

The REMONDIS Group magazine

## **REMONDIS AKTUELL**

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#### Closed cycles: A must for the future

Preserving raw materials for future generations

REMONDIS AKTUELL online: remondis-aktuell.com

Award-winning recycling operations

The Lippe Plant in Lünen named one of the twelve best pioneering projects in NRW

#### Putting pen to paper

Norbert Rethmann exchanges letters with NRW Environmental Minster Johannes Remmel on the future of materials recycling

#### Indispensable and sustainable

New recycling system helps make aerosols a more environmentally friendly type of packaging

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#### Dear Readers!

The summer break has come to an end and people are gradually returning to work - as are the MPs in Berlin. Once again, environmental politicians are focusing on the subjects of waste management and recycling. The coalition agreement, signed by the Government in 2013, gives great importance to curbing global warming and using our planet's natural resources efficiently and also expressly states that innovations that protect the environment, prevent climate change and preserve resources are also opportunities for economic growth. Industry specialists are well aware, however, that economic growth and more innovations are only possible if there are clear framework conditions in place that guarantee fair competition, if product responsibility is extended and if recycling targets are raised. The latter, in particular, can only be implemented if the necessary legal framework has been established so that joint kerbside collection schemes for packaging and other recyclables can be set up.

Unfortunately, the latest draft bill for the new packaging law has failed to deliver what many had been hoping for. What we seem to have here is the eighth amendment to the Packaging Ordinance rather than a genuine recyclables law. Whilst there are a few positive approaches to remedying the current deficiencies, it does not deal with the question of whether waste made of similar materials to packaging should also be collected in recycling bins. The increased recycling targets are well below the volumes that could actually be recovered from household waste. According to the latest studies, an additional 7.8 million tonnes of raw materials could still be collected which in turn would reduce carbon emissions by a further 1.6 million tonnes. Moreover, the need for fair competition and a level playing field between the private and public sector companies has not been tackled in the draft bill either. And there is practically no mention

of introducing effective ecodesign guidelines that would force manufacturers to think about how their products could be recycled when actually designing them. We must wait and see whether this draft bill actually becomes law. The private recycling sector believes that a number of improvements need to be made to the bill. Time is running out, however, with the general election coming up next year.

REMONDIS demonstrates just what can be done with waste and how the very most can be made of these materials to curb climate change and protect the environment - such as at its Lippe Plant in Lünen. The efforts being made by the company here were officially recognised recently when KlimaExpo. NRW (a cross-departmental initiative of the state government of NRW to prevent climate change, conserve resources and achieve sustainable economic growth) added three of the Lippe Plant's areas of expertise to its list of the twelve best projects in North Rhine-Westphalia. At this site, industrial and household waste is recycled and turned into primary products for industrial businesses, waste and residual materials are transformed into fuels and, last but by no means least, biomass is recycled or used to generate energy. These three areas of expertise alone reduce greenhouse gas emissions by around 416,000 tonnes every year - and are, therefore, getting as close as technically possible to achieving fully closed cycles. The Lippe Plant flagship project is becoming ever more effective. It is high time that this model becomes the norm so that future generations also have a planet worth living on.

Yours

(Onc Thomas Conzendorf

### Closed cycles: a must for progress

THE LIPPE PLANT SHOWS HOW A SUSTAINABLE FUTURE CAN BE CREATED



Looking at the rate the world's population is increasing and at the exponential growth in the consumption of our planet's natural resources, one might be forgiven for becoming a pessimist. The so-called Earth Overshoot Day, the date when humanity has exhausted nature's budget for the year, was even earlier this year – on 08 August. And the British scientist and author, Stephen Emmott, states in his bestseller 'Ten Billion': "We urgently need to do – and I mean actually DO – something radical to avert a global catastrophe." This is what REMONDIS' Lippe Plant is all about. Europe's largest recycling centre is showing the world – a world, where simply rethinking matters is no longer an option – what and how concrete action can be taken. Much praise and several awards have been given in recognition of the efforts being made there. We spoke to REMONDIS managing directors, Herwart Wilms and Silvio Löderbusch, about why we should be more optimistic.



The Lippe Plant in Lünen covers a total area of 230 ha. A team of 1,400 people are here every day working for the future

RA: Mr Wilms, Mr Löderbusch, do you find yourselves worrying about our future when you read the latest reports on climate change or on the rate humans are consuming energy and natural resources?

Herwart Wilms: "We certainly can't and indeed shouldn't turn a blind eye to the global challenges caused by our planet's ever growing population. It wouldn't help anyone though to fall into a state of paralysing pessimism. The human race is still able to get a grip on the problems we have been inflicting on our planet. Which is why our work here at REMONDIS is as valuable as it is fulfilling: every single day we focus on finding concrete ways to create a sustainable supply of clean water and raw materials as well as to curb global warming."

Silvio Löderbusch: "The Lippe Plant shows how things could be done better and not just in one but in many different areas. There are even some concrete examples of how our innovative recycling operations have not only helped to prevent an environmental crisis but also to create an environmentally friendly mass-produced item. By producing high quality recycled gypsum, we have turned a substance that used to cause acid rain and put the European forests and their ecosystems at risk into a premium product for the construction industry and medical sector. A sustainable solution to the problem! A sign, too, that we should be optimistic if the problems are tackled correctly."

#### RA: Turning a crisis into an opportunity then?

Herwart Wilms: "Exactly. Our intelligence is our most important resource and we are permanently using our engineering skills and our know-how to develop new processes so that more – or preferably – all waste can be recycled in the future. This really is the only way to combat society's excessive consumption and the negative impact this is having on the environment. The fact, for example, that three separate areas of expertise at the Lippe Plant have been named official KlimaExpo.NRW projects is surely a sign that this message is gradually getting through to a larger audience. We are certainly proud of this achievement but it is also an incentive to do even more. Closed cycles are essential if progress is to continue to be made in the future."

#### RA: Could you give an example of this?

Silvio Löderbusch: "To be honest the whole of the Lippe Plant is an example of high quality recycling. If we focus, though, for a moment on one of the world's most urgent environmental problems - the plastic waste in our oceans then an essential part of the solution to this problem can be found here in Lünen. Our plastics recycling facility at the Lippe Plant transforms collected plastic waste into new raw material for the plastics industry. None of this plastic, at least 20,000 tonnes a year, ends up in our environment, let alone in our seas. What's more, if we compare this to plastic made from crude oil, then every tonne of recycled plastic we produce reduces carbon emissions by 1.2 tonnes. If this process were to be used right around the globe and if the public could be taught to separate their waste properly, then humanity could solve several pressing environmental problems in one go."

The Lippe Plant acts as a role model for many countries around the world – demonstrating how innovative and environmentally friendly technology can be used to recover raw materials



Go to remondis-aktuell.com to see a film about REMONDIS' Lippe Plant

"Compared to plastic made from crude oil, every tonne of recycled plastic we produce reduces carbon emissions by 1.2 tonnes."

Silvio Löderbusch, Managing Director at REMONDIS

#### REMONDIS LATEST NEWS



Silvio Löderbusch, Managing Director at REMONDIS



Herwart Wilms, Managing Director at REMONDIS

#### RA: Would it be correct then to say 'recycling prevents climate change'?

**Herwart Wilms:** "Absolutely. The operations at the Lippe Plant alone reduce carbon emissions by almost half a million tonnes. By the way, one of the classic recycling processes – composting garden waste – plays a major role here. Only we do it on an industrial scale, treating 70,000 tonnes every year."



Silvio Löderbusch: "Which means really that what you said before should be expanded. Recycling prevents climate change, conserves natural resources, protects our environment and guarantees the sustainable recovery and supply of raw materials to satisfy society's ever growing demand for consumer products."

Herwart Wilms: "And, on top of all that, recycling creates a huge number of great jobs! Around 32,000 people work at REMONDIS. A quarter of a million people work in the recycling sector in Germany alone. It is, therefore, very important for the economy – creating jobs and boosting exports."

"Recyclers – and consequently the environment – don't have a chance if they are simply given what the previous owner no longer wants." Herwart Wilms

#### RA: If you had one free wish as to how the industry should develop in the future, what would it be?

Herwart Wilms: "Besides raising public awareness around the world? My wish would most definitely be to have more support from politicians. The current debate and the fact that there isn't going to be a new recyclables law but rather a new version of the Packaging Ordinance shows that politicians would appear to have not yet recognised the true potential and vital importance of recycling. No matter how hard you look, there aren't any really ambitious recycling targets. We certainly can't see any real incentives to avoid waste being generated in the first place nor to increase the use of recycled products. And the urgent need to improve the recyclability of new products by introducing better and obligatory ecodesign guidelines hasn't been met yet either. There's still a great deal to be done." RA: Looking at today's technology though, is it really possible to do this? In other words: is it really possible to recycle all the different kinds of waste that society produces?

Silvio Löderbusch: "Of course, taking today's modern industrial society and the latest levels of technology into account, there are still some residual substances which cannot be sent for materials recycling. These, however, are currently being used to produce valuable refuse-derived fuels to generate energy and heat. This, in turn, reduces our consumption of primary raw materials and cuts carbon emissions. Everyone's goal though must be to increase the rates of material recycling as this is the only way to preserve our planet's raw materials for future generations."

Herwart Wilms: "To do this, however, we need the support of both manufacturers and politicians. If a recycling industry is to preserve natural resources and protect the environment, then systems must be in place that enable product life cycles to be fully closed - from the product design, to intelligent collection and sorting systems, all the way through to the recycling activities and manufacturing of new products. Recyclers - and consequently the environment - don't have a chance if they are simply given what the previous owner no longer wants. The system can only be perfected if the products are designed so that we can recycle them effectively. Which is why, looking ahead, recycling mustn't begin when someone wants to get rid of a product. Recycling starts at the point a product is designed. Products need to be recycling friendly, i.e. made in line with ecological criteria. If society wishes to survive then people must take this on board, accept it and ensure words are put into action by demanding an appropriate response from politicians. For one thing is certain: if we don't try and overcome the challenges caused by our dwindling supplies of raw materials, we are putting our own future at risk."

RA: Mr Löderbusch, Mr Wilms, many thanks for the interview.

## **REMONDIS'** award-winning recycling operations

THE LIPPE PLANT IN LÜNEN NAMED ONE OF THE TWELVE BEST PROJECTS IN NRW HELPING TO CURB CLIMATE CHANGE

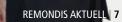
KlimaExpo.NRW officially named the recycling activities at the Lippe Plant in Lünen as one of the best pioneering projects in the state of North Rhine-Westphalia (NRW) during its annual event, "Climate Protection as an Engine for Progress 2016 – Outstanding Pioneers", which was held in Düsseldorf on 23 June. KlimaExpo.NRW plans to present twelve pioneering projects from NRW, which have a positive impact on our climate, each year until 2022. It is looking for innovative projects that conserve natural resources and help reduce energy consumption for its "Saving Resources" category – and found this at REMONDIS' Lippe Plant in Lünen three times over.

"The efforts being made to prevent climate change are an engine for progress for both the economy and society as a whole – and this can clearly be seen by the KlimaExpo.NRW projects. The way the award winners have demonstrated just how sustainable our state can be is truly impressive. They are also a great incentive for all of us to step up our efforts to find innovative business ideas to help prevent climate change," commented Minister President Hannelore Kraft. At the Lippe Plant in Lünen, industrial and household waste is recycled and turned into primary products for industrial businesses, waste and residual materials are transformed into fuels and, last but by no means least, biomass is recycled or used to generate energy. These three areas of expertise alone reduce greenhouse gas emissions by around 416,000 tonnes every year. A great example of efficient recycling.

REMONDIS' plant in Lünen is home to a large number of facilities that are able to treat and recycle a wide range of waste for re-use. Sodium aluminate, for example, is recovered and used for treating wastewater or making binding agents and white pigments. FGD gypsum, generated by flue gas desulphurisation systems at fossil fuel power stations, is also processed here and transformed into binding agents.

