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Moving away from landfills towards more recycling

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Flag

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Dear Readers!

At the end of the year, it is never a bad idea to take a look back at what has been achieved and to try and predict what may happen in the coming year. 2014 was a turbulent year in many ways. The current conflicts in Europe and other parts of the world continue to affect the global economic climate. Chancellor Angela Merkel laconically summed up the situation at the G20 summit in Brisbane, Australia, commenting that it was ‘impossible to overlook the fact that the current geopolitical tensions were not good for growth’. Against this backdrop and despite all the crises, we are very pleased to see that REMONDIS has enjoyed steady growth this year and strengthened its position on the global market. This can, on the one hand, be put down to the realignment and strengthening of our scrap metal activities and our maintenance and services division. On the other hand, REMONDIS has succeeded in expanding its regional presence and extending the reach of its networks both in Germany and abroad. This year, the company has also focused on intensifying its operations in core regions, i.e. in the regions it is expecting to experience long-term growth.

Since the Solidarnosc era, Poland has developed into a kind of model EU member state with great prospects for growth and a genuine enthusiasm for the European ideal. In this positive economic climate, REMONDIS has not only managed to maintain but also to expand its position on the Polish market – and this can all be put down to the quality of its services and its ability to invest. Examples of this can be found in Stettin, Gliwice and Opole as well as in this issue of the REMONDIS aktuell magazine.

Let us attempt to predict what may happen in 2015. Discussions are currently being held in Germany about passing a new recyclables law. We must wait and see just what challenges we will have to face. According to a report published by the Fraunhofer Umsicht Institute, carbon emissions could be reduced by 1.6 million tonnes if absolutely all recyclable waste in the country were to be collected and recycled. This would be the equivalent of a good 6% of the German government’s target to reduce its emissions by at least 40 percent by 2020. REMONDIS, as the biggest water, recycling and industrial services company, is ready and prepared to contribute towards achieving these goals.

Healthy growth and sustainability will continue to be two sides of the same coin at REMONDIS in 2015. As always, we will drive our business forward to further stabilise and expand our company divisions. Such growth is only possible with well qualified and highly motivated staff and with satisfied customers and partners.

We would like to use this opportunity to say a big ‘thank you’ to you all and to wish you a very happy Christmas and all the very best for 2015.

Yours

Egbert Tölle, Board Member

Egbert Tölle, Board Member
In pole position on a dynamic market

REMONDIS RISES TO THE CHALLENGES IN POLAND

REMONDIS’ rapid expansion in Central and Eastern Europe began in Poland back in 1992. New laws passed in the country last year have pushed forward the government’s goal to make waste management and recycling in Poland more environmentally friendly: local Polish authorities are now obliged to achieve much higher recycling rates. Over the years, a number of REMONDIS projects have become role models for other regions indicating that these latest changes to the Polish recycling market could further strengthen the company’s position on the market.
REMONDIS signed its second public private partnership agreement with a Polish municipality in 1993; over 20 years on, it has proven to be a driving force for progress and innovation: today, the 180 employees working for the public private company in Szczecin have a new head office and state-of-the-art facilities and continue to promote modern recycling activities wherever they can. Situated in the northwest of Poland, this port city has a new sorting facility for recyclable materials and a plant producing refuse derived fuels, demonstrating, therefore, what the rest of the country should be doing soon: increasing recycling rates of municipal recyclable and residual waste.

Protecting the environment, preventing climate change

Another state-of-the-art recycling project can be found around 450 kilometres further south east in the Polish city of Opole where a tunnel composting plant has been built alongside the existing household waste sorting and recycling facilities. This joint venture between the city council and REMONDIS has, therefore, invested in modern technology enabling its compostable waste to be organically recycled: an intelligent system, comprising 20 tunnel sections, conveyor belts, biofilters and other pieces of equipment, which reduces the volume of residual waste by up to 40 percent – and limits the amounts of methane gases and carbon dioxide that are released into the atmosphere. The plant in Opole, therefore, reflects REMONDIS’ aspiration to establish integral and sustainable solutions. A trend that is now gradually emerging right across the country.

Since entering Poland in 1992, REMONDIS has expanded and strengthened its position on the water and recycling markets year on year: today, the company has around 2,400 employees working at 43 different locations around the country who together ensure that over 560,000 tonnes of recyclables and raw materials are recovered every year. Since 2011, REMONDIS Poland has been managed from its new head office building in Warsaw: built according to the so-called “passive house” standards, this investment is testament to the fact that the company is well and truly established on the market – and that it wishes to implement sustainability at absolutely all levels of its business.

Each year, at least 2,000,000 tonnes of waste in Poland is disposed of incorrectly – and so is unable to be recycled.
New laws to drive change
Well known for its innovations and high quality services, REMONDIS is well positioned to take on any challenge it might have to face. New regulations regarding the handling of recyclable and residual waste have been in force in Poland since July 2013. These stipulate that municipal waste is now the property of the city and district authorities. This, in turn, means that the local authorities are responsible for processing and recycling the waste – which should lead to a clear increase in recycling rates over the next few years. There has, without a doubt, been much progress made in the area of environmental protection in Poland since the collapse of the Iron Curtain. There is, however, still a great deal for the country to do before it catches up with EU standards: according to the Polish Ministry for the Environment, 78 percent of recyclable and residual waste ends up at landfill sites, 600 of which are legal – many of the areas used for dumping waste, however, are not. The dubious practice of offering waste collection services at discount prices is to come to an end to protect the environment.

The financial strength to invest: over the last twenty years, REMONDIS has invested around 30 million euros in Poznan alone

Clear-cut public procurement rules
Local inhabitants and the environment gain the most from Poland’s improved waste management sector and its higher standards – but companies which have the necessary environmental know-how and are able to cope with the increasing demands can also benefit. Despite the steady growth experienced by the leading companies, such as REMONDIS, the Polish waste logistics market remained highly fragmented with up to 4,000 firms offering their services. A law passed in 2012 made it obligatory for local authorities to use transparent public procurement methods and to award an exclusive contract to one company for districts with fewer than 10,000 inhabitants; contracts should be awarded for each waste fraction in larger districts. There is, therefore, a greater demand for individual providers able to offer extensive expertise covering a whole range of logistics and waste management services.

Sustainable solutions are in high demand in Poland as the recycling market there continues to undergo change. REMONDIS is able to make the most of its expertise here

It is obvious what the Polish government is trying to do: the network of high quality recycling systems in the country should be expanded so that there is an effective and sustainable recycling sector in all parts of Poland. At present, only 14 percent of municipal waste is recycled, seven percent composted and only one percent treated thermally to produce energy. This situation should change; more material life cycles must be closed. Polish local authorities have been given clear instructions: they must be recycling at least half of all their conventional household waste by 2020. Wherever possible, non-recyclable materials should be used to generate heat and electricity: numerous thermal treatment plants are currently being planned across the country, many of which are to receive EU funding.

REMONDIS’ new head office in Szczecin

The Polish waste management market was worth approx. 1.2 billion euros in 2012 and it is expected to enjoy annual double-digit growth over the coming years. To be able to benefit from this growth and to play a role in the public sector, a company should have a wide range of services as well as comprehensive know-how and expertise. REMONDIS not only operates in the cities but also works together with small municipalities providing them with bespoke solutions to cover their needs: thus, for example, the District of Drobin and its approx. 3,000 local inhabitants now have a fully automated waterworks, a reliable residual waste collection service and their green spaces are regularly maintained by the company.

REMONDIS’ new head office in Szczecin
New projects highlight areas of growth

The public-private partnership model has proven to be a great success in Drobin as it has in many other regions. Moreover, REMONDIS is also making public sector history as a privately run contractor: for example in Poznan and the Wielkopolska Voivodeship. Here the extensive range of services provided by the Polish company, REMONDIS Sanitech Poznan, is not only used by 500,000 local inhabitants but also by industrial, commercial and retail businesses. This push towards greater modernisation within the municipal recycling sector has also strengthened the company’s established businesses, as can be seen in Gliwice: the joint venture run by REMONDIS and this Polish industrial city has now invested in a new mechanical-biological recycling plant. Construction work on the new plant began in October and is expected to have been completed by the middle of 2015. Looking at the recycling set up in Opole, this new facility will not only create 50 jobs, it will also benefit the 185,000 people living in the city as far less waste will be sent to landfill – and so improve the environment they live in.

