are recycling rates at risk?

The Ordinance on Substitute Construction Materials prescribes values for each kind of substitute construction material, which must be adhered to through quality control. Furthermore, it determines which methods are admissible in building work. In view of the possible recycling methods that will be permitted in the future, there are some concerns as to whether the current recycling rates can be maintained for some substitute construction materials or whether some volumes will end up in landfill. This is particularly true for the ambitious value for the parameter sulphate in recycled construction materials.

Last but not least, the current draft bill focuses on a new method of analysis for evaluating material, the column test. In contrast, the Soil Protection Ordinance and the Landfill Law use vibration tests. This means, in practice, several different complex testing procedures. For example, if mineral waste is to be recycled but then cannot be recycled due to its contents.

In view of the very complex subject matter and, in some cases, considerable concerns, it very much looks as if the national regulation will be a long time coming. The uncertainties concerning the recycling of Germany's largest mass flow must, therefore, continue a while longer.

Recycling rates of mineral waste in Germany currently lie at over 70 percent.

Greater acceptance for substitute mineral construction materials

Where is the 'Ordinance on Substitute Construction Materials' heading? Dr Axel Kopp, a senior government official at the Federal Ministry for the Environment, spoke to Berthold Heuser, an authorized representative of REMEX Mineralstoff GmbH.

B. Heuser: The Ordinance on Substitute Construction Materials has been on the agenda for a long time now. Can we expect it to be passed during the current legislative period?

Dr A. Kopp: I hope that we will submit either a further consolidated working draft or even a draft bill this year. In view of this, it is very probable that the ordinance will be passed in this legislative period.

B. Heuser: One crunch point at the moment is the value set for sulphate which cannot be complied with and which will determine the use of recycled construction materials. The recycling industry is warning that there will be a drastic fall in recycling rates. Has a solution been found for this?

Dr A. Kopp: The new working draft sets a value for sulphate that allows for a total recycling rate of around 80 percent for the two best quality categories during the transition period up to 2020. For the period after 2020, however, the value set for gypsum is, from a technical point of view, practically impossible to adhere to. For this reason, solutions are currently being looked at that will allow for a minimum gypsum content which is technically possible and economically viable.

B. Heuser: The switchover to the column procedure has also been criticised. Do you believe the extra costs and work resulting from this are justifiable or are other solutions being looked at?

Dr A. Kopp: In the future, the column procedure and the vibration procedure with a liquid/solid ratio of 2:1 will both be standard procedures on an equal footing. In order to avoid duplicate testing, we will standardize the conversion factors to the relevant allocation values in the Landfill Law.

Recycling minerals conserves natural resources

REMEX is the specialist within the REMONDIS Group for processing mineral materials and producing construction materials. Each year, the company transports and processes around 10 million tonnes of mineral materials. The high quality products made from these are then used for constructing railways, roads and traffic routes, for earthworks and concrete structures as well as for building noise barriers, road embankments and landfills and for recultivation work.



Dr Axel Kopp, a senior government official at the Federal Ministry for the Environment



Berthold Heuser, authorized representative of REMEX Mineralstoff GmbH

B. Heuser: The previous concept made backfilling with excavated earth considerably more difficult. There are, however, fewer and fewer alternatives, in particular in the segment for excavated earth that is mildly polluted. This could lead to "disposal bottlenecks".

Dr A. Kopp: The amendment to the Federal Soil Protection Ordinance allows for, similar to the Ordinance on Substitute Construction Materials, permit-free backfilling. Strict measures must, however, be adhered to here. It is possible to apply for a permit for more polluted soils or materials. This will be examined by the authorities responsible on a case-by-case basis who can grant a permit if the local conditions allow for safe backfilling.

B. Heuser: Higher quality standards have been set for the use of mineral construction materials. What quality assurance concept does the ordinance envisage?

Dr A. Kopp: The plan is for the values of the substitute construction materials to be monitored regularly both by the plants themselves and by external parties. The concept here is, for the most part, similar to the monitoring process currently being used to check the parameters in road-building.

B. Heuser: Despite having the same physical properties, recycled and substitute construction materials are not accepted in the same way as natural building materials. Do you believe the planned ordinance will provide them with more support?

"The Ordinance on Substitute Construction Materials takes all the latest scientific evidence into account and sets standards to guarantee the safe use of substitute mineral construction materials in building work."

Dr Axel Kopp, Federal Ministry for the Environment

Dr A. Kopp: The Ordinance on Substitute Construction Materials sets the future standards for use of all important substitute construction materials in building work and makes it clear what is admissible. This should also have a positive effect on the decisions made by construction companies and, as a result, further improve the acceptance of the substitute mineral construction materials.

B. Heuser: Thank you for the interview, Dr Kopp, and for this insight into the future.



Environmental services

Turkey – the Bosph

REMONDIS' INTERNATIONAL MANAGEMENT CONFERENCE IN ANTALYA UNDERLINES THE IMPORTANCE OF THE REGION



Turkey is one of the world's fastest-growing countries. In 2010, its gross domestic product grew by a staggering 8.9 percent. A figure that other countries can only dream about at the moment. Some experts are already comparing it to the so-called tiger nations such as China and Brazil. Growth has continued in 2011, too, which is also giving this country, located between Europe and Asia, an ever more important political role in the Near Eastern countries and the Arab region. REMONDIS was able to establish itself on the Turkish market many years ago and has now become one of the largest water and environmental service providers in the country. It was fitting, therefore, that the conference of REMONDIS' international managing directors was held in the City of Antalya.



The port city of Antalya, an important tourist resort and trading centre on the Turkish Mediterranean coast, was this year's venue for REMONDIS' International Management Conference

Turkey is booming



Prof. Karl-Ulrich Rudolph, managing director of the consulting group for water technology and management



REMONDIS board member, Egbert Tölle, talking to the Mayor of Antalya, Prof. Mustafa Akaydin



Harald Zenke, management spokesman of kfw-Bank

REMONDIS called and they all came to Antalya. Luke Agati and Allan Rushworth had the furthest to travel of all the international managing directors coming from Sydney, Australia, and from Auckland, New Zealand, respectively. Together with their managing director colleagues from a total of 28 countries, they discussed the current results, goals, acquisitions and projects in the different countries during the event which was held from 14 to 16 September. During the presentations and discussions, focus was put on the company's market position in the various countries, compared to their competitors, as well as on future strategies to further extend the activities and, as a result, REMONDIS' market share in the target markets. The participants even ventured to look ahead as far as 2015.

REMONDIS' management team was able to welcome further high-calibre guests on the third day of the conference. After the opening speech held by REMONDIS board member, Egbert Tölle, the Lord Mayor of the City of Antalya, Prof. Mustafa Akaydin, discussed the current situation in his town regarding the waste and water sectors. Addressing his words at REMONDIS' water and environmental service

experts, he made his concrete goals and wishes for the future clear. Antalya is not only the fastest-growing tourist centre on the Turkish Riviera. The city, with over a million local inhabitants, has become an important location for international companies thanks to its well developed infrastructure. This inevitably also means new challenges for the water and environmental sectors and REMONDIS can make a valuable contribution here.

Financing future infrastructure measures

Prof. Karl-Ulrich Rudolph, managing director of the consulting group named after him which is active in the area of water technology and management, then held a speech entitled "No Life Without Water" addressing the issue of what concrete measures cities can take across the world to improve water efficiency. Today, REMONDIS' water division already supplies over 7 million people living in Turkey with modern services from the areas of water supply and wastewater treatment. Harald Zenke, management spokesman of kfw-Bank, then followed by holding a talk on the different kinds of financing models available for the area of infrastructure. Considering the high investments that ▶

Turkey's importance as an economic nation and as a mediator between Europe and Asia is growing all the time.



Compared directly to other processes used, solar sewage sludge drying systems are by far the most cost-efficient kind of technology.



- ▶ are needed in the water and environmental service branches due to the unusually high level of economic growth currently being enjoyed by Turkey, the issue of financing is very important indeed. The International Management Conference ended with a group barbecue and the opportunity to talk to the experts. The work on the growth market, Turkey, has only just begun.

REMONDIS Burcu's location in Izmir is ideal – right in the middle of the growth region in west Turkey.

REMONDIS with the best possible set-up in Turkey
 REMONDIS' two main branches in Turkey have the best possible set-up, in particular for dealing with industrial clients. This year, REMONDIS and REMONDIS Burcu have welcomed a number of new customers including Mercedes, the Coca-Cola Company, Philip Morris and the ISE Automotive Group. Besides further extending its business division for industrial customers, future activities are to be focused increasingly on services for local authorities and on other water management services. The last category also includes a new future-oriented project in the City of Fethiye.

For several years now, REMONDIS has been active in Fethiye where it is responsible for running the operational side of the biological wastewater treatment plant. This project in this popular tourist resort and port city on the

Mediterranean is extremely important for water activities in Turkey. As part of a tender process put out by the town authorities, the company has now succeeded in winning a further contract – in addition to the operations contract for the sewage treatment plant – to build, operate and finance a new solar sewage sludge drying facility for the sewage treatment plant owned by the City of Fethiye. As part of this project, two drying halls that let in sunlight (similar to greenhouses) are to be built in which the sewage sludge generated by the sewage treatment plant will be dried sufficiently by solar thermal energy alone so that it can be sent to landfill without any problem. Up to now, it has been sent to landfill without having been dried first which has been causing both problems at the landfill and high costs.