Three excellent projects were honoured by NRW Environmental Minister Johannes Remmel for the "Saving Resources" category. Managing director Herwart Wilms accepted the award for the Lippe Plant on behalf of the company "At the Lippe Plant, we turn the things that people no longer want or need into raw materials for new products or into fuels. This award, which KlimaExpo.NRW has presented to us, confirms that we are heading down the right path by looking at the whole picture when it comes to recycling materials. We are, for example, completely energy self-sufficient here in Lünen," explained Herwart Wilms, managing director at REMONDIS Assets & Services GmbH & Co. KG, who accepted the award in Düsseldorf on behalf of the company.

KlimaExpo.NRW is a cross-departmental initiative of the state government of NRW. It launched this project to ensure that the energy transition, the measures taken to curb climate change and any changes that have to be made as a result of global warming all act as key driving forces for economic and social development. The overall aim is to present successful innovative projects to as wide an audience as possible – also at international level – as well as to promote further collective action to tackle climate change. REMONDIS' Lippe Plant clearly demonstrates how recycling can help prevent climate change.





## Munich welcomes visitors from across the globe

REMONDIS DEMONSTRATES THE GLOBAL IMPORTANCE OF RECYCLING, WATER AND SERVICES – AND WINS THE GREENTEC AWARD

The IFAT has had a great track record – from the first time it was held in 1966 (147 exhibitors / 10,200 visitors) all the way through to the latest event. Around 138,000 visitors from more than 170 countries travelled to Munich this year to attend the IFAT, which was held between 30 May and 03 June. With the number of participants once again increasing, it can clearly be seen just how important the IFAT has become for the environmental technology sector over the last 50 years. Once again, REMONDIS was at the forefront with a newly designed stand and new recycling processes. One of these – TetraPhos for recovering phosphorus from sewage sludge ash – was presented with the coveted GreenTec Award on the evening before the exhibition opened.



50 years and each time bigger than the last – the IFAT in Munich

The number of different nationalities attending the world's largest trade fair for water, sewage, waste and raw materials management was once again impressive this year. Ludger Rethmann, Board Chairman at REMONDIS, is in no doubt "that the IFAT continues to be the undisputed leading exhibition for recycling, water and industrial and municipal services. The fair attracts people from all over the world, spreading its message of how our planet's natural resources could be used more sustainably right across the globe." The 'Top Ten' nationalities visiting the IFAT this year (following Germany) were Austria, Italy, Switzerland, China, Czech Republic, Netherlands, Spain, Poland, Denmark and Turkey. There was also a significant increase in the number of visitors from Australia, China, Israel and Singapore. In fact, a good 47 percent of all those visiting the fair came from abroad. A total of 3,097 exhibitors (1,695 national / 1,402 international firms) from 59 countries showcased their latest innovations at the event which covered an area of 230,000 square metres. Never before had the share of international exhibitors (45%) been so high.

REMONDIS welcomed prestigious guests from Germany and abroad to its stand at the IFAT in Munich. These included Johannes Remmel, Environmental Minister of the German state of North Rhine-Westphalia, who was clearly impressed by the company's latest innovations. REMONDIS International invited the Deputy Minister of the Building Industry and HCA of the Russian Federation, Andrey Tchibis, to Munich who also took this opportunity to present the latest Russian recycling laws during the BDE Forum. The minister, who is responsible for the development of this key industry in Russia, took part in discussions, with REMONDIS' support, to explore how the Ministry for the Building Industry and HCA of the Russian Federation and the German recycling sector might be able to work together in the future.

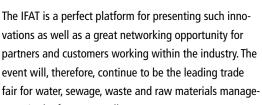


The share of international visitors has grown considerably



One particular highlight for REMONDIS this year was winning a GreenTec Award for TetraPhos, its innovative process to recover phosphoric acid from sewage sludge ash. This process was developed and patented by REMONDIS together with its public sector partner HamburgWasser, where a large pilot plant has been set up in Hamburg Harbour.

vations as well as a great networking opportunity for partners and customers working within the industry. The event will, therefore, continue to be the leading trade fair for water, sewage, waste and raw materials management in the future as well.





Andrey Abramenko (left), Head of the Clearing & Waste Management Department of the 2018 FIFA World Cup Russia Organising Committee, during his visit to REMONDIS' stand at the IFAT in Munich. On his right: Swetlana Bigesse and Hendrik Vonnegut, Managing Directors of REMONDIS Russia



Ulrike Scharf, Bavarian State Minister for the Environment and Consumer Protection, spoke to REMONDIS board members and managing directors at the IFAT about the challenges of protecting the environment and curbing climate change. On her left: Andreas Bankamp, Managing Director REMONDIS Aqua



Go to remondis-aktuell.com to see further images taken at the IFAT

## Putting pen to paper

**INSTEAD OF A RECYCLABLES LAW – AN EXCHANGE OF CONTROVERSIAL LETTERS** 

This spring, four state environmental ministers from the Green Party proposed a compromise in an attempt to save the recyclables law which had effectively run to ground. By putting forward their suggestions, the states of North Rhine-West-phalia (NRW), Lower Saxony, Baden-Württemberg and Schleswig-Holstein were trying to redirect the debate away from the often ideologically driven question of who was responsible for what towards a supposedly more pro-business and more sustainable approach. Norbert Rethmann, honorary chairman of the supervisory board of the RETHMANN Group, read their comments with great interest and decided to put pen to paper. He responded to the initiative put forward by the four states by writing a letter to the environmental ministers, first and foremost to Johannes Remmel, Minister for Climate Protection, Environment, Agriculture, Nature Conservation and Consumer Protection for NRW. He not only expressed his own personal point of view here but also wrote about the concerns felt by the whole of the private sector.

"I'd venture to say that, in around ten years' time, (...) the waste management and recycling sectors will be as important as the chemicals industry and automobile industry are today."

Norbert Rethmann, Honorary Chairman of the Supervisory Board of the RETHMANN Group

#### **Dear Ministers**

Last week, I was invited by the GGSC law firm to attend a symposium to celebrate Mr Gaßner's 60th birthday. Moreover, I read an article in EUWID (issue 14/2016) about your initiative to find a compromise for the recyclables law. Please allow me to make a few comments here.

During the symposium in Berlin on 06 April 2016, Prof. Töpfer gave a talk that clearly illustrated the development of the Packaging Ordinance over the years and the path the country has taken on its way to becoming a recyclables economy. Being President of the BDE [Federal Association of the German Waste Management Industry] at the time the regulations for the Packaging Ordinance were originally drawn up, I was able to participate in many discussions and meetings.

The outcome of this course of events can also be seen in the way our family-run business has developed. Back in 1977, I drew up a set of company guidelines for our then small workforce. One of our guiding principles at that time still remains true today: "At our company, recycling has priority over disposal." I believe that this is the guiding principle for all efforts to recover recyclable materials and the first step towards creating a recycling economy.

#### The challenges of recycling

I have been following the discussion about the recyclables law with great interest but also with a degree of detachment. I believe the minimum recycling rates could be much more ambitious. The decision to recycle materials, also those collected from local households, has created some huge challenges for waste management companies. Working together with scientists and German industrial businesses, recycling processes and treatment facilities have been developed to make it possible for the majority of these substances to be returned to production cycles. Unfortunately, these first steps have been quickly forgotten. I would like to highlight the subject of glass here. Thanks to the change of attitude of glass manufacturers, brought about by the energy savings they could achieve (a third less energy), and the sorting processes developed by universities – here in particular the collection of glass according to colour – glass recycling has become the norm and not only here in Europe but across the whole of the world. There have been similar developments on the plastics market – especially for PET materials. Our family-run business will be opening a new treatment plant in Hamburg in the next few days which will be able to treat 20,000 tonnes a year.

Alongside all this, a wide range of initiatives have been set in motion – in particular in industrial and commercial areas – to try and recover recyclable materials. Thanks to these efforts, our company alone is able to recover ca. 7 million tonnes of scrap metals and 2.5 million tonnes of paper every year.

I would venture to say that, in around ten years' time, these developments will have resulted in the waste management and recycling sectors being as important as the chemicals industry and automobile industry are today.

There is already a big demand for recycling systems both here in Europe and beyond. ►

In his letter to the environmental ministers, Norbert Rethmann calls on politicians to create the necessary framework conditions for the whole of the waste management and recycling sector



**2.5m** tonnes



#### Fair competition benefits local residents

For the most part, if I have gauged the situation correctly, the discussions surrounding the recyclables law have been about who will be responsible for collecting these materials from the households in the future.

This is actually a simple logistics task. In my opinion, this has nothing to do with essential public services. The real challenge here is finding ways to process the materials so that they can be returned to industrial businesses as primary raw materials.

Being a competitive society within a social market economy, we are governed by competition and depend on these services being regularly put out to tender. In this respect, I have no issue whatsoever with both municipal companies and private sector firms competing with each other to take over these tasks.

I do believe, however, that these tasks must always be put out to tender and that everyone must be subject to the same competitive conditions – especially as far as tax rules are concerned. There is no reason for municipal companies to be in a better position when it comes to taxes. Fair competition is needed in this sector so that local inhabitants can benefit.

#### "There is no reason for municipal companies to be in a better position when it comes to taxes. Fair competition is needed in this sector so that local inhabitants can benefit."

Norbert Rethmann, Honorary Chairman of the Supervisory Board of the RETHMANN Group

Private sector waste management firms are often accused of 'cherry picking', forcing the municipal waste management companies to step in and fill any gaps as their public sector duty. This is not true. For more than 25 years now, the collection of sales packaging has been put out to tender. These materials are being collected across the whole of the country as part of the so-called 'dual system' and it is the private sector firms that are operating in the rural areas of Germany. Of course, this can all take place under the responsibility of local authorities. Rules, though, must be drawn up to ensure that these services are put out to tender every five to eight years and these rules must then be adhered to.

I have had the privilege of working as an entrepreneur in this sector for around 50 years now. I have always acted according to the motto "Accepting challenges, taking responsibility". This has led to the development of an incredible number of innovations – developments which can, I believe, be put down solely to the commitment and efforts of the private sector.

There is, of course, the possibility of the two sectors collaborating as public private partnerships to face and overcome future challenges together. Such partnerships allow local authorities to remain in control and give private sector firms the freedom to introduce innovative business solutions.

#### Adopting successful concepts

Over the years, I have learned to orientate myself towards solutions that work well in practice. In this context, I would like to mention the 'TierKBG' [German animal by-product regulations]. I believe that the legal regulations for disposing of animal carcasses offer an excellent opportunity here as they could be transferred to set up similar fundamental principles for waste management laws. Our company has been operating in this sector for decades now, recycling and disposing of animal by-products, and is has become very clear that these regulations really guarantee that such materials are handled safely – protecting both consumers and the environment. I also believe that this is a very modern law that provides all those operating in the sector with many incentives to come up with entrepreneurial and innovative solutions.

This has led to our company now having a 20% share of the global market for producing the anticoagulant heparin from mucosa and also to us producing 700,000 tonnes of protein for the animal feed industry, in particular, for the pet food industry. Moreover, we are involved in the production of blood plasma and the recycling of fish waste – with all the volumes here being large enough to be of interest to our customers. May I also touch on the investments that need to be made to set up modern processing facilities. Just one example here is the plant which we built in the Russian City of Kazan and which involved our company investing around 40 million euros. At least 25 million euros of this sum were spent on technical equipment from Germany and other European countries.

These are all high quality machines (decanters, centrifuges etc). This development is, therefore, extremely important for Germany. We also saw this when we went to Singapore a few weeks ago to take part in the official opening of a plant for recovering metals from IBA from household waste incineration plants. The technology installed will enable the plant to handle 600,000 tonnes a year.

#### The need for political concepts

In my opinion, there will continue to be major developments in the recycling sector over the next few decades. For us, this means we will be able to provide 63,000 full-time jobs, with 2,000 apprentices and a large number of positions that will demand the very most – also in the area of science – from engineers, business people etc.