A strong partner for the Polish industry

REMONDIS is able to react confidently and successfully to new regulations and changes to municipal recycling markets. One of the reasons for this is because it has a second extremely stable and equally successful line of business – its industrial services division. This is also the case in Poland: REMONDIS has been offering hazardous waste and industrial residual waste services in the country since 1998. REMONDIS Electrorecycling, REMONDIS Medison, BUCHEN, XERVON and TSR-Recycling all have branches in Poland enabling the company to provide a wide range of services to its commercial customers: from medical laboratories, to global players such as Bosch, Siemens and MAN. EKO-PUNKT’s take-back system also closes material life cycles, professionally processing recyclable and residual materials generated by local authorities.

“Thanks to its branches and subsidiaries, REMONDIS has a particularly good set up for serving commercial customers.”

Torsten Weber, Managing Director of REMONDIS International

From left to right: Tomasz Rysz, Managing Director of Śląskie Centrum Recyklingu, Zygmunt Frankiewicz, Mayor/President of the City of Gleiwitz, Torsten Weber, Managing Director of REMONDIS International, Dr Dariusz Szyszka, Managing Director of Śląskie Centrum Recyklingu
“Corporate compliance” is a subject our staff encounter more and more often when they meet up with customers, business partners or politicians. Practically every contract and tender now has a clause stipulating that corporate compliance guidelines must reflect – at the very least – minimum international standards and that these must be adhered to at all times. Nowadays, a company’s success depends very much on whether it is prepared to voluntarily commit itself to such standards. What exactly is corporate compliance, however, and what must each member of staff do to let their customers and business partners know that REMONDIS is not just a competent partner but also a company that operates an ethical, moral and responsible business?

According to a study published by PricewaterhouseCoopers, the total damage caused by compliance violations in Germany lay at around 6 billion euros in 2007 alone.
Corporate Compliance effectively describes the ability of a company to adhere to a set of rules, no matter whether they are specific regulations, codes of conduct or guidelines. This compliance, however, goes far beyond simply sticking to statutory regulations. In other words: it is not enough for a company to be operated in a legally correct manner, it must also be run in accordance with fundamental moral and ethical principles – promoting equal opportunities and fair competition and preventing corruption and child labour at all its businesses, both on its home market and abroad. Senior management is responsible for the actions of its staff and, in the worst case scenario, is at personal risk of prosecution. If an individual employee acts improperly, this might not only have serious legal consequences for the person in question but also for the company as a whole and its senior management team. REMONDIS has, therefore, been promoting maximum levels of transparency for many years now. Mandatory compliance regulations were introduced into the company at a time when such decisions were very much the exception rather than the norm. There is a good reason for doing this: according to a study published by PricewaterhouseCoopers, the total damage caused by compliance violations in Germany lay at around 6 billion euros in 2007 alone.

The necessity of a company to comply with statutory regulations is not just a matter of moral duty, it is also set out in black and white. In Germany, Sections 9, 30 and 130 of the ‘Ordnungswidrigkeitengesetz’ or ‘OWiG’ for short (Administrative Offences Act) stipulate that a company and its senior management are responsible for ensuring that its staff do not act illegally. Should an employee overstep legal boundaries, then both the senior management team and the company itself, as the legal entity, may be prosecuted alongside the actual member of staff, if it can be proven that they failed to introduce the necessary organisational and supervisory measures. If, for example, a company employee is guilty of corruption, then the company may not only find itself facing a civil action in the courts brought about by the party disadvantaged by the employee’s actions. The company or the company management team may also be prosecuted for violating the ‘OWiG’ if they failed to meet their organisational and supervisory duties. Numerous other statutory regulations set out the various duties and obligations of a company, not least when it comes to preventing violations of competition law. Sections 91 and 93 of the ‘AktG’ (German Stock Corporation Act) and Section 43 of the ‘GmbHG’ (German Limited Liability Companies Act) are further examples of how a company must ensure rules and regulations are adhered to if it wishes to avoid legal proceedings.

In order to ensure that such conflicts and damage to the company are avoided in the first place, REMONDIS has set up its own Corporate Compliance department which is being led by Dr Ernst-Joachim Grosche. REMONDIS’ aim is not simply to make sure it sticks to the rules. It is looking to protect its good reputation, its employees and the company itself against sanctions. By creating a compliance team, customers and employees now have a place they can turn to to prevent potential violations. The compliance team can be reached by phone, email and a special hotline. They will, therefore, be helping to make sure business processes remain compliant and sustainable – working for the future.

Further information can be found online at: www.remondis.com/en/rgw/about-us/corporate-compliance/

“Nowadays, the success of a company very much depends on whether it is prepared to adhere to corporate compliance regulations.”

Thomas Conzendorf, REMONDIS Board Member
REMONDIS BEGINS ITS COMPREHENSIVE CAMPAIGN TO COUNTERACT THE IMMINENT SHORTAGE OF QUALIFIED TRUCK DRIVERS

For two days, the Lippe Plant and its head office in Lünen were transformed into a professional photoshoot location. Occupying centre stage: modern truck drivers and their most important partner, their truck.

There are a number of explanations why there is a shortage of professional lorry drivers. Besides demographic change, the boom in the logistics sector and the lack of training opportunities, two of the main reasons why such a small number of young people wish to become truck drivers are changing social values and, to a certain extent, the profession’s negative image. REMONDIS employs a large number of qualified truck drivers. In order to ensure that they continue to have drivers in the future, many companies within the group are training young people in this profession.

That though is not all. REMONDIS is now starting a major campaign to promote the company both as an employer and as a training company.

“Taking action against the shortage of drivers

“We feel it is very important to stress the fact that the drivers at REMONDIS are experts in their field, have specialist know-how and perform important work. Truck drivers in the limelight

REMONDIS LATEST NEWS
tasks,” explained Vanessa Mauthe from the head office’s HR department in Lünen. “This campaign not only aims to make people more aware of the fact that REMONDIS employs truck drivers but – and this is its primary goal – to focus on the advantages of working as a truck driver at our company,” Vanessa Mauthe continued. REMONDIS truck drivers are not long-haul drivers. They have regulated working hours and it is very rare indeed if a driver has to cover distances of several hundred kilometres a day.

Uniform campaign to increase brand recognition

A further goal of the campaign, which officially begins at the beginning of 2015, is to ensure that uniform recruitment measures are implemented by the REMONDIS Group companies in their efforts to find new drivers, no matter where in the country they may be. “This is the only way to achieve brand recognition and this will benefit all the companies within the group over the long term,” said Alexa Dierks, also a personnel officer in Lünen, summing up just how important the campaign is.

The models at the photoshoot were genuine REMONDIS truck drivers from REMONDIS Region West. “We were surprised that so many colleagues volunteered to take part and would like to thank them all very much for supporting our campaign,” concluded Alexa Dierks. A set of images will be put together to create an advertising kit which can then be used for designing adverts (for example for putting on the sides of trucks), flyers, posters, roll ups etc. All the REMONDIS companies will be able to access this kit and use it for their various requirements.

2015 is to be the “Year of the truck driver apprentice”

REMONDIS has further improved its apprenticeship course for truck drivers and increased the number of apprentices it can take on. Are you looking for a job as a truck driver or do you know someone who would like to train to become a truck driver?

A list of our vacant positions for qualified truck drivers and for future apprentices can be found on the careers page of the REMONDIS website at > remondis.com
Company growth continues

REMONDIS DRIVES BUSINESS EXPANSION IN THE NETHERLANDS

The REMONDIS Group’s recycling activities in the Netherlands have been managed by its subsidiary, REMONDIS Nederland B.V., since 2006. The company has now further expanded its operations in the country thanks to a number of strategic acquisitions – by purchasing two Kuiper businesses (Noord-Holland) at the beginning of October and the commercial activities of the municipal company, Twente Milieu, in November.

REMONDIS’ Dutch activities began in Nijmegen seven years ago: in 2007, it purchased a share in the ARN waste incineration plant. Founded in 1890, the family-run firm, Kuiper, is based in the North Dutch city of Enkhuizen on the IJsselmeer. For years now, this waste management and recycling specialist has primarily served the provinces of Noord-Holland and Flevoland. REMONDIS has now taken over its two companies, Transportbedrijf Kuiper and Kuiper Groenrecycling Hoogkarspel, effective retroactively from 01 January 2014. The majority of their customers are private households and medium-sized firms as well as numerous agricultural businesses.
REMONDIS Nederland B.V. has a network of twelve business locations across the Netherlands with a total of six associated companies and subsidiaries as well as seven industrial facilities.