Future technology: solar sewage sludge drying systems

The project for the solar sewage sludge drying facility in Fethiye is, in several respects, a great success for REMONDIS in Turkey. On the one hand, it has succeeded in being awarded a contract for a municipal wastewater infrastructure project for the first time. As other local authorities have similar requirements, it can be assumed that this could lead to similar projects in Turkey.

On the other hand, building and operating a solar sewage sludge drying facility is an excellent example of how to minimize CO₂ emissions and use alternative energy resources to replace energy-intensive technology. By consistently using regenerative energy in the form of solar energy, far fewer amounts of climate-damaging CO₂ emissions are released compared to conventional drying processes.

Furthermore, economic efficiency plays an important role here. Compared directly to the other processes used, solar

sewage sludge drying systems are by far the most cost-efficient kind of technology. The comparatively low investment costs and low running costs are matched with a very high level of efficiency. With this modern technology, the wastewater treatment process and corresponding sewage sludge treatment can be carried out in a significantly more efficient and resource-friendly way both from an ecological and economical point of view. By concluding this contract, REMONDIS has confirmed that it is playing a leading role as a water and environmental service provider in Turkey.

The extension of the water and environmental service infrastructure must keep up with the enormous growth currently being enjoyed by the country.

“Turkey is one of the fastest-growing markets for the water and environmental service sectors. REMONDIS shall continue to further extend its activities in the country.”

Egbert Tölle, REMONDIS board member



Supervisory board delegation visits REMONDIS Burcu in Izmir

On 07 September, the honorary chairman of the supervisory board of the Rethmann Group, Norbert Rethmann, his son Dr Martin Rethmann, chairman of the supervisory board, and REMONDIS board member, Egbert Tölle, headed a delegation of friends and partners to visit REMONDIS' business location in Izmir. Since its foundation in 2010, REMONDIS Burcu, a joint venture between REMONDIS and Burcu Ltd., has become an important cornerstone of the water and environmental service sector in the region of Izmir and beyond. Around 400 employees, located in the City of Izmir, serve their customers across the whole of the region as well as in Samsun, Manisa and Antalya. Besides serving local authorities, their customers also include a large number of internationally active companies. The focus of the company's activities is on the collection, transport and recycling of industrial waste. REMONDIS Burcu sells the majority of the materials recovered from the waste on the Turkish market. Norbert Rethmann and Dr Martin Rethmann

used this opportunity to talk to local politicians such as the Governor of Izmir, Mr Cahit Kiraç, and the Mayor of Izmir, Mr Aziz Kocaoğlu. With almost 4 million inhabitants, Izmir is the third-largest city in Turkey. Around 20 percent of all industrial businesses in Turkey are located in the region of Izmir.



Efficiency

Well prepared for the future

REMONDIS ARZAMAS SERVICE IS MASTERING THE CHALLENGES IN THE RUSSIAN WATER RESOURCES MARKET



The need for greater investments on the hand, a fall in revenue on the other hand: those people who wish to push forward the water resources market in Russia must be able to reconcile these two facts. OOO REMONDIS Arzamas Service is showing how to do this. Despite the adverse framework conditions, the public private partnership is proving to be a real success.

The move from being a purely municipal business to a public private partnership company has led to there being a future-oriented restructuring of the water resources sector in Arzamas.

Nizhny Novgorod – an administrative region in the European part of the Russian Federation. The third-largest city is Arzamas with its 120,000 inhabitants. On 01 May 2010, OOO REMONDIS Arzamas Service took over responsibility for drinking water supply and wastewater treatment. Besides looking after the city area, it is also in charge of some parts of the district of Arzamas.

A lot has changed since the joint venture between the City and REMONDIS began operations. This is shown very clearly by the infrastructures: the core areas of logistics and plant technology have been modernized; the scope of the pipe network operated by the company has been increased by more than 50 percent. As far as technology is concerned, priority has been put on automating the pumping stations, introducing a geo information system and developing breakdown, pressure and leakage management processes. An optimized customer service is provided by a modern customer centre which is also home to seminar rooms and

the operations management team. Moreover, the employees at the PPP company have been provided with newly designed offices as well as a social fund which they manage themselves.

Conflict between investment requirements and revenue levels

Whether it was fixed assets or the infrastructure: investments had to be carried out if progress was to be made. And there is still a lot to do. Thus, further technical innovations have been planned. Throughout the area, the outdated pipes will be replaced once the framework conditions for the investment have been submitted. For OOO REMONDIS Arzamas Service, all this involves considerable financial expenditures. And it is not easy to make the funds available as changes to the framework conditions have had a negative effect on revenue: a tariff regulation in the municipal sector and legal regulations on charging for water services according to consumption have clearly reduced the amount customers have



00049



Russia, too, wishes to reduce drinking water consumption. Today, the majority of people in Arzamas have water meters which are used for calculating water charges.

to pay. For the water companies, these have meant a fall in revenue – a situation that is putting the urgently needed investments in the network infrastructure at risk.

Effective concepts to lower costs

The PPP is using a wide range of tools in order to guarantee that the development of the local water resources sector can be continued. These tools are based on three main areas: its capital base, management methods and technical optimizations. The company's equity capital and the low interest loans from Russian banks supply the company with the necessary liquidity. At the same time, modern company management ensures that the costs are transparent and that it can plan over the long-term. Such measures include comprehensive commercial and technical controlling systems. The task here is to identify potential areas that can be optimized and to then control the respective optimization process, for example maintenance measures or to reduce water loss.

Initiatives promote company success

The strategy implemented by OOO REMONDIS Arzamas Service is proving to be a success: (inflation adjusted) operational costs remain practically unchanged despite the pipe network operations being considerably extended. Considerable efficiency gains can, in particular, be generated by altering the work organization. And so, for example, fuel consumption of the fleet of vehicles has been reduced by 40 percent pushing down this particular cost item. The PPP has also been moving in the right direction when it comes to energy management. Small technological changes have already led to considerable success. The careful selection of new pumps will further improve the energy situation over the coming years. The conclusion of all those involved: OOO REMONDIS Arzamas Service is very well prepared and will continue to play a successful role in helping to shape the water resources sector in Russia in the future.

REMONDIS®
ARZAMAS



Process water – a challenge for the industry

CONTRACTING MODEL AS A SOLUTION FOR TREATING PROCESS WATER



Increased competitive pressure combined with legal regulations is forcing many companies active in the metal and automotive industries to continuously optimize their process water treatment systems. An activity that many companies wish to have carried out by a reliable partner rather than using their own resources in order to increase efficiency and reduce costs. REMONDIS Aqua has proved its expertise in the area of process water treatment in many groundbreaking projects. A specialist conference, which was supported and accompanied by REMONDIS, took place recently in Witten in which water experts from the branch were able to exchange experiences and make useful contacts for future business.



a contracting model can be used to optimise process water treatment. One particular advantage of this model is the opportunity it gives a production plant to transfer the risks involved in technology selection, construction work and daily operations to a competent service provider and to be able to plan wastewater treatment costs on a long-term basis thanks to the partner's guarantees. The final address held by Marcus Lodde from the NRW Efficiency Agency in Duisburg gave some very useful tips on how companies can get access to the comprehensive funding programmes for process water treatment projects.

REMONDIS has both national and international experience of industrial process water treatment thanks to the many successful contracting projects it has carried out. Such projects involve modern technology such as membrane technology, ultrafiltration and chemical-physical processes as well as measures to optimise operations and the deployment of REMONDIS' own water pollution control officers. Its clients include well-known companies such as MAN Truck & Bus AG, Deutsche Nickel GmbH, BASF Coating in Münster, Pilkington Automotive, AkzoNobel in Rotterdam as well as firms from the food sector such as the Valensina Group, DMK Deutsches Milchkontor and Lorenz Snack-World. As part of its activities in India, REMONDIS Aqua carries out the process water treatment activities for, among others, the TATA Group, Volkswagen and Lanxess. In the Spanish region of Valencia, REMONDIS recovers energy from the production wastewater generated at WILD Valencia's plant. The energy stored in the wastewater can be recovered and used as biogas. The biogas is then used in the production process as a substitute for mains gas.

REMONDIS has a great deal of national and international experience of industrial process water treatment projects.

Participants at the event included Karl Haase, Chairman of the Board of Management of Deutsche Edelstahlwerke GmbH in Witten, who shed light on the importance of having cost and resource-efficient process water treatment throughout the whole of the metal and automotive industries, Dr Paul Lodde, a partner at the Harnischmacher – Löer – Wensing law firm in Münster, who looked at legal liability issues resulting from the updated Water Resources Act, and Josef Robert from the Fraunhofer Institute UMSICHT in Oberhausen, who gave a comprehensive overview of the latest technology and trends in the area of process water treatment. The practical aspects of successfully implementing concepts to set up efficient and resource-friendly process water treatment systems were depicted in the talks held by Jens Schelp, MAN Truck & Bus AG Munich, and Dr Bruno Schwab, formerly Ruhr-Zink GmbH Datteln. Gerhard Simon from REMONDIS Aqua demonstrated the different ways that





Today, there are already over a billion people who have no access to clean drinking water.