Political concepts are needed here to set up future framework conditions. The issue here is not about making funds available to develop the umpteenth process to recover phosphate. What I feel is important is for politicians to create economic incentives – especially regarding the contamination of materials in the many different recycling processes.

In some cases, manufacturers are taking the easy way out here: they produce cars and other consumer items. Once these have been used, they are returned and we are then faced with the challenge of recovering the metal, aluminium, copper and carbon from the composite materials (such as those from the automobile industry) so that they can be re-used. This is becoming more and more noticeable with components such as chips, printed circuit boards and control modules. They should be installed in the products so that they can be recovered easily at the end of the product's useful life. If this happens, then these raw materials can also be recovered and re-used. I think that the discussions being held at the moment are too simple. People are currently talking about who may collect which materials. Instead they should be looking to solve this issue as a competitive society in line with a social market economy in order to direct more attention to all aspects of the subject: what happens to the raw materials after they have been used? How can they be recovered and returned? Just how effective are the checks being made to see how contaminated these materials are?

We are doing our best to take responsibility here, making the most of our own laboratories, where more than 200 people are now employed, and of the options open to us. It would be nice, however, to see a much greater political reaction so such developments are taken more seriously. This is especially true for the question of the separate collection of organic waste – something that became mandatory by law in 2012. The German states have not succeeded in enforcing these regulations. Having experienced all this, who really expects a recyclables law to be strictly implemented?

This letter has turned out to be very long indeed. I am, therefore, a little worried that you might not be able to find the time to read it and reflect on the points I have highlighted. Should you believe that a discussion about this subject would be useful for your decision-making process, then I would be more than happy to contribute to this discussion by passing on my experiences – or rather the experiences of our company – to you.

Yours sincerely Norbert Rethmann

> Turn to the next page to read NRW Environmental Minister Johannes Remmel's response

#### 14%

of all raw materials used by industrial businesses are recycled raw materials



#### <sup>A further</sup> **7.8m** tonnes

of recyclables could be recovered from municipal waste

#### A further **95kg**

of recyclables could be recovered from German waste per person per year

## **250,000** people

currently work in the recycling sector – and this number continues to rise quickly

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#### > Putting pen to paper

INSTEAD OF A RECYCLABLES LAW – AN EXCHANGE OF CONTROVERSIAL LETTERS

#### Dear Mr Rethmann

Thank you very much for the letter you sent to Minister Höfken, Minister Untersteller, Minister Habeck and myself on 20.04.2016 in which you refer to the initiative put forward by a number of German states regarding the recyclables law and comment on a number of the fundamental issues relating to this topic. Your letter proved to have many similarities with the position of the German states that initiated the resolution passed by the Bundesrat on 29 January 2016 to create an efficient recyclables law that benefits the environment, consumers and local residents. I take great pleasure in replying to your letter on behalf of – and in consultation with – my colleagues.

We agree with you that the decision to recycle materials, also those collected from local households, has created some huge challenges for waste management companies and that the current recycling targets could be considerably more ambitious. It is an indisputable fact that the real challenge here is finding ways to process the materials so that they can be returned to industrial businesses as primary raw materials. Your prediction that, in around ten years' time, these developments will have resulted in the waste management and recycling sectors being as important as the chemicals industry and automobile industry are today cannot be contradicted either. This growth will provide the private waste management industry with more areas of activity and relevant legal regulations must be introduced here to strengthen this sector.

In our opinion, therefore, considerable efforts must also be made to achieve much more ambitious environmental targets, in particular by increasing recycling volumes and qualities by extending product responsibility. To reach such goals, we need a recyclables law that not only includes tough regulations regarding the recycling of municipal household waste but that also – at a later stage – implements product responsibility for commercial waste as well. For the most part, we agree with your statement that, being a competitive society in a social market economy, services must be put out to tender regularly and be governed by competition. Indeed, this was the reason why the proposal submitted by a number of states to make local authorities responsible for organising the collection, sorting and recycling of waste packaging and waste made of similar materials was not pursued. The Bundesrat has now ruled overwhelmingly in favour of a compromise in which local authorities are merely responsible for organising the collection of waste packaging and waste made of similar materials (including glass packaging via other containers) whilst the businesses responsible for the products must organise the subsequent sorting and recycling. This model ensures competition is not restricted.

It should be highlighted here that local authorities should, as a general rule, put the collection of recyclables out to tender in line with public procurement laws. Notwithstanding the above, local authorities must be given the option to collect these materials themselves via in-house tenders. Local authorities are responsible for organising the services and have the right to decide how they should be offered to their local residents, e.g. via kerbside collection schemes or via recycling centres. A so-called standard cost payment scheme is being planned for the collection of light sales packaging and glass which should provide flat rates to cover all costs (including the previous ancillary costs). A transparent system will be used to fix these standard costs by looking at the results of earlier tenders put out for collecting these materials. This will make it possible to set up flat rates for the collection costs and will also ensure there is a cap on the costs so that they cannot grow disproportionately. Consequently, there will no longer be a need to negotiate the time-consuming and costly voting agreements, as is currently the case for paper, card and cardboard, which will also reduce the amount of red tape.



Johannes Remmel, Minister for Climate Protection, Environment, Agriculture, Nature Conservation and Consumer Protection for the state of North Rhine-Westphalia

The apprehension felt by the private waste management sector that local authorities may not put the collection of recyclables out to tender and so not open up the market to privately owned firms but (possibly increasingly) carry out these services (again) themselves and push out any competition is not without cause. However, it should be pointed out here, that these services are, for the most part, being put out to tender across the country. There is no reason why this should change especially as the private waste management sector can do a lot themselves to counteract the current trend towards renationalisation by submitting fair and competitive offers.

On the other hand, it would be difficult to justify a public procurement law to a local authority with its own unincorporated business that forbids it taking part in the tender process for its own district or makes it necessary for them to change the status of their waste management business to that of a separate legal entity so it can participate in the tender. With this in mind, we would ask you to understand the point of view of local authorities who do not wish to have their public duties curtailed by being forced to put services out to tender, even if the volume of materials affected here is relatively small.

Ultimately, it remains to be said that the main obstacle to a recyclables law being passed is the moot point of whether a relatively small number of local authorities should, in the future, be prevented from awarding contracts for waste collection services via in-house tenders. We do believe, however, that this problem is not insurmountable. On the other hand – and you may be in full agreement here – the success of a recyclables collection scheme depends very much on the volume and the quality of the materials collected by local inhabitants. It does not help here to simply raise recycling targets. So far, the Federal Ministry for the Environment has remained silent on this crucial issue because the dual systems are unable to influence households directly. Even manufacturers admit that local authorities play an essential role here providing a "face for local residents". If local authorities have such a key role in this collection process - also because it is they that have the possibility to impose any necessary sanctions - then it stands to reason that they are also made responsible for organising the collection of the materials. This is one of the main reasons why we believe it is essential that they are given this responsibility.

We very much hope that our arguments here have provided you with a greater insight into the position held by the states and have taken the liberty of assuming you are happy for this letter to be made public to a wider audience.

Yours sincerely Johannes Remmel

## Recyclables law remains on hold

THE SEARCH FOR A REPLACEMENT FOR THE PACKAGING ORDINANCE IS PROVING TO BE A NEVER-ENDING TASK

All hopes were on there being a new recyclables law. These were dashed, however, on 19 July when the Federal Ministry for the Environment once again presented a draft bill for a packaging law. Another draft bill, therefore, following in the footsteps of the seven amendments that had already been made to the Packaging Ordinance since 1990. The recyclables law – which is so urgently needed – will be a long time coming.

The Bundestag (lower house of the German parliament) will probably be taking a closer look at the latest draft packaging bill at the end of this year or at the beginning of 2017. The bill is already being heavily criticised by a number of groups. For example by the environmental organisations, BUND (Friends of the Earth Germany), DUH (German Environment Aid), NABU (German Nature and Biodiversity Conservation Union) and the umbrella organisation of German environmental NGOs, DNR (German League for Nature, Animal and Environment Protection).

#### "The Packaging Ordinance is not a successful model... We have been waiting for a recyclables law for over six years now."

Johannes Remmel, MdL, Minister for Climate Protection, Environment, Agriculture, Nature Conservation and Consumer Protection for the state of North Rhine-Westphalia

> All the organisations are calling for a recyclables law with ambitious environmental targets rather than yet another amendment to the Packaging Ordinance. They have reminded politicians in no uncertain terms that the objective here is to extend the kerbside collection of recyclables to

include waste made of similar materials to sales packaging (i.e. plastic and metal) – something that is in the German government's coalition agreement and yet is nowhere to be found in the draft packaging bill.

In their joint statement, the environmental organisations conclude: "The result is an unambitious draft bill for a packaging law that will mean a step backwards rather than forwards for environmental protection." The organisations believe that the packaging law will prevent the recycling bin being introduced across the country. Nothing in the draft bill helps promote an increased collection of recyclables nor does it contain any effective measures to reduce volumes of waste or improve the quality of recycling.

#### **Recyclables law: Bundesrat pushing for a result**

The draft bill was drawn up in response to a resolution passed by the Bundesrat (upper house of the German parliament) on 29 January 2016. This resolution instructs the German government to submit a recyclables law to replace the Packaging Ordinance as soon as possible. The key issue behind this demand is to ensure that waste packaging and other types of waste made of the same materials are collected and recycled together in order to increase recycling rates.

#### "All those involved are waiting for a recyclables law. Both public sector and private sector businesses need to be able to plan ahead."

Michael Thews, MdB, rapporteur for the waste policies of the SPD Bundestag parliamentary group

#### "What we need is a recyclables law with ambitious recycling targets and structures that are as simple and citizen friendly as possible."

Franz Untersteller, MdL, Minister of the Environment, Climate Protection and the Energy Sector for the state of Baden-Württemberg

The overall objectives of the Bundesrat are to achieve better and more innovative recycling systems, to have a simple collection scheme in place as well as to safeguard municipal interests and private sector competition. To ensure this happens, all local authorities should be responsible for collecting the recyclables whilst the actual task of sorting and recycling the materials should be put out to tender. A further demand submitted by the upper house is for there to be a central body with national powers. The tasks of such a body would then range from registering all businesses responsible for such products, to compiling uniform licensing regulations, all the way through to putting out tenders for sorting and recycling the materials. According to the Bundesrat, such a move to replace the current dual systems could greatly help to reduce red tape and cut the costs incurred by companies.

Still many recyclables hidden away in municipal waste REMONDIS is also doing everything in its power to promote a recyclables law that increases raw material efficiency and the quality of recycling systems. At the end of the day, the aim here is to make the very most of the recyclable materials found in household waste. According to an INFA study, a further 95 kilograms of recyclables could be recovered from household waste per person per year. With this in mind, every possible step should be taken to exploit these volumes to help preserve our planet's natural resources.



Read the statement released by the BDE (Federal Association of the German Waste Management Industry) on the packaging law here





### Tax privileges: councils exempt from charging VAT

BDE PRESIDENT PETER KURTH CRITICISES THE LAWS GOVERNING MUNICIPAL COMPANIES

The discussion about having a fair tax system for both municipal and private sector recycling businesses continues unabated. The fact that municipal businesses do not have to charge VAT on their services still dismays their private sector competitors. The President of the BDE (Federal Association of the German Waste Management Industry) Peter Kurth wrote an open letter to the Federal Minister of Finance Wolfgang Schäuble (CDU) in which he criticised this system of "unfair competition" between public and private sector recycling companies.