In addition, REMONDIS acquired Twente Milieu’s commercial waste activities by way of an asset deal in the middle of November which will become effective on 01 January 2015. This municipal company was set up by several district authorities located in the region of Twente, which is situated in the east of the Netherlands along the Dutch / German border. The largest shareholders of Twente Milieu are the towns of Enschede and Hengelo who together have around 240,000 local inhabitants. The customers from this region will now be served by REMONDIS’ associated company, J. Grobben from Almelo.

**Greater regional presence thanks to acquisitions**

REMONDIS’ Dutch arm had acquired a number of other companies in the Netherlands prior to these takeovers. Last year, for example, it purchased two waste collection and recycling companies owned by the family-run business, Methorst Milieu. Located in the towns of Scherpenzeel and Ochten (between Arnhem and Utrecht), these acquisitions helped considerably to expand the reach of REMONDIS’ business activities in the country.

In 2013, REMONDIS took over van Kesteren Milieuservice, a firm previously owned by van Kesteren Holding. Based in Groesbeek in the Province of Gelderland, this business focuses on collecting and recycling commercial waste. The garden and organic waste collected by van Kesteren is recycled in the anaerobic digestion facility operated by REMONDIS’ associated company, ARN, which is located just 15 kilometres away near the town of Nijmegen.

**Increasing number of municipal companies working with REMONDIS**

The acquisition of the commercial waste activities previously operated by the municipal business Twente clearly illustrates the successful cooperation work that also exists in the Netherlands between the public sector and REMONDIS. The district of Kampen (51,000 inhabitants) has also sold its commercial waste activities to REMONDIS this year. The provincial capital city of Zwolle was the first district authority to make this move: ROVA – one of the country’s largest public sector businesses for managing waste, developing public spaces and generating sustainable energy – sold its commercial activities to REMONDIS in 2013.

Two of the main reasons why these authorities opted to sell to REMONDIS were its long-standing presence in the regions as well as its long-term plans for its future business in the Netherlands. Dr Andreas Krawczik, managing director of REMONDIS Nederland, very much values the trust placed in the company by the authorities: “We're really pleased that the Dutch public sector companies, which are looking to hand over their commercial waste activities to a reliable buyer, consider REMONDIS to be an ideal partner. Everyone benefits from us expanding and strengthening our regional businesses across the country.”
The role of the waste management sector in Germany’s energy transition

A COMMENTARY BY PROF. KLAUS GELLENBECK

Switching energy supply from fossils to renewables is one of the biggest challenges of the 21st Century and it is a highly topical issue. The aim of Germany’s so-called energy transition is to ensure the country has a reliable supply of affordable and, above all, environmentally friendly energy. Renewable energy plays a central role here alongside the need to have a decentralised and flexible supply of energy. Biomass is one of the biggest contributors of renewable energy in Germany. The term ‘biomass’ covers various types of material including solid and liquid biomass, biogas, sewage and landfill gas and the biogenic contents of waste. Currently, approx. 3.4 % of electricity and around 7.2 % of heat are produced from renewable energy. These figures, however, do not express the full potential of the contribution of the waste management sector towards energy production.

The German waste management sector already produces a good three percent of the country’s electricity. The waste management sector offers a wide range of energy producing opportunities and these are already making a major contribution towards energy production in Germany today. The most important processes here are the thermal treatment of waste in waste incineration plants (WIP), using refuse derived fuels (RDF) to generate energy in RDF power plants and the co-incineration of waste at cement works and power stations. Using biogas to generate energy is also growing in importance. Here, biogas is produced from the anaerobic digestion of the biogenic contents in waste and then transformed into electricity and gas. As a result, the waste management sector is helping to provide a decentralised supply of energy and reduce Germany’s greenhouse gas emissions.

Priority here is put on using the energy intelligently. This applies in particular to energy produced as a co-product, for example heat generated as a result of thermally treating waste. As the majority of waste incineration plants, which generate heat as a co-product, are located in more remote areas, there is often a lack of potential customers in the direct vicinity able to use the heat. Intelligent solutions are needed in such cases, such as marketing the heat as district heat.

The total contribution of the waste management sector towards the production of electricity in Germany lies at around 19 TWh a year. Looking at the annual gross production of electricity in Germany, namely approx. 620 TWh, the waste management sector currently produces around 3 % of the country’s electricity. This share of around three percent may appear to be relatively low; it is, however, a constant supply of power that can, to a certain extent, be regulated. This makes it an important source of energy – in particular from a regional point of view – especially as neither wind nor solar power systems are able to generate a steady supply of electricity. Furthermore, this ongoing supply of energy helps to stabilise the grid and contributes...
towards evening out the increasingly fluctuating supply of electricity resulting from the energy transition.4

The waste management sector also generates a significant amount of heat. Added together, for example, the waste incineration plants in Germany generate around 14 TWh per year. All in all, the WIPs are the biggest producers of electricity and thermal energy in the waste management sector. The following provides a few examples: approx. 3,500 wind turbines would be needed to substitute the amount of electricity generated by WIPs (ca. 7 TWh per year) with wind power. Were it to be substituted with solar energy, then approx. 74 km² of solar panels (9,250 football pitches) would have to be set up. The annual volume of heat produced by WIPs, namely around 14 TWh, could be used to heat approx. 85 million square metres of living space, i.e. the heating requirements of more than 2.1 million people.5

As far as materials recycling is concerned, it is also true to say that the use of secondary materials generally consumes less energy than using primary sources.

Besides the above-mentioned “conventional” methods of producing energy, waste management companies are also looking at other ways to contribute towards the energy switch and prevent climate change by increasing the amount of electricity they generate. Two such examples are solar and wind power. Closed landfill sites are not only a fitting location for solar farms, they are also particularly suitable for wind farms. One advantage of landfills is that they are, for the most part, situated far away from residential and other build-up areas which means there is less likely to be problems with local residents regarding noise pollution and shadow flicker. Moreover, landfills that have been closed down generally have areas of higher ground which is ideal for wind turbines as they are then more exposed to the wind.

The INFA Institute recently examined the set up at a district in Germany to assess the contribution made by the waste management sector there to local energy supply. Taking the local conditions and a number of other factors into account, it discovered that the contribution was clearly positive – with the waste management sector, in this example, producing more than 5 times the district’s actual energy requirements. This clearly demonstrates the important contribution the waste management sector is making towards the energy switch and many similar such examples can be found across Germany.

These increased efforts to contribute towards the energy switch and prevent climate change are often being made at municipal level. Many projects are currently being carried out – in particular by district authorities and their waste management businesses – to assess the contribution made by the waste management sector towards the energy transition, often with the help of the INFA Institute. The results of such evaluations can be used for local PR work to show local residents how their region is contributing towards the energy switch. For this is a subject that is uppermost in many people’s minds, especially since the events in Fukushima in 2011 and the German government’s subsequent decision to phase out nuclear power – it is a highly topical issue.

“The waste management sector is already making a major contribution towards energy production in Germany today.”

Prof. Klaus Gellenbeck

5 Cf. ITAD e. V.: Energie aus Abfall, URL: https://www.itad.de/ITAD/klimaenergie/327...html.
Expansion in the south of Germany

REMONDIS’ NETWORK CONTINUES TO GROW

REMONDIS has increased the size of its network in the south of Germany thanks to its takeover of a further four Sita Group business locations, effective since November. The new branches are located in Radolfzell, Talheim, Trossingen and Pfullingen, strengthening its service offer in the region and ensuring the company is even closer to its customers in Baden-Württemberg, the third-largest state in Germany.

Facilities for the towns and for the whole state
The southernmost business of the latest acquisitions in Baden-Württemberg is based in Radolfzell on Lake Constance. This branch works for the District of Constance and its approx. 270,000 local inhabitants, collecting waste from a number of the district’s regions. In addition, the staff are also responsible for handling commercial and hazardous waste and collecting old glass and light sales packaging across the whole of the district.

The Talheim branch lies further north in the District of Tuttlingen. The company’s portfolio ranges from logistical services to collecting commercial and food waste, glass and light sales packaging. Just a few kilometres away, the Trossingen branch operates a paper sorting plant and acts as a transhipment point for materials such as paper, plastic film, glass and wood.

The fourth new branch in Pfullingen (District of Reutlingen) runs a facility that produces compost from organic waste. It will, therefore, be a useful addition to the company’s modern tunnel composting plant in Singen near Constance and its anaerobic digestion facilities in Freiburg and Deisslingen. Pfullingen produces and markets high quality products such as mulch, potting compost, planting soil, various types of humus as well as roof garden substrate.