Water resources management

A strong initiative

REMONDIS AQUA INTERNATIONAL IS A MEMBER OF THE GERMAN WATER PARTNERSHIP

Every person needs water but water consumption is growing rapidly and resources are becoming ever scarcer – one of the biggest challenges, therefore, that needs to be faced across the world and which requires sustainable solutions. The demand for the knowledge and technology of the German water resources sector is increasing. This sector is now working together in international marketing measures under the umbrella brand, the German Water Partnership.

The German Water Partnership (GWP) was founded in the spring of 2008. Its current 320 members comprise companies such as REMONDIS Aqua International as well as institutes and associations active in the German water sector. As part of its extensive activities, the GWP works together as partners with the federal ministries for the environment, research, development and the economy as well as with the foreign office.

The aim of this network is to ensure that as many people as possible have access to clean water. And the members of this partnership all believe that the quality seal "Made in Germany" is an excellent argument on the global water market. For, German companies not only have many years' experience of water pollution control and water treatment but are also clearly ahead when it comes to know-how and technology.

Increase in international activities

In order to intensify its measures, the GWP has named a total of 17 countries and regions on which it is intending to focus its attention. Work groups for the different countries organize attendance at trade fairs and congresses. Moreover, they organize delegation trips and invite people to attend workshops in the target regions or receive delegations of water experts and decision-makers from all over the world.

One example of the varied work carried out by the group is the first GWP Day which involved both German and Turkish participants and took place in Ankara in March 2011. International cooperation work and concrete projects were initiated during the event. Further GWP Days will be taking place this year in Croatia and Russia as well as a symposium in Egypt and a seminar trip to China.



REMONDIS Aqua talked about the company's experiences and prospects in Turkey at the GWP Day

Full range of safety measures from one company

AS-CONTROL PROVIDES A COMPREHENSIVE RANGE OF SEPARATOR SERVICES ACROSS THE COUNTRY

AS-CONTROL

Many businesses are responsible for protecting the groundwater and treating highly polluted wastewater. AS-CONTROL operated by REMONDIS ALVA GmbH in Herne provides important support in this area. The four areas of activity of this service provider comprise a complete range of professional services for separator systems.

Maximum protection for the environment: using special vehicles AS-CONTROL even cleans up contaminated channels.

It is work that must be carried out for the sake of the environment – and work that presents above all small and medium-sized companies with a number of challenges: in order to rid wastewater of pollutants such as old oil and fats, it is obligatory for separator systems to be set up and operated at garages, haulier businesses, canteens and restaurants. REMONDIS ALVA's AS-CONTROL division provides professional support covering all aspects of separator systems no matter whether it involves small or large-scale tasks: from carrying out regular cleaning and maintenance work, to carrying out thorough examinations, to completely renovating systems.

Confidently fulfilling legal regulations

Regular cleaning work, checks and maintenance work are essential if a wastewater treatment system is to function efficiently. When carrying out its work, AS-CONTROL not only empties and cleans the oil, petrol and fat separators but also cleans, maintains and repairs shafts. Modern high-tech

vehicles complete with wastewater rinsing equipment and fully equipped maintenance and repair vehicles ensure the best possible results are achieved. Highly qualified employees carry out the in-house inspection work and maintenance work on the separators every one or six months as stipulated by law.

By doing so, AS-CONTROL also creates the best possible preconditions for the major service work that has to be carried out on the systems every five years so that, as far as possible, there are no unpleasant surprises. If the system does, however, need to be improved, then this specialist firm, accredited in accordance with the Water Resources Act, will find the right solutions: from pre-treating the subsurface, to sealing the system to prevent groundwater seeping in and wastewater seeping out to carrying out reprofiling and coating work, AS-CONTROL ensures the separator systems are once again returned to an impeccable condition.

The legal regulations for wastewater treatment are stringent. AS-CONTROL knows how to master these hurdles on behalf of its customers



RENOX – speciality chemicals well under control

REMONDIS INDUSTRIE SERVICE STARTS A NEW SERVICE DIVISION WITH RENOX

At the beginning of September, REMONDIS Industrie Service held an event at its Bramsche site to officially open its new service division RENOX as part of the company's new quality offensive. The branch in Bramsche has been renamed Bramsche Industrial Recycling Centre as part of the company's new concept and because of the new technology that has been installed there.

RENOX is a special division operated by REMONDIS Industrie Service and deals exclusively with speciality chemicals that, for example as part of industrial waste, must be handled especially carefully because of their dangerous, reactive and poisonous nature. However, this system not only deals with such hazardous materials from industrial businesses but also from research institutes, universities, school laboratories, chemists and households. The new service package comprises three components which are offered and carried out by specialist RIS sites in Germany and across Europe:

RENOX TRANSPORT covers all aspects of providing safe transport from the customers' to the processing facility. The waste is taken to the recycling plant once it has been jointly identified/inspected and classified according to the hazardous waste law and once the correct transport packaging has been selected. Special containers are available here for transport by road as well as lifting and carrying equipment, e.g. pressurized cylinders for gaseous materials and special recovery containers.

RENOX TREATMENT carries out the chemical-physical treatment. Depending on the quality and the contents, the gases in the pressurized cylinders can be neutralized via the scrubber system or directly connected to the incineration facility. One special feature of the Bramsche Industrial Recycling Centre is its ability to dispose of HF (hydrogen

fluoride) in pressurized cylinders. Diverse washing systems are available to free the very different kinds of containers and reactor parts of residual materials and deposits. Depending on the material group and the type of packaging, the waste is split up into lighter portions and repacked into smaller packaging so that it is possible to continue with the disposal process. Following the strictest of safety measures, these special materials are processed for direct incineration.

RENOX Direct Incineration demonstrates how a hazardous waste incineration plant can transport the material directly into the furnace via barrel elevators and connecting systems for liquid and gaseous materials. The high-temperature incineration plant (HTVA) operated by the Bramsche Industrial Recycling Centre has a special feature here. Due to the unique way the muffle furnace has been constructed, materials with a longer reaction time (carbide, phosphide) can safely react without any problems. At the same time, this incineration unit has very different kinds of direct connections to the safety zones. The feed lines to the burner guns are so short that a blockage or fault can be ruled out or can be simply and safely dealt with and repaired. Organometallic compounds with a higher amount of solid substances, for example, can be safely disposed of via this system. Furthermore, reactive and toxic chemicals or mixed materials can be incinerated at temperatures over 1,100°C via a special process using very small drums.





Real estate

Waste management with double the advantages

GEWAG REMSCHEID TAPS INTO EXISTING POTENTIAL

Cutting costs whilst protecting the climate – it was with this intention in mind that the municipal housing association GEWAG turned to REMONDIS' subsidiary Innotec. Together, the two companies introduced a waste management system that was fair for all those using it. That was seven years ago. Since then, this project has not only saved considerable sums of money but also 1.1 million kilograms of CO₂.

Innotec

abfall-management

[Das rechnet sich für mich]

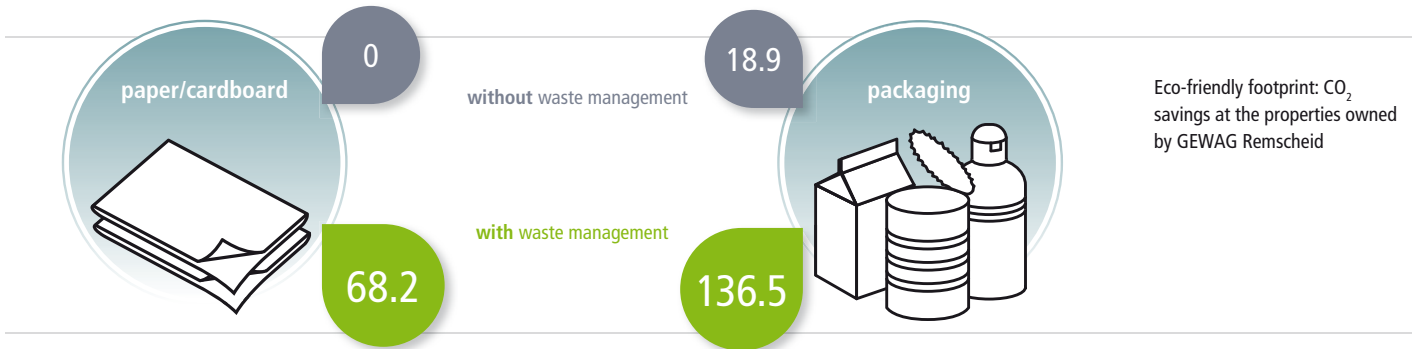
Across the country, the Innotec Group serves more than 250 housing associations with a total of over 1.5 million tenants.