Peter Kurth, BDE President

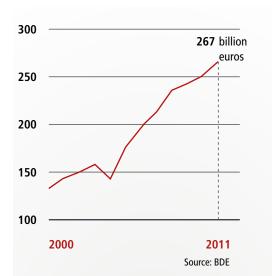
Most people are horrified when they hear that large international corporations have based their head office abroad in order to lower their tax bill. Immediately, discussions start up about unfair competition. This feeling about what is just and unjust is not replicated, however, when it comes to the energy sector or the waste management and recycling industry. BDE President Peter Kurth believes that the fact municipal companies are exempt from charging VAT is just as unfair. This German law applies to all public sector companies (i.e. institutions governed by public law, special purpose associations and owner-operated municipal enterprises) and induces just as strong a feeling of being treated unfairly, in particular among the private sector firms affected by this. Very few countries in the European Union still have such tax laws in place.

The importance of public sector business activities has undergone a change over the last few years – especially at local authority level. The turnover of municipal companies more than doubled between 2000 and 2011. Lying at 267 billion euros, this makes up almost ten percent of the country's gross domestic product. When taking part in public tenders, these municipal firms are even able to directly advertise the fact that they have lower costs. Fair competition, Peter Kurth says, cannot tolerate such a legal discrimination of market players. He continued: "Just recently, a case was brought in front of a Bavarian council by a private sector firm to found a special purpose association to take over a waste management contract. Its argument for doing this was that it wouldn't have to pay VAT. This clearly illustrates the fact that the current situation is unfair." There is absolutely no difference here to private sector corporations trying to avoid paying taxes.

In his letter, Peter Kurth calls on the Federal Minister of Finance Schäuble to re-examine these tax regulations. Steps should also be taken to see what the consequences would be if such an amendment to the VAT law were to be made. Such an investigation would also send a clear message that the tax authorities were taking the problem of unfair tax systems seriously.



#### **Growth** The turnover of municipal companies



## Long-term solutions for mineral waste

PUBLIC PRIVATE PARTNERSHIPS A GOOD OPTION FOR LANDFILL PROJECTS AS WELL





Even though Germany enjoys high recycling rates, there is always a certain amount of mineral construction and demolition waste or slag that cannot be recycled and so must be taken to landfill. A number of regions around the country are finding themselves facing an imminent shortage of landfill space – primarily because many of the current landfills are due to close in the not too distant future. The REMEX Group, a company belonging to REMONDIS, has been entering into public private partnerships to provide local authorities with reliable solutions to this problem and help them increase their landfill capacities.

A group of experts met at the IFAT 2016 at the beginning of June to discuss the landfilling of mineral waste. Everyone present – whether they were politicians, business people or scientists – agreed that priority must always be given to materials recycling. At the same time, though, they also reiterated the need to have the necessary landfill space available across the country for residual materials that are unable to be recycled for re-use. In practice, however, it is not so easy to set up new landfills as there is a distinct lack of suitable land. Local authorities are finding it difficult to guarantee space for landfill materials.

#### Using existing landfills twice

ZAK (Zentrale Abfallwirtschaft Kaiserslautern) and REMEX have proven that it is possible to find intelligent solutions to this problem with their 'landfill on a landfill' concept. At the centre of this project: ZAK's old landfill at its Kapiteltal site near Kaiserslautern in the German state of Rhineland-Palatinate. Here, the partners have created additional landfill space following the principle of "new on old". This new landfill section uses around 21 hectares of old landfill space as well as a further 10 hectares of the Kapiteltal valley immediately bordering this area. Due to be completed this year, this "new" landfill will provide a safe and environmentally compatible area for a total of around 7.2 million cubic metres of slightly polluted mineral waste (so-called 'DK1' landfill category). Plans are for it to accept waste until 2052. This well thought-out extension of the existing landfill saves space, is to be run using the latest technology and also ensures that the original landfill does not impact negatively on the environment. Moreover, it guarantees that the region has sufficient landfill space to provide its local inhabitants, the construction sector and industrial businesses with a safe place to deposit their waste.

#### **Environmental & economic benefits**

This smart solution has a number of other advantages as well: the company will be able to use both its team of experienced staff and its existing infrastructure to operate the new landfill – both of which will help keep the fees stable and take the pressure off the public purse. This joint project has also proven to be well worth its while as far as the investment sum is concerned, as a considerable amount of money has been and will continue to be needed to create the landfill as well as to seal it off and landscape it in the future. Clear proof, therefore, that it is more than possible for local authorities to meet their landfill needs in a cost-effective and environmentally friendly way.

> REMEX Deponiegesellschaft Kapiteltal mbH is ZAK's partner for this project and will also be responsible for marketing activities

"There has been great interest in this public private partnership – and not only in Rhineland-Palatinate but in other German states, too."

Andreas Herb, Managing Director of REMEX SüdWest GmbH, Karlsruhe

Pooling together know-how & individual strengths ZAK opted to collaborate with the REMEX Group following a Europe-wide tender. Each partner has been able to contribute their various strengths. This creates both synergies and advantages. On the one hand, ZAK is able to fulfil its municipal duties as the owner of the landfill ensuring that there is sufficient space available and that fees remain stable. Being its private sector partner, the REMEX Group bears all costs and long-term financial risks connected to building, operating and, later, managing the landfill after it has been closed down. Furthermore, REMEX will be marketing the landfill space agreed on in the contract, helping to make sure the site is run cost-effectively. REMEX will be making the very most of its years of experience of this specialist business and of its know-how from operating numerous landfill projects – strengths from which the Kaiserslautern region will benefit for many years to come.

REMEX processes around



of mineral waste every year and operates a large number of landfills

### Investing in the future

611 YOUNG PEOPLE START AN APPRENTICESHIP AT REMONDIS, RHENUS AND SARIA, A TOTAL OF ALMOST 2,000 APPRENTICES The new apprentices are looking forward to learning their new professions

Recycling, water and services are all growth industries with a strong future

The three family-run firms are currently training just under 2,000 young people They truly are impressive numbers and would certainly appear to point towards a future in which the structural transformation of the economy has been a complete success. The RETHMANN Group companies are once again meeting their responsibilities this year, training a total of 1,936 young people in a variety of modern professions. 611 of these apprentices joined the Group this year. They have all made a good choice as the recycling, water, industrial and municipal services sectors as well as logistics and the bio-industry all have a strong future.

The recycling sector has taken on an important role in the German economy and is creating many new jobs. More than 250,000 people already work in this industry today helping the country to achieve a more sustainable future and generating a total turnover across the country of around 70 billion euros. This development is also reflected in the apprenticeship figures at the RETHMANN Group. 380 of the new apprentices took their first step towards their new career at REMONDIS, the largest of the three sister companies, this August – more than ever before. Rhenus welcomed 212 new apprentices and SARIA nineteen. They have been able to choose from around 50 different professions, all of which will give them a strong position in the job market in the future - from the fields of chemical, motor and environmental technology, to commerce, IT, electronics and industrial metal engineering, all the way through to logistics and a variety of craftsmanship skills. Training to become a professional truck driver heads the list of the Top 3 professions at REMONDIS with a total of 293 apprentices. It has become a tradition to invite the new apprentices to REMONDIS' head office and this year was no exception. On 29 July, they travelled to Lünen where they were welcomed to the company by Norbert

Rethmann, honorary chairman of the supervisory board, and Frank Dohmen, Head of HR. Norbert Rethmann sketched an optimistic picture of the future, emphasising just how important the recycling sector is becoming – and not only for Germany but for the whole of our planet. The recycling, water and logistics sectors will all find themselves playing an increasingly vital role as the world's population steadily increases and the need to conserve natural resources and curb global warming continues to grow. All those, who choose to carve out a career for themselves in one of these industries, will be able to drive sustainable development and environmental protection and have a great opportunity to enjoy a long and fulfilling career.

Frank Dohmen, Head of HR at REMONDIS since the beginning of the year, also stressed just how many apprentices were taken on by this family-run company once they finished their course. More than 70 percent of all apprentices join REMONDIS as specialists in their field after successfully passing their final exams. Those interested in starting an apprenticeship at REMONDIS in 2017 can learn more by going to www.remondis-karriere.de.

611 apprentices have taken their first step towards their new career this year





19 SARIA

# A wide range of expertise

REMONDIS SCHWEIZ AG EXPANDS ITS OPERATIONS IN THE SWISS RECYCLING SECTOR

No-one can beat the Swiss when it comes to innovations – a fact that was further underlined by the Global Innovation Index (GII) that was published just recently. Many food and beverage companies have settled in Switzerland as have chemicals and pharmaceutical businesses. The whole of the Swiss economy benefits from the innovations developed by these corporations. A chance, too, for REMONDIS Schweiz AG – an important player in the recycling market there – to offer and expand its comprehensive range of services to all the different industries.

The strong growth enjoyed by the chemicals and pharmaceutical industries in Switzerland over the last twenty years has also had a positive impact on REMONDIS Schweiz AG. In 1994, it purchased a share for the very first time in B. Spadin AG in Schaffhausen. In 1996, it then acquired Erb Recycling in Geneva. Both companies specialise in recovering precious metals and recycling hazardous waste. They also accelerated the development of REMONDIS Schweiz AG. Today, the company has 130 employees and operates 55 vehicles, three treatment facilities and two recycling centres. "We focus on the core industries of Switzerland's dynamic economy. Our goal is to make the most of our strengths to drive our business in the most important segments," explained Pierre-André Vasseur, chairman of the board of directors.

The range of services offered by REMONDIS Schweiz AG has been influenced by the development of the Swiss economy. It is, therefore, one of the first firms that hospitals, doctors and pharmacies call when they need to have their medical waste collected and recycled. There are many medical professionals in Switzerland and, consequently, a large number of doctors' practices, clinics and research institutes around the country. Besides providing its customers with a range of specialist on-site services, REMONDIS also guarantees that all residual waste is treated using hygienic and environmentally friendly means and in line with all legal regulations. A dedicated team of experts has been set up in Switzerland to support dentists and dental laboratories. One of their primary tasks here is to ensure the amalgam used in dentistry is collected safely. Amalgam fillings are made of alloys that contain mercury and so need to be processed under special conditions.

The Swiss recycling industry has also been shaped by the country's chemicals and pharmaceutical businesses. It was from here that many companies originated, expanding throughout the whole of Europe. REMONDIS Schweiz AG is responsible for managing all waste management tasks at many of their plants. Moreover, its company, REMONDIS Waste Services AG, can be found in the well-known Infrapark in Muttenz, an industrial location that is home to many chemical and life science industries. Thanks to REMONDIS' specialist expertise, it is able to provide the companies there with the complex services they need. REMONDIS Schweiz also owns a majority share in the hazardous waste treatment plant in the Canton of Geneva. 10,000t of the 25,000 tonnes of hazardous waste treated here each year are processed into liquid RDF for the cement industry. Its key customers also include businesses working in the aroma industry, for example perfume manufacturers.

#### **REMONDIS Schweiz AG**





## **Sustainability** right across the country

**RECYCLING IN SOME OF GERMANY'S PRETTIEST AREAS** 

Cherry picking? You must be joking! From the northernmost part of the Island of Sylt to the Alps, from the Polish border to the west of the Lower Rhine district. The REMONDIS Group has more than 500 branches across the whole of the country. One special feature here is the decentralised structure of its network. Local inhabitants, local authorities and industrial businesses always see REMONDIS as being a regional partner no matter where it may be located - whether it be in the middle of Germany or along its borders. REMONDIS' network stretches right across Germany to the furthest geographical corners: Sylt in the north, Görlitz in the east, Oberstdorf in the south and Heinsberg in the west. Whilst they may be located far apart from each other, they are all united by the same aim: to drive sustainable development in their region.