Short journeys, quick response times
By taking over the new branches and facilities, REMONDIS now has an even more effective logistics network in the south of Baden-Württemberg with all branches having direct access to the infrastructure and know-how of the whole of the REMONDIS Group. The company’s proximity to its customers and its wide range of waste management and recycling services will benefit everyone – from the local authorities and private households, to the many commercial and industrial businesses across the whole of the state.

REMONDIS has welcomed around 80 employees from the new branches in south Germany to its team
The survey, initiated and drawn up by ServiceValue GmbH together with the DIE WELT newspaper and the Goethe University in Frankfurt am Main, focused on the customer services that the participants had themselves received at some stage over the previous 36 months. The number of satisfied participants was then expressed as a percentage. At no stage, therefore, were the companies providing the services able to influence the results.

REMONTDIS RECEIVES SEAL OF QUALITY FOR CUSTOMER SATISFACTION

For the fourth year running, Germany’s most prestigious seal of quality has been awarded to the top service providers who have generated the greatest levels of customer satisfaction. A total of 1,519 companies from 188 different sectors were included in the evaluation process. The assessment, which is based on valid and scientifically robust methods, was carried out exclusively by experts: namely customers who have had first-hand experience of working with service providers.

The survey, initiated and drawn up by ServiceValue GmbH together with the DIE WELT newspaper and the Goethe University in Frankfurt am Main, focused on the customer services that the participants had themselves received at some stage over the previous 36 months. The number of satisfied participants was then expressed as a percentage. At no stage, therefore, were the companies providing the services able to influence the results.

Hervart Wilms, managing director of REMONDIS Assets und Service GmbH & Co. KG was really pleased to see the company at the top of the list: “It is great to have received such positive feedback and to be named the 2014 Services Champion in the waste management category. This positive perception that our customers have of us will continue to drive us and our services forward. Most of all, though, I’m really happy for our employees as they are the ones who give their all every day and it is them who really deserve this title.”
Every year, more than 140,000 engines and around 75 million components and gearbox parts are manufactured at the Mercedes-Benz plant in Berlin – a facility owned by the Daimler Group. For the production processes to run smoothly, it is essential that there is an effective waste management system in place throughout the plant. As general contractor, REMONDIS is responsible for all logistics activities there as well as for the subsequent recycling of both the recyclable and residual waste materials – a job it has been carrying out since 2007. The contract between the Mercedes-Benz plant in Berlin and REMONDIS has now been extended for a further five years.

“Thanks to its extensive network of specialty companies, REMONDIS is able to serve customers from a wide range of industries.” Lutz Wedegärtner, branch manager of REMONDIS Berlin
For many years now, REMONDIS has worked together with well-known automobile manufacturers all around the world – whether it be in China, Turkey or Berlin. Besides producing the V6 diesel engine – one of the cleanest and most innovative of its kind – the Mercedes-Benz plant in Berlin focuses on developing and manufacturing components and parts for the various Mercedes-Benz engines using state-of-the-art and environmentally-friendly technology. With the final products having to meet a wide variety of requirements, a whole range of environmental and budget issues had to be taken into consideration to find the best possible waste management system for the various production processes.

Daimler sets really high standards both when it comes to the fuel consumption of its engines and to the waste management activities at its company, examining carefully how resources are handled. This was just one of the reasons why REMONDIS succeeded in winning a tender and becoming Daimler’s general waste management contractor in 2007. Prior to this, the various materials had been collected and recycled by a number of different companies. Since having been awarded the contract, REMONDIS has been responsible for all recyclable and residual materials generated by the plant in Berlin. Moreover, it is also in charge of the in-house logistics system for recyclable and waste materials at the neighbouring Mercedes-Benz Ludwigsfelde plant.

A case for the REMONDIS network
"Collection and logistics activities in two shifts, more than 120 different types of recyclable and residual materials, the highest standards of recycling: REMONDIS’ Berlin branch runs the in-house waste collection centre at the Mercedes-Benz plant in Berlin, collecting all hazardous and non-hazardous materials generated by the many production processes. One of their main activities is to sort and produce bales of materials such as plastic film," explained Jürgen Opitz, REMONDIS key account manager responsible for Daimler Benz.

Several different REMONDIS companies are involved in the activities at Daimler’s Berlin plant, providing their specialist know-how and expertise. Whilst REMONDIS’ company, Wertstoff Union Berlin (WUB), collects and recycles cardboard and card, Rhenus Data Office is responsible for ensuring all confidential files and data storage devices are destroyed correctly. REMONDIS Industrieservice’s task is to manage the collection and recycling of chemicals and solvents found, for example, in paint, glue and cleaning agents. TSR plays a key role when it comes to recycling the scrap metal. Here, it deploys a special machine to crush metal filings which not only makes the ferrous and non-ferrous metals more compact, it also removes any water. By doing so, the company is able to store greater volumes in the special containers than would normally be the case, a far more efficient way to transport the materials for further processing.

A success story with a promising future
The production of more than 140,000 engines and around 75 million components and gearbox parts in Berlin generates an impressive volume of materials: every year, REMONDIS handles over 300 tonnes of plastic film and plastic, 220 tonnes of paper, card and cardboard as well as 250 tonnes of other recyclable and residual materials ensuring they are sent to the most suitable recycling or processing facility. This cooperation work in Berlin is truly a success story with those responsible at Daimler regularly giving REMONDIS the best possible reviews when assessing the quality of its services – a great incentive for the next five years.
TSR opens new branch in Chemnitz

MARKET POSITION STRENGTHENED IN THE EAST OF GERMANY

TSR colleagues in Chemnitz had a good reason to celebrate just recently: the company’s new branch in the city district of Hilbersdorf began operations in the middle of November 2014. Covering around 2.3 hectares, the new metal recycling facility meets all the standards of a modern, environmentally friendly recycling business.
The new branch is located in Chemnitz-Hilbersdorf on land owned in the past by the East German Railways. TSR had been unable to expand its facility in Frankenberg, situated approx. 15 kilometres north east of Chemnitz, and so the management team there began looking for new grounds at the end of 2011. They soon came across the property in Chemnitz which ticked all the boxes for setting up a modern metal recycling facility.

The construction work began in the summer of 2013 once the land had been cleared and the permits issued. Walls were set up to reduce noise pollution, embankments built to help screen the operations and the exit and entrances strengthened and equipped with 50-tonne weighing systems. A new building with offices and facilities for the 14 employees currently working at the branch was then erected as well as a 2,000m² hall for storing scrap metal for foundries. The whole of the wastewater pipe network was completely renewed and a 400m³ retention tank installed. This is to be used for storing oil and drill emulsion residue from the scrap metal (collected via a separator) so that it can be transported away to special processing facilities.

Covering a total area of around 2.3 hectares, the new grounds provide an extra hectare of space for processing metal scrap. The company can also organise efficient and environmentally friendly transport routes for its materials thanks to the railway siding on the premises. Besides offering the necessary space to enable TSR to expand its existing operations, the new location is far more central which will make customer acquisition easier: this new branch will be the main point of contact in the future for industrial and commercial businesses as well as for private individuals looking to dispose of their old metal.

Branch manager, Holger Lindemann, and his deputy, David Ksoll, welcomed a large number of guests to the official opening ceremony in the middle of November 2014, including TSR employees, customers and partners as well as local politicians and business people. One of the many guests was the President of the Chemnitz Chamber of Commerce, Mr Voigt. Bernd Fleschenberg travelled to the event to represent TSR’s senior management team and get a good look at the new branch: “This new location in Chemnitz paves the way for further growth. This project clearly illustrates that we will continue to make the necessary changes — and even in a difficult economic climate — in order to drive forward the scrap metal business in the south of Saxony and beyond.”

“This new location in Chemnitz paves the way for further growth.”

Bernd Fleschenberg, TSR-Managing Director
The importance of gypsum

STAFF AT SÜDHARZER GIPSWERKE CALL FOR GREATER UNDERSTANDING FOR THEIR BUSINESS – VISIT FROM BODO RAMELOW

Since 1850, the South Harz region has become the main production centre for the German gypsum industry. The main reasons for this are the large deposits of gypsum in the region, its central location, the good transport set up and the high quality of the products. The most important gypsum factory, set up in the South Harz region since 1860, was Friedrich Euling Vereinigte Gipswerke Ellrich am Harz GmbH which was founded in 1868. This is where the roots of REMONDIS’ company Südharzer Gipswerke are to be found, a company with over 150 years of history. Both the works council and the workforce have called on politicians to support them in their drive to protect this traditional industry and, as a result, their jobs. Bodo Ramelow, parliamentary party leader of the ‘Die Linke’ party in the Thüringen state parliament, visited the site this autumn to find out more about the importance of gypsum for the region and for the country as a whole.