In order to implement this future-oriented form of waste management, waste containers with locked flaps were set up at GEWAG's properties in Remscheid. The tenants are able to open the flap using their own individual access chip. The amount of waste that they throw away is measured and then assigned to their flat and individually invoiced. Innotec is responsible for running the system. As GEWAG's partner, it looks after all of the 2,550 households that are part of the housing association. Its portfolio of services ranges from providing tenants with advice, to carrying out maintenance work on the pay-as-you-throw bins, to assisting in the invoicing process.

Actively separating recyclables helps to prevent climate change

These moves to optimize the waste management system have achieved success across the board: the tenants use this opportunity to consistently separate waste and recyclables thus reducing both their waste volumes and disposal costs. Volumes of residual waste have dropped to below 35 litres per household for a long time now. In contrast, volumes of recyclable waste thrown away into the recycling bin have increased considerably – packaging material from 7 to 54 kilograms per household per year and paper/card from 1 to 18 kilograms. As recycling not only conserves





natural resources but also cuts CO₂ emissions, the carbon footprint of the various properties has improved considerably: by simply separating their waste, the tenants save, on average, 71 kilograms CO₂ per household per year. Looking at all of the houses owned by GEWAG, that means a good 180 tonnes a year.

Reducing pressure on the council's social services budget

For Hans-Jürgen Behrendt, a board member of GEWAG, the economical aspects are also important besides the ecological advantages: "Over the last few years, the amount of money spent by the City of Remscheid on social services has increased by just under 450 percent – and this figure

is expected to rise. It is our duty to ensure that we reduce the pressure on the council's social services budget as much as we can. Lowering waste management costs is an effective way to do this." The pay-as-you-throw bin system cuts costs by around 120,000 euros a year. The individual households benefit most from these savings. However, approx. every one in five of GEWAG's tenants is on some form of benefit so that the council's social services budget also benefits from this.

Intelligent waste management goes down well with the tenants: almost 70 percent of German households are in favour of waste being invoiced using pay-as-you-throw schemes.

"We focus on implementing a variety of economical concepts that benefit both the owners and the tenants."

Dr Ralph Hunklinger, managing director of Innotec Abfallmanagement GmbH

On the way to being the "optimizer" of operational costs

Dr Ralph Hunklinger, managing director of Innotec Abfallmanagement GmbH, on the company's extended range of services and sustainable orientation.

REMONDIS aktuell:

Dr Hunklinger, Innotec has been providing waste management services for housing associations since the end of the 90s. What are the main points of your business now and how will this develop in the future?

Dr Hunklinger:

Innotec is developing into a company that intelligently controls 60 percent of the running costs of a housing association which are invoiced individually.

Our products have, therefore, become considerably more varied accordingly.

REMONDIS aktuell:

Does this mean that the amount of work carried out at the actual properties has increased?

Dr Hunklinger:

Exactly. Our energy management division already provides our customers with meters for measuring heating and water consumption. The waste management experts will also increase the amount of services offered at the properties, for example collecting bulky waste or taking on the responsibility of ensuring the area around the buildings is safe.

REMONDIS aktuell:

What solutions does your company offer to ensure the properties are managed in a sustainable way?

Dr Hunklinger:

Besides looking to optimize costs, sustainability continues to be of great importance to us. For, by increasing the volumes of recyclables, thousands of tonnes of CO₂ can be saved. Moreover, more efficient heating systems reduce the consumption of valuable primary fuels. Thus, Innotec, as part of the REMONDIS Group, makes an important contribution towards genuinely practising environmental protection.



Recycling instead of a shortage of raw materials

ONLY COMPREHENSIVE RECYCLING CAN PREVENT A SHORTAGE OF RAW MATERIALS

It is a wake-up call for the industrial nations in the European Union but also a warning for all other regions around the world: two new studies published by the EU Commission and the United Nations warn of an impending crisis in raw material supply. If all important raw materials are to be available at affordable prices in 2050, then recycling activities must be increased.



More and more people in threshold countries are taking an active part in economic growth. Intelligent recycling systems will safeguard this increasing prosperity

Despite its strong service sector, the economic performance of the EU is dependent on its industrial sector and, as a result, on the availability of raw materials. There could, however, be a glaring shortage of raw materials in the near future which would threaten the safe supply of such materials and, therefore, the prosperity of the European Union. This has been underlined in two recent studies that have been published by the EU Commission in cooperation with the UN. In his "Roadmap to a Resource Efficient Europe", EU Environmental Commissioner, Janez Potocnik, stresses that there must be a clear increase in recycling rates.

prosperity in Africa, Asia and South America can continue to grow – and prosperity levels in Europe can be maintained. For, if the use of raw materials continues to grow at the current rate, then, according to the EU Commission, annual global requirements would increase to 140 billion tonnes – three times the amount, therefore, used today.

REMONDIS already provides solutions that are needed to conserve natural resources.

Recycling safeguards prosperity

One of the main reasons behind economic growth in developing and threshold countries is their high use of natural resources. This great increase in demand has already led to a steady increase in raw material prices. And this indicates that there must be a change in attitude if the increased

Unused recycling potentials can, above all, be found in the area of metals. Across the world, only 18 of 50 metals have a recycling rate of over fifty percent when they reach the end of their lives. The EU Commission's first reaction to these alarming studies has been to declare extensive improvements for their new targets until 2020. By increasing recycling, the pro-capita volume of waste should fall considerably and the amount of recyclables sent to landfill be reduced to a minimum. Its vision for 2050: all resources should be managed and used sustainably.

Jubilee for the environment

AUSTRIAN RECYCLING PLANT SCORES WITH IMPRESSIVE ACHIEVEMENTS

Europe's most modern recycling plant for cooling appliances is located in Kematen an der Ybbs, a market town in the Lower Austrian district of Amstetten. The 500,000th cooling appliance has now been recycled there meaning that 2 million tonnes of CO₂ have been saved in the approx. two years it has been in operation.



Run using three shifts, over 400 kilograms of chlorofluorocarbons (CFCs) and other coolants and propellants are professionally recovered and/or disposed of by the facility every day. Around 95 percent of the materials contained in a cooling appliance can be recovered and processed again as secondary raw materials, including iron, aluminium, copper and plastics. Thanks to the state-of-the-art plant technology, there is no need to pre-sort the equipment – appliances with CFCs can be processed together with those without CFCs.

Chlorofluorocarbons are extremely harmful to the climate. For this reason, the use of cooling appliances containing CFCs has been forbidden in Austria since the 90s. As these household appliances, however, have a very long working life, there is still a very large number of products containing CFCs being handed over for recycling. The plant in Kematen has succeeded in recovering practically 100 percent of the ozone-depleting greenhouse gases. "As far as the recovery of coolants and propellants containing CFCs is concerned, we are particularly proud of the fact that we fulfil the strict

" Thanks to the successful joint venture, UFH RE-cycling, REMONDIS also makes an important contribution to preventing climate change in Austria by recovering raw materials from waste electrical equipment."

Gerhard Jokic, managing director of REMONDIS Electrorecycling and UFH RE-cycling

Austrian environmental regulations in an exemplary way and are able to ensure at the same time that the company is on a solid business footing," explained plant manager, Gerhard Ungerböck.



The success of the fridge recycling plant is being noticed beyond the Austrian border. And so delegations from all over the world are now travelling to Kematen an der Ybbs to learn first hand about this exemplary facility. Incidentally, the plant is run by UFH RE-cycling GmbH, a joint venture between the Austrian firm, UFH Holding GmbH, and REMONDIS Electrorecycling GmbH.



Austria, Poland, France and Germany: REMONDIS operates a total of eight dismantling centres for waste electrical and electronic equipment in Europe

(from left to right) Dr Helmut Kolba, managing director at REMONDIS Electrorecycling, Gerhard Ungerböck, plant manager at UFH RE-cycling, and Thomas Faast, managing director at UFH RE-cycling

Environmental protection knows no boundaries

SAVA IN BRUNSBÜTTEL IS ONE OF THE WORLD'S HIGHEST-PERFORMING PLANTS



When it is a matter of safely and cleanly disposing of hazardous waste, then even large industrial nations such as the USA, Russia and Australia occasionally have problems. Often, there is a lack of suitable facilities for treating these materials – materials that require extra special care and that are an unavoidable result of many industrial production processes. Germany does not have this problem. REMONDIS' hazardous waste incineration plant SAVA, which is located in Brunsbüttel, is one of the world's highest-performing plants. And, since it went into operation, one of the cleanest, too, as the latest figures show.