**REMONDIS** has set up a special system at the MAUSER Group in Erkelenz to enable materials to be separated at source

Erkelenz / District of Heinsberg The westernmost district of Germany, the District of Heinsberg, lies nestled between the southern

1

Rhineland serves many different commercial customers throughout this area. The MAUSER Group is its westernmost customer. This manufacturer of industrial packaging employs 4,500 people at 90 business locations in 18 different countries. REMONDIS' Rhein-Erft branch works together with a number of these. For the last six years, for example, they have been providing two plants in Erkelenz with a comprehensive range of waste management and recycling services. The main product manufactured by the MAUSER Group in Erkelenz is IBC containers, which consist of an outer frame

made of steel, an inner container made of plastic and a pallet. This means, of course, that the plants generate many different types of waste: from plastic and metal, to old timber, paper and cardboard as well as residual waste. A special system has been set up here to enable the different materials to be segregated at source. This concept, which was developed to fit in with the in-house logistics system, ensures the materials are stored correctly and that the containers are emptied 'just in time'. "Environmental awareness is important for both of us. By working with REMONDIS, MAUSER has a partner who can deliver quality waste management services, sustainability and reliability right across the country," commented René Spoel, operations manager for MAUSER North and Western Europe.

REMONDIS

WORKING FOR THE FUTURE



The northernmost bottle bank in Germany can be found in the District of List within sight of the Danish coast. And it is a team of REMONDIS employees who are responsible for collecting this valuable raw material in the northernmost district of Germany. The company has been providing a full range of recycling services for this island, a popular holiday destination, since 1968. Besides offering municipal and commercial services, REMONDIS is also called in to handle any states of emergency that may affect the coast. Dealing with oil pollution, damage to the beaches or stranded whales are the exception rather than the rule but they are on

the list of the Sylt team's tasks. The large number



during the summer months and the additional 6,000 cars on the island mean there is a distinct lack of space. REMONDIS' logistics experts on Sylt have to work under unusual conditions: more than 75 percent of the waste has to be transported to the mainland on the car train. That means more than 1,700 containers end up in Niebüll every year and have to be redirected to the various recycling facilities. Only garden and construction waste remain on the island. These are treated on site and recycled into new, sustainable products.

REMONDIS provides both municipal and commercial recycling services on Sylt



#### Niesky / District of Görlitz

REMONDIS Ost GmbH has entered into a public private partnership with the district authorities of Görlitz: together they run the firm, Niederschlesische Entsorgungsgesellschaft mbH. Görlitz is officially the easternmost district of Germany. The company's head office and logistics centre is in the town of Weißwasser. It also, however, has a branch in Niesky, a town located right in the middle of the district, enabling it to provide the whole region with cost-effective and environmentally friendly services. 27 people work at the Niesky branch travelling from here to collect municipal waste, commercial waste and hazardous waste. This business location



The REMONDIS Group's southernmost branch lies at the foot of the Zugspitze in Oberammergau, and it is also its highest branch, lying 873 metres above sea level. It is difficult to take our services much higher but there is room for more sustainability to the south. Oberstdorf Clinic specialises in internal medicine and orthopaedics and treats both local inhabitants and tourists in this popular hiking and skiing district. REMONDIS Medison GmbH, a specialist business owned by REMONDIS Industrie Service, began working with Oberstdorf Clinic this year and is responsible for collecting and recycling its X-ray films. And no distance is too far here as recycling X-rays is well worth its while: ten grams of silver can be recovered from one kilogram of film. Thanks to its also acts as an interim storage facility for hazardous substances. The team also serves Zentendorf, Deschka and Zodel, the only towns in Germany east of the 15th meridian (east). As the time difference here is almost exactly one hour from the Greenwich meridian, this is the

of tourists, on the other hand,

are certainly a challenge and are

regularly planned into the work

schedule. The amount of materials

that need to be collected doubles

perfect place to measure Central European Time. Punctuality is, therefore, not a foreign concept in this part of the country and most certainly not for REMONDIS.



No distance is too far: we use our special SafetyTruck to offer a mobile hazardous waste collection service in Niesky

X-ray recycling activities, the REMONDIS Group is one of the country's largest producers of silver. Oberstdorf Clinic benefits from this service as soon as it hands over the films to Medison: the clinic is reimbursed for the films which are then processed into a top quality recycled product. This further underlines Oberstdorf Clinic's desire to drive sustainability. A total of six kilograms of silver have been recovered from the films provided by Oberstdorf Clinic over the last two months. Once the skiing season is in full swing, however, the clinic's orthopaedic, A&E and hand

surgery departments treat up to 100 patients a day.

REMONDIS Medison collects and recycles X-ray film for a local clinic in Oberstdorf



# Entering the market in South Holland

#### **REMONDIS NEDERLAND B.V. CONTINUES TO EXPAND**

REMONDIS' Dutch subsidiary is continuing to grow and extend its share of the market. It took a further big step forward when it acquired the commercial waste operations from the municipal company, Avalex. This transaction, which was agreed on at the end of 2015, has paved the way for the company to expand its activities in the Province of South Holland.

More than 3.6 million people live in South Holland. This means that this is not only the country's most industrialised region but also the most densely populated. The municipal firm, Avalex, was established in The Hague in 2001.

It currently handles the waste management operations for six local authorities in South Holland who are also the owners of the company. The firm is intending to focus on household waste in the future. It has sold its commercial activities to REMONDIS, which now wishes to expand these services.

At the heart of the operations: the branch in Delft Besides taking over the services, REMONDIS has also acquired an additional branch in the university town of Delft. This is perfectly located between the two large cities of The Hague and Rotterdam, providing an excellent platform for expanding the business in South Holland. "REMONDIS' customers in the region can now be served by a local branch," explained Dr Andreas Krawczik, managing director of REMONDIS Nederland B.V.



Jan Hoekema, Mayor of Wassenaar (right), and Dr Andreas Krawczik, Managing Director of REMONDIS Nederland, signing the Avalex contract



Günter Gülker, Managing Director of the German Dutch Chamber of Commerce (left), was welcomed by Dr Andreas Krawczik, REMONDIS Nederland B.V.

Several other Dutch regions had handed over their commercial operations to REMONDIS prior to this contract with Avalex – for example, the municipal companies Twente Milieu and ROVA in the east of the country. REMONDIS' position on the market in the eastern provinces of Gelderland and Overijssel has also been further strengthened by its takeover of the waste management and recycling group, Dusseldorp.

#### **Dutch visitors at REMONDIS' Lippe Plant**

REMONDIS wishes to use its expanded business structures to intensify its collaboration work with Dutch local authorities as well as to extend its range of services for both its public and private sector customers. Its focus here is on transparency and transferring know-how. Which is why, for example, the DNHK (German Dutch Chamber of Commerce) and more than 60 business people travelled to REMONDIS' Lippe Plant in Lünen in June to take a closer look at the operations there. The visit – part of the 'DNHK on the ground' series of events – enabled the guests to see Europe's largest industrial recycling centre in action. Thanks to the activities at the plant, greenhouse gas emissions are able to be reduced by up to 466,000 tonnes a year. This is the equivalent to the amount of carbon emissions cut by 25,000 hectares of woodland or by a wind farm operating 80 wind turbines. REMONDIS Nederland B.V. has been providing specialist recycling services in the Netherlands for ten years now





REMONDIS welcomed a further group of visitors from the IKGL (Groenlo-Lichtenvoorde Industrial Circle) who also travelled to Lünen in June. All in all, almost 60 guests from the Dutch Province of Gelderland attended the event. They were first given a presentation about REMONDIS and the Dusseldorp Group before being taken on a tour around the Lippe Plant (ca. 230 hectares).

## A partnership with twice the benefits

COOPERATION WITH REMONDIS MEANS LOWER COSTS AND GREATER SUSTAINABILITY FOR THE CAR PARTS SUPPLIER HENGST

The way in-house waste management is handled plays an important role in the success of a company. Taking its customers' specific needs into account, REMONDIS develops practical concepts and then helps them to be implemented. Hengst SE & Co. KG, one of the world's leading specialists for filtration systems, has also benefited from this service with REMONDIS drawing up bespoke waste management solutions for its German factories.



REMONDIS®

Improving in-house logistics means less time is needed to transport and empty the containers around the plant Hengst and REMONDIS have been partners for a while now. The focus of this successful collaboration work has been on developing comprehensive and effective waste management systems for its German plants. REMONDIS' concept was first implemented at the factory at the group's head office in Münster in the middle of 2015. The plants in Berlin and Nordwalde were added to this list in April 2016.

REMONDIS drew up waste management and logistics concepts to fulfil the precise needs of each individual production site. The goal here was to meet Hengst's primary aim of significantly lowering waste volumes by improving the segregation of the different materials and increasing recycling rates.

#### From the initial review to a new system

The first step that the project team from REMONDIS' west region had to carry out was to analyse the situation at all the different plants – from looking at the waste volumes being generated, to the container systems being used, to analysing the distances taken to dispose, store and manage the waste materials. Using this information, project engineer, Arne Ringkowski, developed various ways to improve the systems at the different Hengst sites. His proposals covered subjects such as material flow management, intralogistics, staff deployment, information systems and staff training courses. A solution was drawn up for the Nordwalde plant that enabled a further 50 tonnes of materials to be recycled for re-use every year. 216 containers and 13 different kinds of container were needed for the system that had previously been in place. Fundamental changes were introduced here, adapting the system to reflect the various fractions and volumes as well as the locations where the waste is actually being generated. This has led to considerable improvements, especially in the areas of paper and cardboard, plastic film and waste containing reusable materials. Moreover, the distances that employees must walk to throw away the waste have been kept as short as possible and the in-house transport systems have been pooled together.

#### Tangible environmental & economic benefits

The amount of time that Hengst needs to spend on waste management has been reduced by around 1,000 hours a year simply by having its in-house processes and container systems reorganised. This, of course, gives them more time to concentrate on their core business. Moreover, they get more revenue from marketing their recyclables and have lowered their transport costs. All in all, the amount of transport they need now has been almost halved. Great news for the environment: carbon emissions caused by the fractions plastic

"We were only prepared to work with REMONDIS if they were able to develop sustainable environmental and economic solutions for all the relevant areas and were able to implement these themselves at all of our plants."

Karsten Reth, Head of Facility Management at Hengst SE & Co. KG





Hengst Automotive is well-known on the global market for developing and delivering filtration and fluid management systems for the automobile and engine industries as well as for industrial and consumer applications. It employs over 3,000 people at 15 locations in Germany, Brazil, China, Denmark, India, Poland, Singapore and the United Arab Emirates as well as in the USA

HAUPTVERWALTUNG

#### RE2WIN<sup>+</sup>

Thanks to its new and protected concept, RE2win+, REMONDIS now makes it possible for its customers to systematically check their costs

film, paper and cardboard, timber and waste containing reusable materials have been cut by 26 tonnes a year.

#### Training courses provide additional benefits

REMONDIS has also carried out training courses for the employees at all of Hengst's sites. At the top of the agenda: focusing on the fact that the better the different materials are segregated from each other, the better they can be recycled. A special colour-coded system was introduced at Hengst to make the system even clearer, making it easier to collect the different types of waste separately and reducing the number of materials being thrown into the wrong bin. Thomas Wällering, head of project development at REMONDIS, commented: "Our optimisation concepts provide our industrial and commercial customers with top quality bespoke solutions. Teaching the employees to separate the materials properly is extremely important."

> If materials are segregated better and less waste is thrown into the wrong bins, then the recycled products are of a higher quality and can be marketed more easily

A summary of the benefits A comparison of the costs based on REMONDIS' price

indicator revealed that the following tangible benefits have been achieved as a result of improving the in-house waste management system:

- A significant increase in the volume of materials being sent for materials recycling
- A considerable reduction in the number of hours spent on in-house waste management
- A reduction in overall costs by improving material flow management
- A reduction in carbon emissions by considerably lowering transport requirements

### Indispensable and sustainable

RESPRAY EXTENDS ITS AEROSOL CAN RECYCLING CAPACITIES IN BRAMSCHE

Hair spray, spray paint, rust remover – all these products are sold in aerosol cans. They can be found in households, workshops and businesses and are being used all the time – but what happens to them when they are no longer needed?