At the beginning of the 90s, over 60 million euros were invested in the Ellrich business creating a state-of-the-art gypsum and anhydrite processing plant. In 2004, the plants in Dorste, Ellrich, Neckarzimmern and Sulzheim then merged to form the company, Südharzer Gipswerk GmbH (SHG). Following the transfer of the business to REMONDIS at the beginning of 2009, SHG continued to sell its products under its own brand names.

In February 2013, all of REMONDIS’ gypsum activities were then grouped together in a newly founded company to unite the experience of Südharzer Gipswerk GmbH (SHG) and the know-how of the RADDIBIN brand. Run under the name CASEA, the new firm has five company-owned and two associated business locations. The 200 employees market up to one million tonnes of gypsum products a year. The company continues to have its head office in Ellrich. The Ellrich plant, with its more than 60 employees and apprentices, has access to raw materials of extremely high quality. These quarried materials are around 260 million years old, with the beds of anhydrite reaching a thickness of up to 100 metres and the beds of gypsum 25 metres. These are removed from various sections of the quarry to enable the company to provide different grades of material. The Ellrich plant has strong ties to the South Harz region and has contracts with various local production and service companies creating jobs for those living in the area. The raw materials are also transported from the quarries to the processing facilities by local transport businesses.

A highly versatile product
The separate calcination and mixing lines at the processing facility allow the company to offer a wide range of gypsum and anhydrite products. These are incredibly versatile sub-

“Both FGD gypsum and natural gypsum will continue to be key raw materials. Natural gypsum will become increasingly more important as Germany switches from fossil fuels to renewables.”

Dr Alfred Schiffer, Managing Director of CASEA GmbH

(from left to right) Dr Alfred Schiffer and Silvio Lüderbusch, Managing Directors of CASEA GmbH, together with Bodo Ramelow, parliamentary party leader of the ‘Die Linke’ party in the Thüringen state parliament, in the control room of the gypsum plant in Ellrich
The importance of gypsum substances and are used in every household as well as in many other areas of application. Plaster of Paris, wall plasters and flowing screeds are the products primarily made for the building trade. Besides using standard procedures to produce hemihydrates, the facility is also equipped with state-of-the-art technology to enable it to use liquid calcination processes. The resulting alpha plaster has low porosity and a low water requirement. As it is exceptionally strong, it is primarily used for industrial applications. Both naturally sourced gypsum and FGD gypsum are used here.

With the deposits being of such high quality in Ellrich, the company there is also able to supply specialty plasters for the medical, food and animal feed industries. Environmental protection has been an integral part of the company’s business both at CASEA and at its parent company REMONDIS for many years now. Right from the beginning, measures were taken to integrate the production facility into the landscape in an environmentally friendly way – when planning, refurbishing and expanding the gypsum plant. To ensure the deposits are used sustainably and to protect the surrounding areas, a pilot project is being implemented at the Rüsselsee quarry which aims to gradually "restore" the quarried areas and enable nature to reclaim these spaces. Moreover, FGD gypsum and recycled gypsum are also used alongside the naturally sourced materials to conserve the raw material reserves.

Over the last 20 years, the framework conditions for gypsum quarries have steadily worsened. Towards the end of the summer, therefore, CASEA’s employees – the majority of who come from the South Harz region – called on politicians to create fair conditions for their industry to safeguard the future of the gypsum quarries and production facilities. Using the motto “Living and working with nature”, they argued their case to ensure they continue to have jobs long into the future. Minister President-elect of the state of Thuringen, Bodo Ramelow, visited Ellrich to find out more about the plant, about the sustainable way gypsum is quarried and about the importance of gypsum for so many products and industries. Dr Alfred Schiffer, a managing director at CASEA, summed up his impressions of the visit. "You could really sense his desire to get hold of this issue and really understand it. Indeed he did this quite literally by touching the boundary stones along the edge of the plant which are, of course, made of gypsum.”

After the meeting, Bodo Ramelow said that he had learned many new things about gypsum and had been truly surprised about the many different uses of this natural product. Before he left, Dr Schiffer once again pointed out that quantities of FGD gypsum will gradually decrease as Germany switches from fossil fuels to renewables and for this reason alone natural gypsum is indispensable. Time will tell whether this message has been taken on board by the politicians.
The Federal President’s Summer Festival

The RECYCLING PROFESSIONALS visit the Federal President

THEATRE PERFORMANCES AND GAMES AT THE FEDERAL PRESIDENT’S SUMMER FESTIVAL PROMOTE RECYCLING AND ENVIRONMENTAL PROTECTION

Once again, the German Federal President invited the public to join him at Schloss Bellevue, his official residence in Berlin, to take part in his annual summer festival at the beginning of September. The weather stayed fine throughout and there was a great atmosphere with the visitors being offered an entertaining programme of events including concerts, theatre performances, discussion groups and a number of information booths. The motto this year: “Voluntary work and its wide and varied range of activities”.

Joachim Gauck welcoming his guests to this year’s summer festival at Schloss Bellevue
A hobby horse for our Federal President

Our RECYCLING PROFESSIONALS were also invited to take part in the festival this year. They were, therefore, able to continue their mission, namely to raise awareness about raw material shortages and to emphasise the importance of teaching children at an early age about practising recycling and conserving our planet’s natural resources. REMONDIS’ project demonstrates how crucial subjects – such as separating recyclables and the impending shortages of raw materials – can be taught in an entertaining manner so that children learn how to separate waste correctly, protect the environment and prevent climate change. As always, our RECYCLING PROFESSIONALS were a great success: the children had loads of fun taking part in the different games and, at the same time, absorbed the most important facts about recycling and raw materials. Our RECYCLING PROFESSIONALS were, of course, able to offer the full range of activities – including REMONDIS’ wall building game, the "RECYCLING KIDS" board game and the crafts workshop where the children made their own hobby horses and spinning plates from recycled materials. This wide range of entertaining activities meant the RECYCLING PROFESSIONALS’ stand was extremely popular attracting families with children and even the Federal President, Joachim Gauck, himself. Joachim Gauck and his partner, Daniela Schadt, were given a warm welcome and learned all about the educational RECYCLING PROFESSIONALS project and its mission to save our planet’s raw materials. Before leaving, they were given a present – a hobby horse and a spinning plate – bringing smiles to the faces of all those present.

The letter sent by the Federal President thanking the company for taking part in the festival
‘Beat swords into plowshares’ was one of the popular sayings in the 70s. In order to — figuratively — remove the swords of the past, Umwelt Control Labor has been ploughing through the grounds of an old ammunition depot on the east bank of the Kiel Fjord. The City of Kiel is planning to build a state-of-the-art gas-fired combined heat and power plant (output: 200 MW) on this site in the near future. Extensive remediation work, however, has had to be carried out on the area, before the new plant can be built. UCL has been responsible for testing the contaminated soil and organising the transport and recycling of the material.

The project’s first phase, which lasted until July 2014, was to dig up the old shells and rockets and make them safe. To be able to do this, over 30,000m³ of earth had to be excavated and fed through a specially protected separation facility to remove the weapons. Even at this stage, UCL experts were on hand to take samples of the soils and water and then have them tested in UCL’s laboratories in Kiel and Lünen. As the UCL experts were on site at all times and were in close contact with the laboratories, they were able to react quickly to situations and analyse the materials within the shortest possible time. UCL then used the data collected to draw up a recycling and waste management concept for the materials which would have to be removed from the site, such as earth and construction waste. Moreover, this data was essential for other kinds of paperwork, for example for the waste declaration documents, as well as for providing preliminary findings for the soil and water risk assessment required by the authorities. UCL ensured that the screened

Clean soil thanks to UCL
SOIL EXAMINATION AND REMEDIATION WORK IN EXPLOSIVE SURROUNDINGS
In Kiel, they are also following the maxim: “recycling rather than disposal.” UCL Umwelt Control Labor GmbH has been carrying out comprehensive tests on an old navy ammunition depot in Kiel to assess levels of contamination and organise recycling measures. The material was piled on a very small area of the site before filling out the necessary declaration forms for the authorities. Keeping a close eye on the excavated material, UCL worked closely with transport and recycling companies to make sure that the soil, which was unable to be reused, was removed from the site promptly.