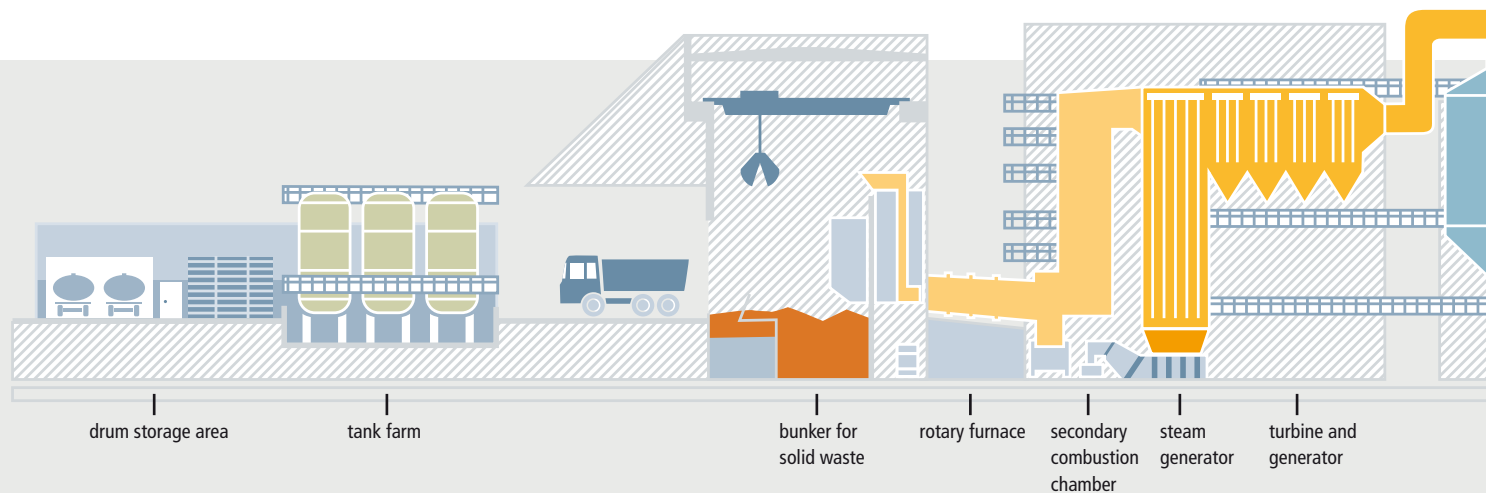
The 2010 environmental figures published for the thermal treatment plant in Brunsbüttel speak for themselves. As in previous years, emissions of materials that have an impact on the environment are clearly below the requirements of the official planning approval for the facility and way below the legal threshold limits. The emission loads remain at the same low level as in the years before. The hard figures show the exceptional efficiency of the plant. In 2010, SAVA disposed of a total of 51,901 tonnes of waste in 7,945 hours. Fossil fuels were not needed during the waste incineration

process. Besides covering its own requirements, 5,680 MWh of electricity was also able to be fed into the national grid. SAVA is also contributing, therefore, practically as a side-effect – and in a highly symbolic way as the plant is in sight of the Brunsbüttel nuclear plant which has already been shut down – to the 'energy turnaround' in Germany.

Last year, SAVA produced a total of 1,670 tonnes of scrap steel, 386 tonnes of gypsum, 8,495 tonnes of slag and 3,723 tonnes of fly ash. In accordance with the 17th Ordinance of the Federal Emissions Control Act and the official planning approval issued by the Federal Environmental Agency in Itzehoe for the Brunsbüttel hazardous waste incineration plant, all emission values connected to the waste disposal processes have been made public. And they are figures to be proud of. The plant's incineration requirements have been clearly defined and are adhered to permanently. Each day, a mixture

“Thanks to our seven-stage flue gas cleaning system, SAVA is clearly below the legal emission ceiling values and, in some cases, even below the detection limit.”

Dr Martin Kemmler, SAVA management



is made from the liquid, paste-like and homogenized solid waste which is then incinerated in a special rotary furnace. Thanks to the slow rotation, the burning waste is continuously circulated as it makes its way to the end of the rotating cylinder where it ends up as slag in a water bath to be cooled down. After the rotating cylinder, the combustion gases are completely burned out in the secondary combustion chamber. The temperature in this chamber is at least 1,100°C with a minimum oxygen concentration of 6% by volume. Once mixed with the air, the combustion gases remain in the secondary combustion chamber for 2 seconds. After the combustion gas has then been cooled down in the steam generator and spray dryer, it undergoes a total of seven complex cleaning and filter stages. This includes an electrostatic precipitator to separate the flue dust, a so-called quench to further cool down the flue gases to saturation temperature to remove the mercury, an HCl scrubber to remove hydrogen halides as well as an SO₂ scrubber and an absorption fabric filter which removes organic materials from the flue gas with the help of activated carbon. Before the cleaned gases are discharged through the chimney, a NO_x catalytic converter transforms all nitrogen oxides into harmless nitrogen and water. The result of this complex procedure is emission values that are normally considerably below the legal ceiling values. Furthermore, the former problem materials – dioxins and furanes as well as the inorganic fluorine compounds – are now even below the detection limit. All in all, a truly clean operation that benefits both the environment and the economy.

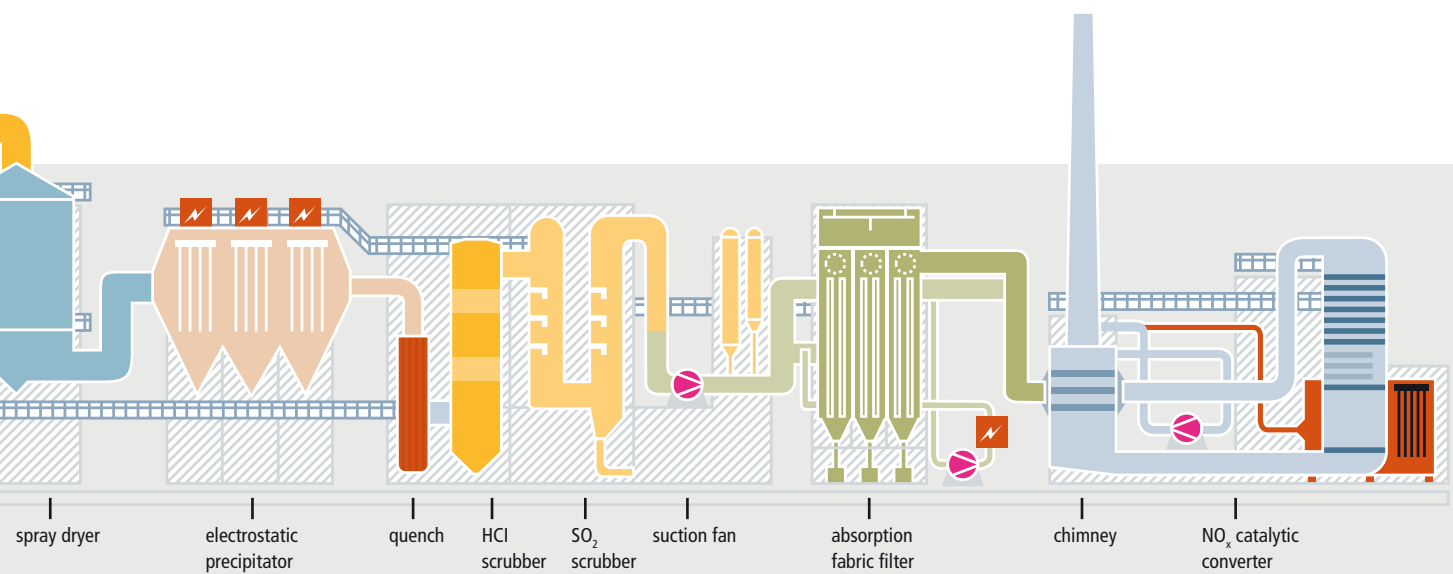
It is, therefore, logical that SAVA also offers its services to international customers. For, environmental protection does not stop at the border. We share one world and our planet is so



Fossil fuels are not needed during the waste incineration process. On the contrary, SAVA feeds 5,680 MWh of electricity into the national grid thus contributing towards the 'energy turnaround'

small that the waste management problems of other countries – in particular those of our European neighbours – affect us all. In the interests of both people and the environment, therefore, the principle should apply that the most suitable, environmentally friendly plants with the highest levels of technology should be used to dispose of waste. It is an undisputable fact that SAVA in Brunsbüttel is one of the highest performing plants of its kind in Europe and, with its unique service, it will continue in the future, too, to contribute towards protecting the environment and to responsible industrial production in Germany and beyond.

Waste should always be disposed of in plants with the highest levels of technology irrespective of where it is located. SAVA is such a plant.



A refreshing partnership

REMONDIS IS RESPONSIBLE FOR WASTE MANAGEMENT AT COCA-COLA IN DORSTEN

Long-term success is only possible if there is responsible management. This is the concept behind Coca-Cola's strategy for sustainability in Germany. And so this drinks producer is accepting no compromises when it comes to handling residual materials: REMONDIS' task to organize waste management at the Dorsten production plant is the beginning of a very promising partnership.

The first Coca-Cola drink was produced in Germany in 1929 and marked the beginning of the company's success story in the country. The company now sells 3.5 billion litres per year – successful numbers that also demand responsible management. Run according to their motto "Live Positively", Coca-Cola's strategy for sustainability in Germany covers seven areas of campaign activity, including "Climate Protection", "Beverage Benefits" and "Packaging". The aim: to act in a sustainable way along the whole of the supply chain – and now with the support of REMONDIS, too.