> "Quite apart from the risks that these cans pose – risks that really shouldn't be taken lightly – aerosols contain valuable materials, some of which can be recycled again and again and again. Recycling them, therefore, is good for both the environment and the economy and helps conserve natural resources."

Robert Sonnenschein, Managing Director of REMONDIS Industrie Service



What people shouldn't do is to throw them into their residual waste bin or recycling bin. Aerosol cans are listed as hazardous waste whether they are empty, partially full or full and there are strict regulations about how they should be processed. Households must hand them in to centres that accept hazardous waste. Industrial and commercial businesses are obliged, by law, to store their used aerosols in special containers and ensure they are disposed of and/or recycled properly. REMONDIS Industrie Service's RESPRAY division provides its customers with a system of containers that fulfils all these rules and regulations. The containers have special antistatic, perforated liners and various vents to eliminate any danger of explosions whilst they are in use. This is vital as the propellants - propane, butane and dimethyl ether – are highly inflammable and can cause an explosion if they come into contact

A quick glance at the recycling market, however, makes it very clear that the majority of people are unaware of these risks. Only ten percent of the 1.3 billion aerosol cans produced in Germany each year are recycled using safe and eco-friendly means. Until just recently, many recycling facilities were already working to full capacity despite this low figure. Three years ago, REMONDIS set about finding a solution to this problem.

with oxygen.

The result of this research work is a specialised, state-of-theart recycling plant from Canada which began operations in the Bramsche Industrial Recycling Centre in July. RESPRAY decided to invest in this new technology to further extend its leading position on the market as well as to drive the market as a whole. "Quite apart from the risks that these cans pose – risks that really shouldn't be taken lightly – aerosols contain valuable materials, some of which can be recycled again and again and again. Recycling them, therefore, is good for both the environment and the economy and helps conserve natural resources," commented Robert Sonnenschein, managing

> 80 guests were invited to Bramsche Industrial Recycling Centre to see the new plant being officially opened by managing directors Robert Sonnenschein (left) and Klaus Scherler (2nd right)



director of REMONDIS Industrie Service, who had travelled to the Canadian city of Ontario in 2013 to visit the manufacturer and find out more about their technology. He was impressed by what he saw: 6,500 tonnes of aerosols processed every year, a technology that recycles, a safer environment for the workforce and a lower energy bill.

This exclusive technology has clearly increased the amount of materials recovered for recycling: a compressor liquefies the extracted propellant gas so it can be used as a source of energy – just like any residual substances left in the aerosol cans. The machine (operated at 300 bar and under inert conditions) compacts the metals into round briquettes. These are then sent straight to industrial businesses. "This truly is a milestone in the recycling of aerosols," concluded Robert Sonnenschein. Aerosols are hazardous waste whether they are empty, partially full or full; there are strict regulations about how they should be stored, transported and recycled



# Recycling remains top of the list

NATIONWIDE NETWORK OF FACILITIES HELPING POLAND TO ACHIEVE ITS ENVIRONMENTAL TARGETS

Recycling, services, water: REMONDIS offers a wide range of services in Poland. The company has around 50 business locations across the country. Many of its operations are run as public private partnerships, i.e. in collaboration with local authorities.

One of the main factors behind the company's success is its large number of diverse recycling facilities. REMONDIS has opened five new plants at various Polish towns over the last three years alone: the existing mechanical treatment plants in Bydgoszcz, Opole and Szczecin were extended to include composting plants so that they have now been given the status of an integrated mechanical biological treatment (MBT) facility. Moreover, a composting plant was commissioned in Tarnowskie Góry, an additional RDF plant was built in Szczecin and a new recycling centre began operations in Gliwice, which includes one of the largest and most modern MBT facilities in the south of Poland.



Norbert Rethmann at the opening of a new plant in Poland



Priority is now being put on sorting and recycling in Poland as well

This centre now not only has more ways to treat municipal waste but is also able to recover greater quantities of recyclable materials.

In addition to this, REMONDIS has extended its presence in the south west of Poland: its acquisition of the van Gansewinkel Group's Polish operations and of Becker Polska Sp. z o. o. means it now has more branches and more work in the Lower Silesian, Lesser Poland, Silesian and Opole Voivodeships.

Poland is making great efforts to decrease the volume of waste being taken to landfill. Setting up a suitable infrastructure, however, is essential if the country is to grow its material recycling rates. REMONDIS' close-knit network of plants helps provide a systematic solution to this problem and is able to take over specialist tasks. It is, therefore, helping to create the basis that the country needs to be able to operate a modern recycling sector and achieve its environmental targets.



Another advantage offered by this ever increasing network of plants is that they can now collaborate with one another. This creates synergies and economies of scale that not only benefit the environment but also enable the plants to be run even more effectively.

"REMONDIS has been operating in Poland for more than 24 years now and its aim is, as always, to extend its network of facilities to treat residual materials." Dr Marek Gebski, Managing Director of REMONDIS Sp. z o.o.



# On the safe side

BUCHEN SAFETYSERVICE OFFERS ITS CUSTOMERS A WIDE RANGE OF SAFETY CONCEPTS AND EQUIPMENT

From breathing apparatus, to full body protection, all the way through to fall arresters: BUCHEN's SafetyService division has become one of the leading providers of bespoke concepts for managing safety technology. REMONDIS' subsidiary recently extended its business operations – opening a new service centre and expanding its customer base to include firefighters and the emergency services.

Being an industrial services specialist, BUCHEN UmweltService GmbH works to the highest safety standards. Having served its industrial customers for so many years now, it has in-depth knowledge of safety technology and knows all about the special requirements of this field. It has pooled together its specialist areas of expertise to create its Safety-Service division, enabling it to offer an exceptionally wide range of SafetyService focuses on delivering all the tasks needed to manage safety technology. Looking at the exact requirements of its customers, BUCHEN draws up bespoke concepts and then ensures these are implemented in the most effective way. The company's portfolio ranges from acting as consultants for safety technology, to servicing, hiring out and selling such equipment, all the way through to training people how to use it. If requested, SafetyService takes over all aspects of managing safety equipment, including keeping an eye on testing intervals, servicing the devices and documenting when the equipment is handed out and returned.

## **`\_\_\_\_** 24h

BUCHEN also supplies the emergency services and firefighters with an extensive range of technology for their operations – including personal protective equipment





The safety equipment is serviced by experienced technicians in BUCHEN's own service centres

#### Wider range of services & stronger regional presence

The company's range of services is being continuously extended as is its target groups. Which is why BUCHEN is now serving firefighters and the emergency services in addition to its industrial customers. At the same time, it is looking to grow its network of service centres. In April, for example, a new centre was opened at the chemical park in the German city of Leuna – one of the largest and most modern service centres for safety technology in Europe. Another centre is currently being built in Cologne.

All possible types of industrial safety equipment can be hired or bought at these accredited centres, with the BUCHEN service technicians working there to hand out, take back, service and repair the various devices. Special dispenser systems make it possible for safety materials to be handed out and returned 24/7.

#### Customers prefer to be on the safe side

There are a number of very good reasons why companies choose to collaborate with SafetyService. One crucial argument: the extremely high safety standards delivered by BUCHEN as it can guarantee that the safety equipment that is needed is always available. Moreover, it handles all the documentation work and ensures all equipment is serviced and tested at regular intervals. "Our solutions not only provide the highest levels of safety, they are also cost effective," explained managing director Jürgen Lennertz, who is in charge of the SafetyService division. Not tied to any particular manufacturer, BUCHEN is able to deliver the latest technology at competitive prices.

#### Using life-saving technology correctly

The company not only supplies safety equipment, it also shows how it should be used it. To be able to do this, BUCHEN SafetyService organises courses, passing on its extensive know-how to its customers and providing them with both theory and practice. Priority here is put on showing how to use the products correctly and effectively in line with the manufacturer's instructions and legal regulations. All types of courses, for example, are being held at the seminar rooms at the service centre in Leuna – showing participants how to use their safety equipment properly as well as holding seminars for operatives looking to specialise in a specific area. Such courses are also held in BUCHEN's own training centre in Voerde (Lower Rhine region), where operatives can practise using their respiratory protective equipment under realistic conditions. BUCHEN<sup>®</sup> WORKING FOR THE FUTURE

BUCHEN also holds courses at its new service centre in Leuna to teach participants how to use their safety equipment properly

In May, BUCHEN SafetyService showcased its services for firefighters and the emergency services at the RETTmobil in Fulda, Europe's leading exhibition for rescue and mobility.

## **Close to the sky**

EXTENSIVE EXPERTISE REQUIRED TO ERECT SCAFFOLDING AT THE TOP OF A MOUNTAIN

Speed and smart logistics were needed to renovate Germany's highest church. What's more, XERVON's scaffolding experts had to be particularly light on their feet: they had to transport seven tonnes of material uphill for the last few metres of the journey by hand.

XERVON<sup>®</sup>

Germany's highest church can be found on a rocky crest high up in the Bavarian Alps, almost at the very top of Mount Wendelstein (1,838m). Built 125 years ago, Wendelstein Church regularly holds Sunday services for worshippers and is also a popular location for weddings. Exposed to the elements, the years of rain, snow, frost and wind have left their mark with damp causing so much damage that there has been no choice but to repair the building.

#### **Unusual transport route**

The building work began last year with XERVON playing a vital role in the project: REMONDIS' subsidiary was respon-

sible for carrying out the complex scaffolding work around the outside of the church. The client had awarded the contract to the company because it had been so impressed by its concept to transport and erect the scaffolding and by the fact that its plans had taken absolutely all of the complex challenges of this project into account.

Logistics played a major role in the success of this enterprise. All in all, the scaffolding specialists had to transport around seven tonnes of scaffolding material up the mountain – an unusual and time-consuming task. The equipment was first transported by train in a special waggon on the



### 1,740m

above sea level: Wendelstein Church is Germany's highest church. Only a handful of chapels can be found higher up

Wendelstein cog railway – normally used by tourists, hikers and churchgoers – to the train station 1,723 metres up the mountain. The material was then unloaded onto the mountain by hand and, from this point onwards, there was no automated equipment available to help the crew: the scaffolding specialists had to walk the last few metres to the church carrying their material themselves.

**From resting on the ground to hanging in the air** The team was given just five days to transport and erect the scaffolding around the building. Once they arrived at the church everything had to go really quickly because of the weather conditions: a scaffold was erected around three of the church's walls for the first stage of the building work. The south-facing fourth wall is extremely difficult to access and so a suspended scaffold will be set up there at a later date to provide the builders with a safe platform to do their work. XERVON's scaffolding experts will use the material that is already there to erect this hanging scaffold for the second part of the project – by rebuilding and repositioning their first scaffold structure.

XERVON's concept to transport and erect the materials was implemented perfectly. Despite the difficult weather conditions, everything went according to schedule so that the scaffolding was available on time for the team to carry out their renovation work. Once again this project has shown how the meticulous and detailed planning work that has to be carried out by the XERVON experts is also able to deliver top quality results for the most complex of projects.



#### Reopening delayed due to bad weather

The renovation work on the church is currently well under way but it is very dependent on the weather. Whenever possible, the builders can be found at the site repairing the roof and walls. They are, however, currently behind schedule as this summer's weather has not been kind to them. The church services will, therefore, probably not start up again until the end of the year. The team had to carry all the material themselves for the last few metres of the journey

Difficult transport conditions and little storage space: Wendelstein Church's spectacular location required some unusual and highly complex solutions

## Setting a new course in Kiel Harbour

**REMONDIS INDUSTRIE SERVICE DELIVERS SPECIALIST SERVICES FOR CRUISE SHIPS** 

REMONDIS Industrie Service's branch in Klausdorf has increased the range of services it offers at Kiel Harbour thanks to the TUI cruise ships "Mein Schiff 4" and "Mein Schiff 5". At the end of May, its Klausdorf branch was awarded a new contract to manage the removal and treatment of the scrubber wastewater, sludge and bilge water from the 300m long cruise ships. This is a great success for the company's team who have been looking into ways of treating scrubber wastewater for a while now. Right from the start, both crews knew that they were dealing with professionals who were specialists in their field.