UCL Umwelt Control Labor GmbH and its experts from its consulting department in Kiel have been responsible for all work needed to set up the remediation site as well as for all aspects of the project affected by environmental and waste management law. Besides drawing up work safety plans and coordinating safety measures, this has also included taking samples and conducting the analyses in the laboratory. Here, too, they are following the maxim: “recycling rather than disposal.” Developing a recycling and waste management concept for the excavated earth is, therefore, just as much a part of the package as drawing up a soil and water risk assessment and preparing a remediation concept in accordance with German soil protection laws. UCL’s package of services has been rounded off with its report on the condition of the site at the beginning of the project (drawn up in accordance with the IED Directive) and its professional on-site monitoring measures.

The grounds must be free of ammunition and contaminated earth before the new power plant can be built. Stringent work safety regulations have to be adhered to as the site is contaminated with both weapons and chemicals. Before the actual work began, therefore, UCL prepared different work safety concepts for each stage of the project and instructed all those working on the site about these measures. The work is unlikely to be completed before the end of 2014. The project has, however, progressed rapidly thanks to the capabilities of the UCL laboratories and the professional way UCL has been working with the building contractor, the approving and supervisory bodies, the engineers and the waste management businesses.

The remediation project involved 30,000m³ of earth having to be excavated and freed of any contamination.
What is waste for one person is a valuable source of energy for REMONDIS. With the world’s supplies of fossil fuels shrinking and the volumes of recyclables and waste growing, one of the big ecological challenges of our times is to make the most of the energy contained in this waste. REMONDIS Thermische Abfallverwertung GmbH (formerly EVZA GmbH) has been operating a state-of-the-art plant in Staßfurt, in which waste is used to produce steam and electricity, since May 2008. The annual inspection of the plant took place in September according to plan in order to ensure that the facility continues to operate at its normal high standards. This involved inspecting and servicing both incineration lines, the waste gas cleaning systems and the steam circuit – a complex process involving a total of around 3,500 individual tasks.

There was, however, more work to do this year: the power generator was due for its major service. After 60,000 hours of operation, the generator, gearbox and turbine had to be dismantled, taken apart and sent to the production plant for inspection.

An initial assessment of the state of the generator was made whilst it was being dismantled. This revealed that the condition of the individual sections was as to be expected with no major damage. A fact that can be put down to the careful and responsible way the facility is treated by the staff at Staßfurt. "The good condition of the whole of the
Operations continue throughout
The generator’s individual parts were sent to the production plant to be inspected and were back in Staßfurt by the end of October. Operations at the waste treatment plant continued throughout the whole of this period. The facility has been set up so that it can continue to supply steam to the neighbouring chemicals business without producing electricity. As a result, the waste delivered to the plant can be processed as normal during the inspection period. Once the generator had been reassembled at the end of October, it was started up again and is now fully operational.

Contributing towards the energy transition
Reduce, reuse, recycle, energy recovery, disposal – this is the 5-step waste hierarchy set out in waste management law. Despite the many and extensive recycling processes available, there are always a few waste fractions left over that cannot be used for materials recycling. More than 50 percent of such fractions contain so-called biogenic substances which have a high calorific value. Residual waste from private households or from commercial and industrial businesses and sewage sludge from wastewater treatment processes are efficiently treated here using state-of-the-art technology and used to generate electricity and steam. Each year, a total of 380,000 Mg of waste can be transformed into energy at the Staßfurt plant. Each treatment line can process up to 22.5 Mg of waste an hour. REMONDIS Thermische Abfallverwertung GmbH uses the energy from the waste to generate electricity, with up to 170,000 MWh being fed into the national grid every year. Moreover, up to 360,000 MWh of heat is generated and supplied to a neighbouring plant which uses it to manufacture key chemicals.

Preventing climate change
REMONDIS is, therefore, actively contributing towards preventing climate change at its Staßfurt plant as well. On the one hand, using waste to generate energy means fewer fossil fuels are needed. On the other hand, with around 50 percent of the contents being biogenic, a part of the electricity and heat production process is carbon free.

The biogenic substances in residual waste have a high calorific value
A far-reaching project

XERVON TAKES PART IN ONE OF AUSTRIA’S BIGGEST INFRASTRUCTURE PROJECTS

The major works being carried out just outside Vienna to upgrade the “Knoten Prater” motorway junction has presented scaffolding specialists XERVON Austria with three complex tasks: the company has had to plan and erect the scaffolding needed to build two bridges over the Danube Canal; a further shoring structure is also needed to build an access ramp road.

This is one of the big infrastructure projects being carried out in Austria: due to last several years, the “Knoten Prater” motorway junction near Vienna is in the process of being upgraded. Linking the A4 motorway (“East Motorway”) and the A23 motorway (“South East Tangent”) on the outskirts of Vienna, this is one of the most important motorway junctions east of the city. The roads and bridges here, therefore, have to cope with large amounts of traffic.

The building contractor for this project is ASFINAG, an Austrian state-owned company responsible for roads and motorways in the country. ASFINAG has commissioned the “Umbau Knoten Prater” syndicate – consisting of the companies Porr Bau GmbH and Habau GmbH – to execute the project. This, in turn, has commissioned the scaffolding specialists XERVON Austria to develop a solution for the complex shoring structures needed to complete the work.

The main focus of this project is on the ‘Erdberger Brücke’ (Erdberg Bridge) which was built in the 70s and crosses the Danube Canal. Over the decades, the heavy volume of traffic has had such a detrimental effect on its structure that it must now be demolished and completely rebuilt. Two new additional bridges are currently being constructed either side of the bridge, so-called flyovers, to ensure the traffic does not come to a standstill and is not affected, for the most part, by the work being carried out on the main bridge. When the new bridge has been completed in 2017, these additional bridges will remain in place and continue to be used to prevent traffic jams during rush hour periods.

The complex work to erect the shoring scaffolding over the Danube Canal for these two new flyovers began in May 2014. In addition, a further stretch of road has to be built that also needs shoring scaffolding: a ramp road to connect the A23 motorway exit to the southern flyover (see illustration).

Engineer Anton Stricker, head of the shoring scaffolding division at XERVON Austria, explained what the company had to take into account when designing the shoring scaffolding for these two additional bridges: “Both bridges will consist of eight sections (hollow section framework, 12 metres wide) with a total length of 223 metres and 237 metres respectively. They will cross over both the east and westbound lanes of the A4 motorway and have a main span over the Danube Canal of around 45 metres. What is most important here is that our shoring structures have the necessary heights and widths to allow traffic to flow unimpeded.” This includes both the lanes on the A4 motorway and the various exit and access roads to the A23 motorway as well as over the Danube Canal itself which is a busy shipping route.
In order to fulfil all these requirements, the scaffolding experts developed a complex structure based on steel girders (rolled steel girders), scaffold beams and scaffold supports (to transfer the load vertically) – all in all comprising a total of approx. 1,000 tonnes of material. The horizontal shoring scaffold section, on which the bridge superstructure and carriageway will be built, is made up of rolled steel girders (HEB 300 to HEB 800) up to 80cm thick and of lengths varying between 5 and 20 metres. The 34 metre section in the middle of the shoring scaffold, that crosses the Danube Canal, has been erected using heavy duty scaffold beams as it has such a long span. 16 scaffold beams have been joined together to create a 12m wide structure over the water. This, in turn, is connected to further structures – erected using cross girders, lowering devices and heavy duty vertical scaffold beams – which transfer the load into the ground or into the bridge foundations that have already been constructed.

There were two main challenges that both teams had to face whilst erecting the shoring scaffolding: firstly, the night shift work, when the motorway was closed off so they could set up the rolled steel girders above the carriageway, and secondly placing the 34m long scaffold beams over the Danube Canal. To keep the crane work to a minimum, all 16 scaffold beams were preassembled at the building site on the smallest of spaces and lifted into place – in some cases individually and in others as complete boxes (each weighing ca. 18 tonnes). This work was completed in a single day.

Apart from the final dismantling tasks, the shoring scaffolding work has already been completed for the northern flyover bridge. The installation teams are currently working on the southern structure. By the end of the shoring scaffolding work in April 2015, XERVON will have erected and dismantled a surface area totalling 6,300 square metres.
REMONDIS is not only one of the leading “P recyclers” in Europe as a result of its sewage sludge recycling activities for agricultural businesses, it is also an important supplier of the precipitating agent, ALUMIN. This substance is needed to eliminate phosphate from wastewater at sewage treatment plants. In 2013, REMONDIS Aqua began research work on its TetraPhos® process and has now found an economical way to recover high quality phosphate from sewage sludge ash on an industrial scale, namely using phosphoric acid. Practically all other phosphate products are made from this important, multi-functional mineral acid, in particular fertilisers and animal feed. Demand for phosphoric acid lies at over a million tonnes per year in Europe alone.