Many of Coca-Cola's approx. 70 products are made in Dorsten. The waste management requirements are as varied as the range of drinks

The Coca-Cola legend

Since its foundation in 1892, Coca-Cola has developed from being a US American "one-product company" to being the world's largest producer of soft drinks. In Germany, "The Coca-Cola Company" from Atlanta/USA is represented by Coca-Cola Erfrischungsgetränke AG. Across the country, more than 10,000 employees are responsible for filling and selling the range of more than 70 soft drinks – from its core product, Coca-Cola, to isotonic sports drinks to ready-to-drink coffee specialities.



(from left to right) REMONDIS project manager, Fabian Möllers, with Carsten Rademacher, head of planning and materials management, and Holger Lorenschat, production manager, at Coca-Cola in Dorsten

Guaranteed waste management around the clock

Coca-Cola considers packaging to be a valuable raw material – and so it must be handled in a responsible way if the company is to be managed in an ecologically friendly manner. During the drinks producer’s search for a waste management partner for their Dorsten site, REMONDIS fitted their job profile perfectly being a specialist for closed loop recycling. The result: the Selm-based family-run company was commissioned with the task of carrying out waste management at the North Rhine-Westphalian production plant where disposable bottles and cans are filled with various soft drinks and packed for delivery.

REMONDIS has adapted its many years of experience of being a service provider to meet the individual conditions at Coca-Cola, for example the production times around the clock and the quality standards that go way beyond the legal requirements. The high expectations of the company are being met with an absolute guarantee that all processes will be performed with the highest levels of reliability. Paper, card and cardboard, plastic film and empty bottles and cans are first collected in special compactor containers and then returned to the economic cycle whilst ensuring the maximum possible levels of recycling are achieved. Production rejects that have already been filled need to be disposed of in water-tight compactor containers in order to fulfil cleanliness and hygiene standards.

Quick reactions – flexible solutions

The work carried out between Coca-Cola and REMONDIS, however, covers much more than just pre-defined normal case scenarios. This includes fulfilling new waste management tasks whenever they are needed at short notice. From bottle caps to scrap cables and electronic waste to hazardous waste – the specialist for closed loop recycling always creates sustainable waste management solutions whatever the material – thanks, also, to the extensive network of REMONDIS specialist companies. Cables and waste electronic appliances, for example, are transferred to closed material cycles by REMONDIS Electrorecycling.

The new partnership is proving to be a success: Coca-Cola has now extended the scope of activities performed by REMONDIS to include its nearby storage facility and has requested more compactor containers for paper and film. And so both companies are looking to create a long-term partnership in order to create a durable and secure waste management system.

Efficiency, process optimization, legal compliance: Coca-Cola values REMONDIS’ extensive experience in the area of waste management.

As part of its strategy for sustainability, Coca-Cola places great importance on creating closed loop recycling for its packaging. A case for REMONDIS



“We are proud that we are able to fulfil the special requirements and high quality standards of Germany’s largest drinks company.”

Fabian Möllers, regional sales at REMONDIS’ branch in Bochum

EKO-PUNKT Hungary: carving out a new future

A CHANGE IN THE LAW IS FORCING SYSTEM PROVIDERS TO REORGANIZE THEIR BUSINESS



Over the last three years, EKO-PUNKT Nonprofit Kft. in Hungary has been able to steadily grow the number of its licence partners and, as a result, increase the amount of waste packaging it handles. However, a new regulation concerning licence fees in the Hungarian waste management sector, which is coming into force at the beginning of 2012, will hand over the tasks of the non-profit-making business to the state. The private-sector system operators will have to reposition their businesses.



(from left to right) Zoltán Juhász (project manager), Hédi Flanek (marketing and PR manager), Csilla Sztarinka (managing director), Nikolett Szekeres-Szűcs, (assistant to the management)

This amendment to the Hungarian licence fee regulation will apply to tens of thousands of packed products and their manufacturers. With the passing of the new law on the so-called "Environmental Protection Product Fee" from 01 January 2012 onwards, those companies placing sales packaging onto the market will no longer have the choice as to whether they wish to transfer their disposal obligations to a private-sector system operator. From this point onwards, the state is to coordinate the disposal of sales packaging. This regulation will affect the future of organisations such as EKO-PUNKT, which have up to now coordinated the collection and recycling of waste packaging. The contracts will remain valid until the end of 2011. "Over the coming months, we will do everything in our power to help our waste managers and partners responsible for packaging to switch to the new system," said Csilla Sztarinka, managing

director of EKO-PUNKT Nonprofit Kft. EKO-PUNKT has organized several conferences to inform their customers and other interested parties about the new product fee regulation.

Since EKO-PUNKT began work in the country three years ago, it has been commissioned by over 300 companies placing sales packaging onto the market to take over their disposal obligations. These firms include well-known names such as McDonald's, Burger King, AVON, Decathlon, Schneider Electric, Segafredo, Hama, Braun and Szentkirályi Ásványvíz Kft., which place 80 million bottles of mineral water onto the market each year. In the meantime, EKO-PUNKT has been able to double its performance in the area of waste treatment year on year. Thus last year, this systems provider collected and recycled around 17,000 tonnes of waste packaging, almost 10 percent of which was packaging that had been separated by households. REMONDIS' Hungarian subsidiary has also published information brochures, such as its 'A-Z on recycling waste', and carried out campaigns at kindergartens and schools to promote environmental awareness among the population and talk about the advantages of separating waste at home. If the state decides to take over the coordination of waste packaging collection in the future, then REMONDIS is intending to concentrate on the actual collection and recycling tasks. For, in Hungary, too, it will not be possible to carry out these tasks without support from the private sector. EKO-PUNKT is looking to continue to contribute towards Hungary's waste management sector in the future, too.





Environmental services

REMONDIS receives environmental award from NABU and VW Leasing

AN EXCELLENT EXAMPLE OF A "360-DEGREE" APPROACH FOR ITS FLEET MANAGEMENT

NABU (The Nature and Biodiversity Conservation Union) and Volkswagen Leasing are continuing their successful cooperation work to protect the environment and prevent climate change. On 06 September, the management spokesman of Volkswagen Leasing, Lars-Henner Santelmann, and NABU President, Olaf Tschimpke, handed over the prizes to the winners of this year's "Green Awards – The Green Fleet 2011" in Berlin in the presence of the Federal Minister for the Environment, Dr Norbert Röttgen. For the very first time, an 'initiative prize' was awarded in recognition of a fleet strategy that was particularly environmentally friendly. REMONDIS was the winner of this prize.



The ceremony held for the second "THE GREEN FLEET" awards was presented by Claudia Kleinert, who being a weather expert for the German TV channel, ARD, is particularly interested in the subject of climate change, and the figures she quoted were particularly impressive. The 77 participating companies with their approx. 9,200 vehicles have been able to save 1,650 tonnes of CO₂ and just under 630,000 litres of fuel this year. This year's award winners include PCEF GC GmbH and SEAR GmbH (in the category up to 100 vehicles) as well as REMONDIS' long-standing customer, CLAAS KgaA, mbH (in the category over 100 vehicles). Pflgeteam Wentland and HypoVereinsbank were presented awards for the "lowest average fuel consumption" category.

The special award "for the 360-degree approach" was presented to REMONDIS board member, Max Köttgen. According to the jury, REMONDIS was presented with this award because the company's core business is environmental ser-

vices and because a very high number of REMONDIS' fleet of vehicles belongs to the 'blue motion low fuel consumption category' and because REMONDIS carries out intensive training courses for its drivers to ensure they contribute towards the fuel savings in a positive and sustainable way. Today, 40% of REMONDIS' fleet of over 1,000 vehicles leased from Volkswagen are environmentally friendly vehicles. "Volkswagen's unrivalled BlueMotion technology, in particular, offers the best possible symbiosis between economics and ecology," explained Herwart Wilms, a managing director at Remondis Assets & Service GmbH. In addition, REMONDIS has special incentive systems for its drivers in order to further encourage the selection of environmentally friendly vehicles. This concept is rounded off with ECO driving courses which are held regularly. 250 sales employees have already taken part practising how to drive their vehicles in a way that is kind to the environment. The company's long-term goal is for all employees, who travel for the company, to take part in such an ECO driving course.

REMONDIS has launched special incentive systems for its drivers in order to further encourage the selection of environmentally friendly vehicles.

Everything is shipshape in the "City of Sails"

REMONDIS IS KEEPING THINGS CLEAN IN AUCKLAND, NEW ZEALAND



The City of Auckland is proud of its nickname, the "City of Sails". According to the statistics, just under 50 percent of the 1.4 million local inhabitants own their own boat. This multi-cultural city on New Zealand's North Island is often considered to be the secret capital city of the South Pacific region. Polynesians live in harmony with Europeans, Asians and other groups of immigrants in this friendly place which is regularly to be found on the list of the world's Top Ten best cities to live in. Auckland's good reputation also has to do with its cleanliness. And REMONDIS makes an important contribution towards this.