Located close to Kiel Harbour and with a fleet of modern vacuum trucks, REMONDIS Industrie Service is able to provide a fast and flexible service when it comes to removing and treating scrubber wastewater Scrubber wastewater is the wastewater produced by a ship's flue gas desulphurisation system which is installed to clean its exhaust gas. Desulphurisation plants – so-called scrubbers – aim to reduce sulphur emissions by 99% and emissions of soot particles by 60%. The water, which is used to filter out the pollutants, is treated again and the extracted residue is disposed of on land. 60 cubic metres of scrubber wastewater or more can be removed from the ships each time. The so-called sludge – thick, polluted heavy fuel oil –

is extracted from the ship by vacuum trucks and then transported to treatment facilities. Between 1,000 and 10,000 litres of sludge can be generated every day, depending on the size of the ship. Bilge water is simply water that accumulates in the ship's bilge, at the very bottom of the hull. This may contain saltwater, cooling water and fuel as well as lubricating oil, soot and dirt.

The BSH (Federal Maritime and Hydrographic Agency) is currently working on plans to make it obligatory for all ships travelling on the Baltic Sea to have exhaust gas cleaning systems installed. As REMONDIS Industrie Service's Klausdorf branch is located just ten minutes from Kiel Harbour and has a fleet of modern vehicles, it is able to respond rapidly whenever scrubber wastewater and sludge need to be removed from ships. "As we now have nine vacuum trucks, we can provide our Kiel Harbour customers with a really flexible service – performing waste management tasks as and when they need them," commented branch manager, Maximilian Lammerding. REMONDIS Industrie Service is the only waste management specialist near Kiel Harbour able to treat such waste.

## On its own two feet

**REMONDIS AS-CONTROL GMBH A SPECIALIST COMPANY IN ITS OWN RIGHT SINCE 2016** 

Five years ago, the REMONDIS Group set up its AS-CONTROL division to offer specialist services for separator technology across Germany. By focusing on this one specific area – primarily on performing maintenance, servicing, inspection and repair work – REMONDIS Industrie Service has been able to steadily expand its portfolio in this field. With the business growing and enjoying such success, the decision was then made to transform this division into a company in its own right. The result: REMONDIS AS-CONTROL GmbH was established at the beginning of this year.

REMONDIS' new specialist company is being managed from its head office in the German city of Herne. REMONDIS AS-CONTROL GmbH currently has a network of six branches: in Herne, Uetze, Hamburg, Bargeshagen, Berlin and Reichenbach. Each location has a team leader who is responsible for organising their local operations and supporting their customers. Each of them has all the qualifications needed for this work as well as in-depth knowledge of their field so that they can advise their customers and answer any questions they may have. All of the operatives take part in annual training courses to refresh and expand their know-how a further way of ensuring that REMONDIS AS-CONTROL's high standards are maintained in the future, too. Besides having such an experienced team, AS-CONTROL also operates a highly modern fleet of vehicles which was completely renewed last year. These steps to modernise and expand the range of equipment were taken to prepare the business to become an independent company. Thanks to these decisions, AS-CONTROL will continue to be able to fulfil the most complex demands of its ever growing customer base.

Every day, REMONDIS AS-CONTROL GmbH makes an important contribution towards protecting the environment and the quality of the groundwater. It helps operators of separators - especially light liquid and oil separators - to monitor, check and document their facilities in accordance with all laws as well as to advise them on the latest rules and regulations. "Our work is really important for the environment. Many small and medium-sized enterprises (SMEs) find the regulations a great challenge: garages, petrol stations, forwarding agencies, canteens and restaurants must all op-

erate separators to make sure their wastewater does not contain pollutants such as petrol, lubricants, oils and fats," explained Thomas Korba, managing director of REMONDIS AS-CONTROL GmbH. It is essential that these separators are serviced, checked, cleaned and maintained at regular intervals if they are to work properly tasks that are, for the most part, nothing to do with the core areas of expertise of these SMEs.

AS-CONTROL's new range of services also includes teaching its customers about separator technology

**REMONDIS AS-CONTROL GmbH makes** an important contribution towards

protecting the environment and the

quality of the groundwater





## **REMONDIS wins the GreenTec Award 2016**

TETRAPHOS PROCESS NAMED THE WINNER OF THE GREENTEC AWARD FOR 'RECYCLING & RESOURCES'

The highly coveted GreenTec awards – one of the most important environmental awards in Germany – have once again been presented to honour the best green innovations. The 9th awards ceremony was held in Munich on 29 May 2016. This year's winner of the 'Recycling & Resources' category was REMONDIS Aqua's innovative process: "REMONDIS TetraPhos® – Recovering phosphate from sewage sludge ash".

"It is a great honour to be given this award and it will spur us on to do even more to conserve natural resources in Germany – both in the water and in the recycling sectors." Dr Martin Lebek, CTO

> Around 2 million tonnes of dewatered sewage sludge are generated in Germany every year which contain approx. 60,000 tonnes of phosphorus. A significant amount, therefore, which could be recovered and recycled – especially as natural reserves around the world are gradually being depleted and the quality of these reserves is deteriorating rapidly.

REMONDIS has been looking into this subject for many years now and has developed a number of processes that are creating the groundwork and setting standards for recovering phosphorus. Its intention here is to enable the phosphorus to be used as a fertiliser as well as for it to be supplied to industrial businesses as valuable phosphates.

The company's TetraPhos® process demonstrates REMONDIS' approach to this issue perfectly. Thanks to its patented system, high quality phosphoric acid can be produced from sewage sludge ash. This acid can be used to create phosphate compounds that, in turn, can be used to make fertiliser or



Dr Michael Beckereit, HamburgWasser, Dr Martin Lebek, REMONDIS Aqua CTO, Sabrina Lohmar, REMONDIS Aqua Managing Director, Peter Kurth, President of the BDE and Andreas Bankamp, Managing Director of REMONDIS Aqua, were proud to receive the GreenTec Award



animal feed or be sent on to the chemicals and metal industry for manufacturing a whole range of different products. Besides the phosphoric acid, the TetraPhos® system also generates gypsum for the building supplies trade and iron and aluminium salts for treating wastewater. A further advantage: TetraPhos® can be operated on an industrial scale making it particularly cost effective.

This year's GreenTec Award for the 'Recycling & Resources' category was presented to REMONDIS during the awards ceremony, which was held in Munich on the eve of the IFAT exhibition. Dr Martin Lebek, CTO, expressed his pleasure at being presented with this award: "Receiving the GreenTec Award for our innovative process for recovering phosphates from sewage sludge clearly shows that REMONDIS and its research and development team are heading in the right direction. TetraPhos<sup>®</sup> is an important way to bridge the gap between recovering and recycling vital substances and running modern water management systems. It is a great honour to be given this award and it will spur us on to do even more to conserve natural resources in Germany – both in the water and in the recycling sectors."

Andreas Bankamp, managing director of REMONDIS Aqua, also thanked HamburgWasser for the support it has been giving REMONDIS to help it develop its TetraPhos® process so it can be deployed on an industrial scale – in particular thanks to the long and successful collaboration work between itself and REMONDIS Aqua at Vera Klärschlammverbrennung GmbH: "We would certainly not have been able to win this award like this without this public private partnership. REMONDIS may have been presented with this award this evening but for us this GreenTec Award 2016 is recognition of the efforts made by both HamburgWasser and REMONDIS."

According to the figures published by the BGR (Federal Institute for Natural Resources), supplies of natural phosphorus – a substance vital for plants, animals and humans – will have run out within just a few generations. The problem of availability is further aggravated by the fact that, for the most part,

David Mayer de Rothschild and Heike Schiffler held the laudatory speech for the 'Recycling & Resources' category



Dr Martin Lebek, CTO, accepted the green award on REMONDIS' behalf



Dr Heike Schiffer, Tetra Pak, and David Mayer de Rothschild presented the award for the 'Recycling & Resources' category to Dr Martin Lebek, REMONDIS Aqua GmbH

this raw material is found in regions or countries that lack political stability or security. 77% of all phosphorus reserves are in a region in Morocco where militant groups are fighting for independence. China owns the world's second-largest reserves (approx. 6%). Faced with this situation, the EU Commission decided to put phosphate rock on its list of 20 critical raw materials two years ago, especially as Europe has to import over 90% of its supplies from overseas.



Go to remondis-aktuell.com to see a film about the GreenTec Award 2016

# Quality standards put to the test



ONCE AGAIN, EURAWASSER RECEIVES SEAL OF QUALITY FOR ITS SEWER CONSTRUCTION WORK

For the fifth time running, EURAWASSER Nord GmbH, a fully owned subsidiary of REMONDIS Aqua, has been issued with the RAL Quality Mark (Gütezeichen) for its sewer construction work by the RAL German Institute for Quality Assurance and Certification – once again fulfilling all the quality criteria and underlining the high calibre of its work. 'Gütegemeinschaft Kanalbau', the organisation appointed by RAL to carry out the quality audits, visited EU-RAWASSER in June to see whether its in-house quality management and control systems were still up to standard. Its report confirmed that all regulations were being systematically complied with and that all of the company's technical equipment was working properly.



The auditors checked a number of criteria including the standard of staff training courses and compliance with technical rules

RAL's central office responsible for sewer network services had to carry out extensive work before the actual audit began to ensure that the inspection could be documented correctly. The audit engineers then arrived at EURAWASSER where they first inspected the company grounds and a number of building sites to check the operatives were complying with the technical rules and regulations set out for cleaning and inspecting sewers. Moreover, they also took a close look at the technology being deployed to make sure the various machines were working properly. Other criteria examined during the audit included scrutinising the instructions given to the staff and the way their work was documented as well as checking that all health and safety laws were being adhered to. Furthermore, the company had to provide proof that all their employees had

> The quality mark is valid for 12 months and underlines the performance and expertise of EURAWASSER Nord GmbH

attended courses to refresh and further extend their professional skills and qualifications.

Having analysed the audit's results, RAL's committee has now officially confirmed that EURAWASSER Nord GmbH has passed the inspection and issued the company with the quality mark for sewer construction work. Jörg Abel, head of RAL's central office responsible for sewer network services, commented: "This quality mark is valid for a period of 12 months and underlines the performance and expertise of the staff as well as the high standard of the company's in-house quality management system. It promotes sustainable development and also provides EURAWASSER with an incentive not only to continue its personnel development courses but also to adopt and implement the wide range of technical information supplied by RAL and other specialist organisations. This will help further cement the specialist knowledge and performance of the company."



## New technical operations team at Dierdorf Waterworks

PUBLIC PRIVATE PARTNERSHIP: LOCAL AUTHORITY ASSOCIATION IN RHINELAND-PALATINATE JOINS FORCES WITH EURAWASSER

The contract regulating the management of the technical operations at the waterworks owned by the Dierdorf local authority association has been in place since 01 July 2016. Horst Rasbach, mayor of the Dierdorf local authority association, and Eberhard Leukel, plant manager, welcomed REMONDIS EURAWASSER's employees and managing director Torsten Ohlert to the water tower in Dierdorf.

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The Dierdorf local authority association currently consists of six local councils situated right in the heart of the Rhine-Westerwald nature preserve (District of Neuwied) close to the A3 motorway. "Having completed the tender process and awarded the contract to REMONDIS EURAWASSER, we know that we are working with experts. We will be able to use the company's experience and know-how to ensure that our local inhabitants will continue to receive a reliable supply of high quality water," commented Mayor Horst Rasbach.

A new public private partnership (PPP) was established on 01 July 2016 which is now responsible for performing a wide range of tasks. Besides operating the plants for extracting and processing the region's drinking water, it must also maintain the 153 kilometres of drinking water pipes, the pumping stations and all the other plants and technology needed to guarantee the supply of water to the 10,000+ local residents. Moreover, REMONDIS will also be supporting the local authority association to develop more efficient and decentralised ways to fulfil their municipal tasks.