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In just a few decades’ time, supplies of mineral fertiliser will have become scarce in many countries around the world which will mean that food production will also decrease. The key nutrients in mineral fertiliser are nitrogen, potash and salt of phosphoric acid, the so-called phosphates. These are obtained from phosphate ore, which is primarily mined in North Africa and Russia, and is of course – like all raw materials – finite. Unlike the majority of other raw materials, which are used by industry to manufacture consumer goods, phosphate cannot be substituted. Phosphates are essential for all life forms on our planet – for the smallest cell, for human bones, for the tusk of an elephant. Raw phosphate ore, however, is running out: if demand continues at its current rate, reserves that can be affordably mined will have been used up in the near future. New solutions need to be found so that the world’s ever growing population can continue to be fed and we can reduce our dependency on the Earth’s scarce phosphate reserves, especially in the densely populated countries of Europe which have so few natural resources of their own.

What is particularly special about REMONDIS’ innovative TetraPhos® process is the fact that sewage sludge ash containing phosphate is treated with diluted phosphoric acid. Up to 50 percent of sewage sludge ash is made up of phosphates which dissolve in the diluted phosphoric acid. The phosphoric acid solution is enriched with the phosphate from the ash and then treated in four different stages. Various products are available at the end of the process including RePacid® phosphoric acid, used to produce phosphates for manufacturing fertilisers, and gypsum for the building supplies industry as well as iron and aluminium salts.
This new process was developed in REMONDIS’ own research laboratories with the support of UCL Umwelt Control Labor in Lünen and then optimised at the central sewage treatment plant in Rostock in cooperation with EURAWASSER Nord. This patented method was presented to the public for the very first time at the REMONDIS EURAWASSER Forum, which was held in the German city of Bremerhaven in September. Josef Lehmkuhl, REMONDIS senior consultant and inventor of the process, presented REMONDIS’ TetraPhos® at the event during which he explained just why it is so special: the RePacid® phosphoric acid created during the process can be reused to treat new ash. This means there is no need to buy in new conventionally produced phosphoric acid making the whole procedure, of course, incredibly economical. Not only up to 500kg of RePacid® phosphoric acid can be produced from 1,000kg of ash but also over 500kg of gypsum for the building supplies industry and, for example, iron and aluminium salts that can be recycled as precipitating agents to treat wastewater at sewage treatment plants. REMONDIS’ TetraPhos® process is, therefore, an ideal addition to a mono-incineration facility at sewage treatment plants. By combining incineration processes and TetraPhos (especially in combination with fluidised bed incineration systems), sewage sludge can be used for materials recycling.

The REMONDIS TetraPhos® process is highly efficient, environmentally friendly and cost-effective, helping at many different levels to conserve our planet’s natural resources. It closes a number of material life cycles and, over the long term, will help to make Europe less dependent on phosphate imports and the spiralling raw phosphate prices. As Josef Lehmkuhl repeatedly demonstrated, there are other promising uses for this process such as combining RePacid phosphoric acid with mineral products from processed abattoir waste, such as bone meal ash or Polymat sediment, to produce high purity fertilisers.

"REMONDIS’ new TetraPhos® process once again highlights our philosophy at REMONDIS, namely that sewage treatment plants are no longer to be seen as a facility for disposing of products but for recovering clean water, energy and minerals,” explained Dr Martin Lebek, senior manager at REMONDIS Aqua GmbH & Co. KG. REMONDIS Aqua has already been granted four patents. From the spring of 2015, the company will, in cooperation with HAMBURG WASSER, be testing the new process under normal working conditions at a pilot facility at Köhlbrandhöft sewage treatment plant in Hamburg.

From left to right: Andreas Bankamp, Managing Director of REMONDIS Aqua GmbH & Co. KG, Dr Martin Lebek, also a member of the senior management team at REMONDIS Aqua GmbH & Co. KG, Sabrina Lohmar, Project Manager (industrial division) at REMONDIS Aqua, and Josef Lehmkuhl, Senior Consultant at REMONDIS, at the REMONDIS EURAWASSER Forum in Bremerhaven.
India not only has an enormous potential for growth, it is also looking to modernise its environmental and recycling systems – two reasons, therefore, why the REMONDIS Group is looking to expand its activities in the country. Working together with DEG in Cologne, REMONDIS Aqua International GmbH recently developed and implemented a project as part of the develoPPP.de programme run by the Federal Ministry for Economic Cooperation and Development (BMZ).

The aim of the project was to introduce a modern, resource-friendly water management system that can be used by the food production industry. Using the sugar industry in India to illustrate this, this two-year project began in April 2012 and was divided up into three different phases. REMONDIS Aqua staff from both Germany and India joined an international, multidisciplinary team which was responsible for ensuring the project was a success. The sugar businesses that took part were located in and around the Indian cities of Pune and Kolhapur.

The first of the three phases lasted a total of nine months. This preparation stage was used to select suitable partners from the sugar industry for the project, to assess the potential of the water management systems these businesses already had in place and to draw up training measures. The actual project plans were then implemented over a period of twelve months and included training courses for the plant personnel on subjects such as technology, facility operations, workplace safety and the environment. In addition, the water and wastewater facilities at the plants were optimised during this period. Focus during the final three months was on gathering together information and drawing up reports which also included PR measures for promoting sustainability.

Well established on the market
For REMONDIS, this project was also an important step towards establishing itself on the Indian market. The information gathered concerning the potential of the Indian market has been particularly useful. The staff were able to get an overview of potential customers in this sector which can be used for future REMONDIS investments. This reliable source of information will help the company in its decision-making processes, especially when it has to decide how and where to invest. Moreover, the project has also led to the company being awarded long-term service agreements to build, operate and maintain wastewater treatment facilities and energy plants. All in all, this cooperation work with development agencies and the success of the project itself have meant that REMONDIS Aqua International has succeeded in establishing itself on the market, paving the way for it to roll out its services for the food processing industry in India.

REMONDIS has learned much from working together with DEG and helping it to implement such an international development programme and will be using this valuable experience to help other regions around the world.
REMONDIS and ENERVIE: reliable partners for utility companies

WORKING TOGETHER TO MASTER THE CHALLENGES OF THE ENERGY TRANSITION

Having recently become a shareholder in ENERVIE Südwestfalen Energie und Wasser AG, the REMONDIS Group has succeeded in adding further activities in the supply and energy sectors to its current portfolio of environmental and water services. Thanks to its acquisition of RWE Deutschland AG’s 19.06% share in Enervie, REMONDIS has further strengthened its position as a reliable partner for local authorities and their utility companies. One of the biggest challenges Enervie will have to face in the near future is the energy transition, i.e. Germany’s move to switch from fossil fuels to renewables. The advantage here is that Enervie is hugely important for the supply network.

ENERVIE Südwestfalen Energie und Wasser AG has around 400,000 customers and is responsible for supplying them with electricity, gas, heat and drinking water. This group of companies is, therefore, one of the largest independent energy providers (generating its own energy) in the German state of North Rhine-Westphalia. Protecting the environment and preventing climate change are the main components of the ENERVIE Group’s sustainability strategy. It achieves this in a number of different ways, for example by promoting the efficient use of energy, reducing carbon emissions and continuously investing in state-of-the-art equipment. The Group is also focusing on expanding renewable energy in the region. In May 2014, ENERVIE made a fundamental decision to withdraw from conventional electricity production.

This decision was in response to the mismanagement of the energy markets – a result of the energy transition – which will mean, looking at the current situation, that it will be impossible to operate conventional coal and gas-fired power stations profitably over the long term. However, due to the limited capacities of the grid, the ENERVIE Group has agreed with the ‘Bundesnetzagentur’ (Federal Network Agency for Electricity, Gas, Telecommunications, Post and Railway) to continue to operate its power stations over the medium term to ensure that there are sufficient supplies of power in the region. Thus, Enervie is reacting to the challenges of the energy transition by changing the overall strategy of its business operations and creating a programme to improve results. Central points here are to cut costs, grow efficiency, adjust business strategies and take a close look at investment measures.