The New Zealand MP Nikki Kaye worked at REMONDIS for one day. She is doing all she can to improve waste management in her home city of Auckland

Each year around 1.4 million tonnes of waste are generated in Auckland. A significant amount of this is organic material. It is estimated that around 100,000 tonnes of high quality compost could be produced from these materials, were they to be processed accordingly. As is the case all over the world, the waste contains other valuable raw materials which will have to be recovered in the future. In order to increase the population's awareness of the significance of waste as a source of raw materials, the New Zealand TV channel, Great Southern Film and Television Company, approached REMONDIS at the end of 2010. As part of its well-known series, "Make the Politician Work", the MP, Nikki Kaye, was to get to see first hand, on behalf of her constituents in the Auckland region, the waste management work carried out in the country's largest city. Nikki Kaye is committed to

achieving a "more intelligent and cleaner Auckland" with her campaign "Thrash the Trash" and is doing all she can to ensure waste volumes are reduced and a modern recycling sector set up in Auckland. Many people living in New Zealand now consider the high volumes of waste to be a growing risk for their environment. In order to solve this problem, the new city authorities are working together with partners such as REMONDIS to improve material flow management. Besides reducing the amount of waste generated, the efforts being made to extend and modernize their system is heading in the direction of a genuine recycling economy.

As part of the popular programme, the politician was invited to "get her hands dirty" and experience first hand what waste management in Auckland actually involves. The city council

REMONDIS Australia at the 2011 IGA Metcash Fair



REMONDIS is further extending its growth strategy in Australia, too. For the first time this year, the company took part in the annual Metcash Fair in Queensland in order to present REMONDIS Australia's range of services to a wider group of customers.

Metcash is one of the largest Australian marketing and distribution companies primarily operating in the grocery and drinks sectors as well in the area of wholesaling house-

hold goods. Today, REMONDIS already acts as a waste management partner for Metcash in all Australian states and it believes there is further room for growth in the re-



One of REMONDIS' collection vehicles in Auckland harbour. The New Zealand branch ensures this large city on the Pacific Ocean is kept clean

contacted REMONDIS which is responsible for, among other things, collecting and disposing of waste from the business district in Auckland's city centre. During the three days of filming, Ms Kaye visited REMONDIS' branch in Avondale and collected the REMONDIS bags filled with rubbish from the central business district in front of a live camera. She was able to get a direct insight into the condition of the city centre before and after REMONDIS had collected the rubbish. The programme was then broadcast across the whole of New Zealand on the leading TV channel 1 advertising REMONDIS' name beyond Auckland, too, throughout the country. REMONDIS not only collects the waste from the central business district on behalf of its client, the regional

Auckland authorities, but also empties the mobile garbage bins from around 80,000 people living in the town. For Nikki Kaye, this experience helped to increase her motivation even more to use her political work to promote the expansion of the recycling sector in her country. REMONDIS is, of course, happy to help her where it can.

REMONDIS New Zealand provides waste management services for:

- over 120,000 households = 5,520,000 collections = approx. 60,000 tonnes
- paper/cardboard ■ metals ■ tyres/rubber
- mixed waste ■ biowaste ■ construction waste
- glass ■ wood

tailoring sector, for example with the IGA supermarket chain. REMONDIS was able to take part in the three-day event, which was held on the Gold Coast from 17 to 19 July, as the only waste management and environmental service provider and demonstrate its recycling solutions for, among other things, mixed waste and old paper. The IGA supermarket chain has branches in practically every Australian city and is, therefore, particularly interested in having a national solution for its waste management activities. REMONDIS' national team was able to use this event to build up long-term ties with new customers.



REMONDIS Australia was able to make some important contacts at the IGA Metcash in Queensland. (from left to right) Ashley Skew, commercial manager, – State of Victoria – and Anthony Zammit, national business development manager

EVZA – actively working to prevent climate change

REGIONAL BISHOP ILSE JUNKERMANN LEARNS ABOUT THERMAL RECYCLING AT REMONDIS



As part of the campaign "Klimawandel-Lebenswandel" [climate change – life change], the Regional Bishop of the Protestant Church for Central Germany, Ilse Junkermann, visited EVZA Staßfurt on 28.06.2011 as one of the industrial businesses in the region. Having first listened to a presentation of the Rethmann Group and EVZA by the managing director Bernd Fleschenberg, the representatives of the Protestant Church were able to take part in a tour of the site to get an impression of how the plant works as well as to talk to the employees at their work stations.

By substituting fossil fuels with waste, EVZA contributes towards reducing CO₂ emissions.

Energie- und Verwertungszentrale GmbH Anhalt (EVZA/ Anhalt energy and recycling centre) in Staßfurt, Saxony-Anhalt, is one of the most modern thermal waste treatment plants in Europe. The waste, primarily municipal waste and commercial waste similar to waste from households, is used as a fuel to generate electricity and steam. The electricity is used both to cover the plant's own requirements as well as in the national grid. In addition, steam is produced to sup-

ply the neighbouring soda works with process steam thus increasing the efficiency of the complex. By substituting fossil fuels with waste, the plant, a fully owned REMONDIS subsidiary, contributes towards reducing CO₂ emissions. Producing up to 170,000 MWh of electricity and 360,000 MWh of process steam a year, EVZA is today already mak-

ing a valuable contribution towards the 'energy turnaround' in Germany.

"The visit to the plant has given me an interesting insight into the recycling sector. I am impressed by how creatively the business handles the waste in order to recover all recyclable materials as well as the energy contained in them. This is an important task especially considering the fact that our planet's natural resources will not last for ever. At the same time, actually seeing the large volumes of waste produced makes you realize just how important the 'Ethics of Enough' is as well as the move to prevent waste," commented Ilse Junkermann, Regional Bishop of the Protestant Church for Central Germany. "I really felt the commitment of the REMONDIS employees to their work. I would like to encourage the company to continue to put priority on people – employees, customers, business partners and neighbours – as well as on sustainability as it carries out its responsible business activities."

"I am impressed by how creatively the business handles the waste." Ilse Junkermann, Regional Bishop of the Protestant Church for Central Germany

ply the neighbouring soda works with process steam thus increasing the efficiency of the complex. By substituting fossil fuels with waste, the plant, a fully owned REMONDIS subsidiary, contributes towards reducing CO₂ emissions. Producing up to 170,000 MWh of electricity and 360,000 MWh of process steam a year, EVZA is today already mak-

The delegation with Regional Bishop Ilse Junkermann and Bernd Fleschenberg, managing director of EVZA, during a tour of the EVZA plant in Staßfurt



Urban mining with a system

PROWASTE INCREASES RECYCLING RATES AND COST EFFICIENCY AT CONSTRUCTION SITES

The materials that were left over after the 'Thier Galerie' shopping centre had been completed were returned to the economic cycle as raw materials: this large-scale construction site in the city of Dortmund is one of a growing number of venues of cost-efficient and eco-friendly waste management logistics. The recipe for success is the innovative service concept developed by ProWaste GmbH.

Maximum recycling rates and a 50% reduction in waste management costs – ProWaste's concept for construction site logistics means double the advantages.

The owners' cheerful anticipation of seeing the new building is often spoiled by the waste management tasks at the construction site. For, each individual craftsman has his or her own solution and in many cases the construction companies involved fail to separate their waste leaving behind a mixture of materials that is expensive to dispose of. And so it is possible that up to 1.5 percent of the construction sum has to be spent on waste management. ProWaste GmbH, a company in which REMONDIS has a 49 percent share, is not prepared to leave things as they are. By using coordinated waste management processes, it ensures that there is ecological and economical efficiency at large-scale construction sites.

Relieving pressure on the environment and budgets

At the moment, this innovative service is proving to be a success at 14 large-scale construction sites across the whole of Germany. One of these is the construction site of the 'Thier Galerie' shopping centre. Up to 30 ProWaste employees work at this large-scale construction site in Dortmund. Their task: to minimize waste management costs

for the investor firm, ECE, as well as to return as many recyclables as possible to the economic cycle. To achieve this, ProWaste developed an individual waste management concept, coordinates software-supported deliveries of building materials and ensures that the fractions of waste generated are strictly separated according to type on site.

Now that work is being carried out inside the shopping centre, a number of containers have been placed on each floor – each for a different kind of recyclable waste – which are emptied when necessary according to a special logistics concept. By organizing waste management at construction sites in this way, up to 80 percent of the residual waste can be recycled. At the same time, the amount of cost-intensive mixed construction waste is reduced to just ten percent. This is added value that the market cannot ignore and which is bringing ProWaste rapid growth. When Martin Przybilla and Thomas Dahlmann founded ProWaste in 2006 they had just one employee – they now have a workforce of 62 employees. And this number is expected to grow.



All aspects of construction logistics from one company: besides collection logistics, ProWaste's fields of activity include supply logistics, the setting up of construction sites and securing construction sites.



News in brief

50 years of BDE – A festschrift to mark the jubilee

WASTE AS A RESOURCE – DEVELOPMENT, IMPORTANCE AND FUTURE OF THE WASTE MANAGEMENT SECTOR

The BDE (Federal Association of the German Waste Management Industry) is celebrating its 50th anniversary this year. The festivities to be held by this waste management association, which has the largest number of members in both Germany and Europe, are taking place in Berlin on 10 and 11 November.

During this occasion, BDE President, Peter Kurth, and BDE managing director, Anne Baum-Rudischhauser, head of the BDE's office at the EU in Brussels, will be presenting a festschrift. It contains around 35 articles from high-calibre authors from the world of business, politics and science in-

cluding the EU commissioners, Potočnik and Tajani, Federal Environmental Minister Röttgen and Federal Minister of the Economy Rösler as well as the former federal environmental minister Töpfer and BDI president Keitel. Readers will be able to get a multi-faceted look at how modern waste politics began and the development of the recycling sector as well as at the resource economy of the future. The 400-page festschrift is to be published at the beginning of November and is to be officially presented at the anniversary celebrations. Copies can already be pre-ordered by contacting the BDE press office.

News in brief

REMONDIS Region North expands

The branch in Melsdorf is Oetjen Rohstoffhandel GmbH's new head office



On 01 August 2011, REMONDIS took over parts of Oetjen Rohstoffhandel GmbH, a firm based in Zeven. The company, which will continue to be run under its established name,

has three locations in the towns of Rotenburg, Zeven and Seedorf in the district of Rotenburg Wümme. The company's new head office will be REMONDIS' business location in Melsdorf. The range of services of the new REMONDIS company includes, besides collecting paper/card/cardboard and household waste for the city councils and DSD collection work for the district authorities, a recycling facility for end-of-life vehicles and a scrap metal dealing business. As a result of the takeover of Oetjen Rohstoffhandel GmbH, the Region North's team of employees has increased to 60. Arne Oberbeck and Norbert Groth have been appointed managing directors of this newcomer to the REMONDIS Group. "By integrating Oetjen Rohstoffhandel GmbH into the REMONDIS Group, we have succeeded in making an important step towards achieving greater growth in the north region. The areas of recycling end-of-life vehicles and scrap metal trade are a particularly significant extension to REMONDIS' range of services in north Germany," explained Oetjen managing director, Arne Oberbeck.

TOV Seltik supports campaign to separate waste in Kiev

TOV Seltik has become a partner of the Ukrekoressursy social advertising campaign to promote the collection of separated waste in Kiev. TOV Seltik, one of the leading environmental service businesses in Kiev, is supporting the campaign against the backdrop of the separate waste collection system introduced into Kiev by REMONDIS in 2010. Since then, the company has already set up over 500 containers for recyclables in the Ukrainian capital city and processes the recyclables collected in its own sorting plant. The campaign aims to inform about and promote the separation of

waste by households. TOV Seltik is a company owned by the German REMONDIS Group. REMONDIS has been active as an environmental service company in the Ukraine since 2008. Via its branches and subsidiaries, REMONDIS and its approx. 600 employees collect and process household and commercial waste from 2.4 million local inhabitants from seven business locations.



Events – Exhibitions – Conferences

REMONDIS presents its services and products at a large number of international events. A full list can be found on the Internet at <http://www.remondis.de/aktuell/messen-und-veranstaltungen/>



IWES | 3.11.–4.11.2011, Istanbul, Turkey

Exhibition, symposium and conference – this specialist fair and conference cover all aspects of waste management under one roof. REMONDIS will be presenting its latest technology and providing some interesting views in the largest and most modern congress centre in Turkey.



POLEKO | 22.11.–25.11.2011, Poznan, Poland

The largest specialist exhibition of its kind in Eastern Europe is focusing on environmental protection this year. Topics such as renewable energy and recycling will be playing an important role. Being one of the leading water and environmental service companies, REMONDIS will also be setting up a stand here to provide information about our future-oriented activities in Poland.

CommunTech



CommunTech | 8.11.–11.11.2011, Kiev, Ukraine

The central topics of the Ukrainian CommunTech are energy and resource-friendly technology as well as equipment and materials for local authorities. Exhibitors at this international fair will, in particular, be demonstrating special equipment for carrying out municipal services. REMONDIS will be there showing what the future will bring.



**Pollutec | 29.11.–2.12.2011,
Paris-Nord Villepinte, France**

This international specialist exhibition for environmental technology and renewable energy will be presenting a wide range of innovative products and solutions. REMONDIS will be taking part in the event providing information about its trendsetting portfolio of services and products.

Apprenticeships rather than a shortage of skilled workers

518 NEW APPRENTICES BEGIN THEIR WORKING LIVES

If you ask the “old hands” in their second or third apprenticeship year at REMONDIS about their future prospects, the answer is loud and clear: “All doors are open to us!” And this is a logical answer considering the demographic development and the lack of natural resources in Germany. Being a company, whose core business is sustainability and the conservation of natural resources, REMONDIS faces the impending shortage of skilled workers by starting its own educational offensive every year that offers both the ‘job starters’ and the company the best prospects for the future. REMONDIS aktuell invited three apprentices to take part in an interview.



REMONDIS and its sister companies, SARIA and RHENUS, offer apprenticeships for 35 different professions – from the fields of chemical technology, motor technology and environmental technology, to commerce and IT, to electronics and industrial metal engineering to logistics and craftsmanship skills.

518 new apprentices joined the RETHMANN Group in August to begin their working lives. High expectations and curiosity were combined with a few doubts and some uncertainties. Will the profession I have chosen live up to my expectations? What requirements are there? Caroline Müller (20, second apprenticeship year), Fabian Knappe (20, second apprenticeship year) and Pascal Ressemann (21, third apprenticeship year) have already found the answers to these questions. All three are training to become industrial clerks; Fabian and Pascal are doing a combined apprenticeship to gain a bachelor’s degree in economics. What have their experiences been so far? What tips can they pass on to their ‘successors’?

“I had been interested in finding a commercial job for a long time,” Caroline Müller explained. “Of course, I also thought about doing a dual apprenticeship/degree course after getting my high school leaving certificate. I decided, however, to “only” do the apprenticeship as the course was shortened to two years as I had a high school leaving certificate. I found REMONDIS interesting right from the start. All

the advantages of a large, internationally active company can be found here with a wide range of operational areas. For Fabian Knappe, the question was whether to do a ‘normal’ or a ‘dual’ degree course. “Of course, I asked around amongst my family and friends and everywhere else in fact and the answer was always the same: that by doing a ‘dual’ apprenticeship/degree course, I would have both in a very short space of time – a professional qualification and a bachelor’s degree and at the age of just 22. Okay it requires a high amount of energy. Four days a week at the company, Tuesdays at the vocational college to begin with and then university, and then university on Saturday, too, from 8am to 2.45pm – I needed some time to get used to it at the beginning. But I had imagined it to be much worse (smiles). Especially now, after 18 months, my apprenticeship time to become an industrial clerk has been completed and I no longer need to go to vocational college.”

Pascal Ressemann always wanted to have a job that had something to do with economics: “Several periods of work experience at REMONDIS and SARIA allowed me to have a look at what the company does and convinced me that my decision to do a ‘dual apprenticeship/degree course’ was right. What I also felt was important was the close way that theory and practice were interconnected. And even if this method does require a lot of effort, it is certainly doable with the right level of commitment. The high level of support that we receive here also makes a big difference. I have successfully completed the first part of the apprenticeship qualifying to become an industrial clerk. And there is one thing that I can definitely say: REMONDIS prepares us really well for the final exam!” Caroline has a final tip for the new apprentices: “They don’t need to worry. All the different departments will welcome them with open arms. My conclusion so far: the apprenticeship is fun. I have always gone home with a positive feeling so far.”

> Impressions



◀ Vladimir Fedorovitch Suschkov, Lord Mayor of the Russian city of Saransk, and Svetlana Bigesse, project manager at REMONDIS International, at an appointment in Saransk

▶ The Honorary Chairman of the Supervisory Board, Norbert Rethmann, with Dr Martin Rethmann, Chairman of the Supervisory Board at RETHMANN AG, and REMONDIS board member, Egbert Tölle, during a visit to REMONDIS in Turkey



▶ Torsten Weber, managing director at REMONDIS International, at the German-Polish economic summit in Warsaw



▶ Andreas Oellerich, HR Manager at REMONDIS (back row) and Herbert Jahn, head of the plant's fire fighting department, welcome the new apprentices to Lünen



◀ At the NRW summer party in Berlin, (from left to right): NRW Minister President, Hannelore Kraft, chairman of the SPD Party, Sigmar Gabriel, and REMONDIS managing director, Herwart Wilms



2011



2015



2019



2023



2027



2031



2035



2039



2043



2047




2051

**2056?**

No Niobium – No Modern Cruises.

> Shortage of raw materials

 The rare metal, niobium, is used to make special steel that is particularly strong. If reserves run out, as predicted, in less than 50 years' time, then this will not only have fatal effects on ship building. Availability could become a problem even before 2056: 92% of the total volume mined comes from one single country. REMONDIS is developing recycling methods to ensure such supply bottlenecks need never happen. The highest levels of quality, worldwide. For a secure future. **German Qualität.**

Sources: United States Geological Survey (USGS 2010), Cologne Institute for Economic Research (IW 2008)

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The availability of niobium has been classified as particularly critical.