In the future, REMONDIS will be using its extensive private-sector expertise to help the ENERVIE Group to overcome the great challenges of the energy transition. On 30 October 2014, REMONDIS managing directors Markus Schmidt and Andreas Bankamp were appointed to the supervisory board of Enervie during its general meeting of shareholders. They have, therefore, taken over the seats held previously by representatives of RWE Deutschland AG. Moreover, Markus Schmidt was appointed to the executive committee of Enervie’s supervisory board. Markus Schmidt is managing director of REMONDIS Energy & Services GmbH & Co. KG. Andreas Bankamp heads REMONDIS Aqua GmbH & Co. KG. In addition, both are managing directors of REMONDIS Wasser & Energie GmbH.
On 03 September 2014, REMONDIS South West signed a share purchase agreement to take over the 50% share owned by Nordwestdeutsche Papierrohstoffe, Mayen (NWD) in REMONDIS Mittelrhein GmbH. REMONDIS South West and NWD had set up REMONDIS Mittelrhein GmbH as equal partners in 1995.

NWD’s focus in REMONDIS Mittelrhein GmbH had always been on procuring waste paper for Moritz J. Weig GmbH & Co. KG, Mayen. Following REMONDIS South West’s takeover of Veolia West’s Koblenz business and SITA’s Altenkirchen and Katzwinkel businesses, it was a natural progression for REMONDIS Mittelrhein GmbH to concentrate more on classic waste management operations. As a result, the shareholders of REMONDIS Mittelrhein agreed to transfer NWD’s shares to REMONDIS South West. At the same time, the shareholders confirmed their wish to continue their successful cooperation work in the future. The sale and takeover of the shares was, therefore, very much a mutual and amicable decision.

Marcus Bauer, managing director of Remondis UK, commented: “We are always happy to open our doors to our colleagues at the Environment Agency and the event was no exception. We are extremely proud of our facility here in Prescot and it’s always a pleasure to demonstrate our capabilities.”

A delegation from the UK Environment Agency paid a visit to REMONDIS’ hazardous waste transfer and recycling facility in Preston (UK) recently. Eighteen compliance officers joined the group to take a closer look at the facility which is able to process up to 69,000 tonnes of material every year. The officers from the Environment Agency praised the company’s excellent set up there. They said that the tour had been both ‘interesting and enlightening’ and were sure that REMONDIS and its state-of-the-art services would help to ensure that high standards became the norm in the UK’s waste management sector.
didacta, the world’s largest educational trade fair, is being held at the Hanover Exhibition Centre from 24 to 28 February 2015. Teaching and educational experts, companies and institutes will be travelling to the event to explain and demonstrate the future trends in the educational sector. Moreover, they will be tackling central issues and presenting the latest new ideas – such as how to achieve successful inclusion, introduce the ‘accelerated’ high school leaving certificate into all-day schools and get access to improved teaching materials for all age groups. The organisers are expecting more than 80,000 visitors to travel to the event.

For the second year running, REMONDIS will be presenting its own educational initiative, ‘The Recycling Professionals’, at the didacta. Next year, REMONDIS’ stand (Hall 17 / C13) will be focusing on its bespoke teaching material for kindergartens, primary schools and secondary schools

REMONDIS and its ‘Recycling Professionals’ at the didacta in Hanover

The mayor of Kiel recently paid a visit to MVK’s plant in the city and was highly impressed by the operations there: “Kiel and other neighbouring districts can rest assured that the technology used here to treat their waste is both safe and environmentally friendly. Being located right in the middle of a residential area, the highly efficient, multi-phase flue gas cleaning system here keeps both the local inhabitants and the environment safe.” Dr Ulf Kämpfer also learned about how the various parts work, including the steam turbine. Following the principle of cogeneration, the turbine is used to generate electricity and district heat. “Thanks to MVK’s proximity to the city, the inhabitants of Kiel have a guaranteed supply of heat,” commented the mayor with the upcoming winter period in mind. MVK produces energy from waste and covers around 20 percent of Kiel’s district heat requirements.

Wolfgang Steen, representing the private sector shareholder Remondis, pointed out the excellent condition of the facility to the mayor during their tour of the plant. “As shareholder, we are helping to support the plant’s sustainable maintenance concept to ensure MVK operates far into the future,” commented the managing director of REMONDIS GmbH & Co. KG, Region North, which has owned a 49 percent share in MVK since 1998. The plant underwent a comprehensive overhaul during its inspection in the middle of the year.
I’ve never seen 214 skydivers simultaneously jump into the sky and I’ve certainly never experienced such a skydive," commented Timo Toperi who was elated with his new world record. "It is an absolutely brilliant feeling to skydive in such a large group. It’s impossible to put it into words." Timo Toperi got his parachuting licence back in 2007 and has jumped over 700 times since then. This world record jump has been the most memorable of his skydives to date. Born in Munich, he has also had a high-flying career at XERVON as a scaffolding and industrial services specialist. His career began in 1996 as a construction manager at RöRo Bautechnik GmbH in Flörsheim and then later as a site manager at ThyssenKrupp Xervon. His career took another big leap forwards following the takeover of Xervon by REMONDIS: first as regional manager responsible for the south west region and now – also as regional manager – for both the south and south west regions. Whether it be to do with scaffolding, industrial services or skydiving: the 46-year-old always has safety foremost in his mind. His hobby has been put on the backburner for the moment – his next formation skydive is not until next spring. Wherever he may be, we all wish Timo Toperi “Blue skies and safe landings”!

Again and again, the 214 men and women clad in their colourful jumpsuits leapt out of the ten planes. Numerous meetings and dry runs had taken place on the ground before they even got into the planes – and then the moment had finally arrived: at 9.20am local time on 24 October. All 214 skydivers succeeded in getting into their positions on time so that they were all joined together and heading towards the ground in formation as one large group. The “windmill” remained in the sky for a whole four seconds before they let go of each other and released their parachutes to reach the ground safely.

The big jump

XERVON REGIONAL MANAGER, TIMO TOPERI, IS ONE OF 214 PEOPLE TO SET A NEW WORLD RECORD IN FORMATION SKYDIVING

People

Thirteen practice runs were needed above the Arizona Desert. By the fourteenth run everything was perfect. Together with 213 other skydivers, Timo Toperi jumped from his plane, 5,800 metres above the town of Eloy in the US state of Arizona. 90 seconds later, the 214 skydivers had formed a huge black, red and gold windmill in the sky. A new world record – with XERVON’s Timo Toperi part of the group!

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Bodo Ramelow, parliamentary party leader of the ‘Die Linke’ party in the Thüringen state parliament, visiting Südharzer Gipswerke (from left to right: Silvio Löderbusch, Managing Director of REMONDIS Production GmbH, Angela Hummitzsch, deputy party leader of the ‘Die Linke’ party at the Nordhausen district council, Bodo Ramelow, parliamentary party leader of the ‘Die Linke’ party in the Thüringen state parliament, Dr Alfred Schiffer, Managing Director of CASEA GmbH, Wolf-Ulrich Künzel, member of the ‘Die Linke’ party and the environmental and regional development committee at the Nordhausen district council).

Norbert Rethmann, Honorary Chairman of the Supervisory Board of REMONDIS, talking to Reinhard Bütikofer, Chairman of the European Green Party at the European Parliament, during the 2014 Resource Efficiency and Recycling Congress in Karlsruhe.

The team of apprentices at REMONDIS’ head office in Lünen.

Bodo Ramelow, parliamentary party leader of the ‘Die Linke’ party in the Thüringen state parliament, visiting Südharzer Gipswerke (from left to right: Silvio Löderbusch, Managing Director of REMONDIS Production GmbH, Angela Hummitzsch, deputy party leader of the ‘Die Linke’ party at the Nordhausen district council, Bodo Ramelow, parliamentary party leader of the ‘Die Linke’ party in the Thüringen state parliament, Dr Alfred Schiffer, Managing Director of CASEA GmbH, Wolf-Ulrich Künzel, member of the ‘Die Linke’ party and the environmental and regional development committee at the Nordhausen district council).

The RECYCLING PROFESSIONALS visiting the Wieschhof Primary School in Olfen.
Save the world, just like that. Nice try

Our planet’s most pressing problems can only be solved if effective countermeasures are put in place. For example perfect recycling systems. Which is why REMONDIS recovers raw materials that are becoming increasingly scarce and returns them to industrial production cycles. Metals, paper, plastics and many other valuable materials. To protect our environment and reduce energy consumption. Non-stop, 24/7.

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