REMONDIS EURAWASSER, which is based in the German town of Grafschaft, took part in and won the Europe-wide tender. "We wish to work together closely with the Dierdorf local authority association's own company and make the very most of our know-how to further develop the systems being used to supply drinking water in the district," explained Torsten Ohlert. REMONDIS EURAWASSER is now responsible for managing the technical operations that had previously been carried out by the local authority association's own company. All official tasks and duties remain in the hands of the local council.



# Human capital and leadership skills

11TH REMONDIS FORUM IN GOSLAR TO WELCOME DISTINGUISHED SPEAKERS FROM THE WORLDS OF POLITICS, SCIENCE & BUSINESS

Following the 10th anniversary of the REMONDIS Forum last year, there is yet another reason for celebrating this now traditional get-together. This year's forum is being held in Rammelsberg, a UNESCO World Heritage Site, to mark the 20 years' collaboration work between the City of Goslar and EURAWASSER, a subsidiary of REMONDIS Aqua who is hosting the event. "Thanks to the public private partnership, the City of Goslar is able to benefit from the company's expertise. What is really pleasing to see is the way EURAWASSER supports the local community. It has become an important employer in the region," commented Dr Oliver Junk, Lord Mayor of Goslar.

Dr Oliver Junk, Lord Mayor of Goslar





Employer qualities, leadership skills and staff motivation – these are just a few of the catchwords that the eight distinguished speakers will be focusing on during the REMONDIS Forum, which is being held on 29 and 30 September. They will be discussing the importance of human capital – providing both a theoretical and practical point of view. Over the last few years, companies have found themselves facing new developments that are far more dynamic and complex than those of just a few decades ago. Digitisation, demographic change, the switch from fossil fuels to renewable energy, the change in social values, migration and the influx of refugees – many of these are having a considerable impact on both business and society and HR managers are finding themselves having to reassess the market again and again. Are these just trends or will they have a lasting effect on what they expect their employees to deliver? Is it just the large DAX corporations that are affected or is this something that other HR departments should be looking at?

Not every change has a big impact. Some of them are hardly noticeable. Others, though, such as digitisation, immigration and decision making, are having a huge effect on society which is why the REMONDIS Forum in Goslar offers a great opportunity to look at different ways to react to these. Besides welcoming distinguished speakers from the worlds of politics, science and business, Federal Minister for Economic Affairs and Energy, Sigmar Gabriel, will be holding a talk about demographic change and promoting integration. Moreover, Urs Meier, a retired football referee, will be talking about his experiences of having to act quickly and decisively under extreme conditions. The honorary chairman of the supervisory board of the RETHMANN Group, Norbert Rethmann, will be calling on everyone to take on responsibility and be resourceful. He will be looking back at the market and describing how REMONDIS began to see what can be learned from past developments. In contrast, Tobias Schröder, IT security specialist, will be taking a humorous look into the future when he gives his talk, "Hacking for Managers".

"Thanks to the public private partnership, the City of Goslar is able to benefit from the company's expertise. What is really pleasing to see is the way EURAWASSER supports the local community. It has become an important employer in the region." Dr Oliver Junk, Lord Mayor of Goslar

# Collaborating to curb climate change

COOPERATING TO PROMOTE SUSTAINABLE DEVELOPMENT: LWG JOINS THE 'COTTBUS ENERGY NETWORK'

Growing energy efficiency at companies – this is the aim of an initiative set up by the Federal government, trade associations and German business organisations. The goal: to work together to create around 500 energy efficiency networks across the country by 2020. LWG has also joined in. REMONDIS Aqua's PPP has become a member of the Cottbus municipal energy network where it is looking to drive sustainability and help prevent climate change.

LAUSITZER LWG

One of the main tasks of these networks is to increase energy efficiency levels at industrial, trade, retail and commercial businesses. Around 50 such networks have already been set up including KEN Cottbus (Cottbus municipal energy network), of which LWG Lausitzer Wasser GmbH & Co. KG has become a member. The company introduced an energy management system in line with DIN ISO 50001 into its business in 2014. This system helps give a clear picture about energy consumption and reveals where savings can be made.

The members of KEN. Cottbus meet regularly to discuss effective initiatives that might cut energy consumption and curb global warming. LWG is able to contribute here as one of the PPP's key policies is to find and implement measures to prevent climate change. This Brandenburg-based company, for example, had a photovoltaic system installed at its Cottbus-Sachsendorf waterworks in 2013 – a move that has cut its annual electricity bill by approx. 30 percent. Last year, the plant was linked up to three new raw water booster pumps that are primarily run on solar electricity. In addition to this, LWG has also been generating storable biogas at its Cottbus sewage treatment plant since 1995. This gas is used to produce electricity and heat in combined heat and power stations as and when required.

KEN Cottbus currently has 18 members including a clinic, Cottbus zoo and the local public transport company. 13 of them are to have energy audits (in line with DIN EN 16427) carried out at their business premises. This joint initiative can help out here, too. "The regular meetings are really important as they enable the members to exchange ideas and experiences and support each other to implement measures," explained Ralph Grohmann, who hosts the KEN Cottbus get-togethers. And this nationwide initiative to help prevent climate change is proving to be effective. The latest results show that the network companies have, on average, reduced their greenhouse gas emissions by 1,000 tonnes CO<sub>2</sub> and increased their energy productivity twice as fast as the industry average



The photovoltaic system installed at LWG's Cottbus-Sachsendorf waterworks in 2013 has cut its annual electricity bill there by approx.

## 30%

Members of KEN Cottbus visited the Cottbus-Sachsendorf waterworks to learn more about how LWG is trying to cut its energy consumption

#### Steinmeier visits TSR in Brandenburg an der Havel

At the beginning of May, Foreign Minister Frank-Walter Steinmeier visited TSR in Brandenburg an der Havel to see for himself just how important the recycling industry has become for the economy as a whole. The REMONDIS Group and TSR (a company in which REMONDIS owns an 80% share) are

> planning to build a facility there to recover metals and plastics from waste materials containing metal. The plan, which has been given the name REMINE and will involve an eight-figure investment sum, will be a flagship project for the whole of the recycling sector. Foreign Minister



Dr Frank-Walter Steinmeier learned more about how the site, formerly home to a steelworks, is to be reused as well as about what measures are going to be implemented to limit emissions. "Innovations, industrial developments and environmental protection must all go hand in hand. This also creates secure future-oriented jobs," the SPD politician concluded. The environmental industry not only creates new jobs in Germany but across the whole of Europe. Several million people are currently employed by firms working within this sector. "Our goal is always to invest in areas that have a strong future, that guarantee jobs over the long term and that help protect the environment and curb global warming," explained Bernd Fleschenberg, managing director of TSR Recycling GmbH & Co. KG, which is implementing the REMINE project. "Thanks to the modern recycling technology that we are going to set up here in Brandenburg an der Havel, we will be able to recover raw materials from waste fractions and intermediate products, recycle them and then return them to production cycles."

#### World Water Day 2016 highlights the opportunities of the water sector

This year's World Water Day was on 22 March and explored the theme of "water and jobs". At the same time, UNESCO published its annual UN World Water Development Report 2016 which clearly shows what a significant role our planet's most important resource plays for both national economies and employment around the world. Over 100,000 people work in this industry in Germany alone, supplying drinking water or treating wastewater. REMONDIS has been focusing on handling water in a sustainable and responsible way for many years now. The 160 employees working at Wasserverband Lausitz Betriebsführungs GmbH (WAL-Betrieb), for example, are celebrating their 10th anniversary this year. This company is a fully owned subsidiary of REMONDIS Aqua. Since 2006, it has been in charge of managing both the technical and the commercial side of all water operations owned by the Lausitz Water Association and is, therefore, responsible for supplying drinking water to around 120,000 local residents as well as treating their wastewater. Last year, the company was presented with an apprenticeship award in recognition of the efforts it makes to help young people carve out a career for themselves.

#### NABU: organic waste bin still not all around the country

The 500-day mark has passed since the new regulations came into force to ensure that organic waste is segregated from other types of waste and collected separately across Germany. According to the latest findings published by NABU (German Nature and Biodiversity Conservation Union), however, many local district authorities have set up solutions that are inadequate or have not introduced separate collection schemes at all. As four million tonnes of organic waste are still being incinerated rather than recycled, regulations were introduced on 01 January 2015 making it obligatory to collect this waste stream separately. "In practice, however, just under ten percent of the 400 town and district authorities in Germany are completely ignoring this new law. A further ten percent only collect organic waste sporadically or do not have kerbside collection schemes but insist local inhabitants must take their waste to recycling centres," commented NABU managing director Leif Miller, summarising the report. These authorities justify their decision by saying that the law does not explicitly say that organic waste bins must be distributed to households. Studies, however, have clearly shown that the greatest volumes of

organic waste are collected in the districts where local inhabitants have their own special bin. "Whoever made the decision not to introduce a separate organic waste collection scheme or to insist that local inhabitants use their own cars to transport their organic waste to their local recycling centre must also have realised that several million tonnes of valuable organic waste would end up in residual waste bins," Leif Miller concluded. Another argument often used by local authorities for their lack of action in this area is their financial situation. Many have signed long-term contracts with waste incineration plants or mechanicalbiological waste treatment facilities. NABU is calling for the current laws to be enforced and, as a last option, to allow someone else to carry out the service. In such a case, a higher body should be able to issue a decree that organic waste must be collected separately and then charge the costs incurred by this to the local authority concerned.

#### Sustainable development in the Constitution?

During a public hearing at the Bundestag on 08 June, an expert from the RNE (German Council for Sustainable Development) talked of the urgent need to have the subject of sustainable development included in the German Constitution. REMONDIS managing director, Herwart Wilms, attended the meeting to listen to the arguments. Prior to this, the RNE had asked Joachim Wieland, a professor at the German University of Administrative Sciences in Speyer, to draw up a legal opinion regarding the constitutional status of sustainable development to create a basis for the discussion as well as to push it forward. Addressing his words to both the MPs of the Bundestag (lower house of the German parliament) and members of the public, Hans-Jürgen Papier, former President of the Federal Constitutional Court, first stated that he was in favour of the term "sustainable development" being given constitutional status. According to Hans-Jürgen Papier, such a move would make it obligatory for the legislator to ensure that the interests of the community are met on a long-term basis. Gesine Schwan, president and co-founder of the Humboldt-Viadrina Governance Platform gGmbH, said that the need to have this embedded in the Constitution is "more urgent than ever before to be able to have a lively public debate about the topic at all". At the end of the day, this is the basis that is needed for robust sustainable development policies. Joachim Wieland also believes that the time is right for such a decision, commenting "there has probably never been a better time with the Agenda 2030 having just been approved". He is also of the opinion that having sustainable development as a governmental target would not constrain the legislator but would encourage them to think long term. In his report, Wieland suggested that a single sentence be included: "The state shall act in accordance with the principle of sustainable development." He concluded that whilst concrete measures could not be construed from such wording, it would force the state to check whether its actions are in keeping with sustainable development.

Rat für NACHHALTIGE Entwicklung



When PET bottles become art, then there can only be one message: there is no such thing as waste – only recyclables!

## Art and recycling at the UNESCO World Heritage Site Zollverein

THE ZOLLVEREIN COAL MINE INDUSTRIAL COMPLEX ENJOYS ITS MOST SUCCESSFUL ART EXHIBITION EVER WITH REMONDIS' HELP

The "Earth Worth" exhibition put on by German artist Thomas Luettgen had a record number of visitors making it the most successful art exhibition ever to be staged by the Zollverein Coal Mine Industrial Complex in Essen. Thomas Luettgen's latest exhibition, "Earth Worth – Perspectives & Values", which will be taken around the country, opened its doors to the public for the very first time in Hall 5 of the UNESCO World Heritage Site Zollverein on 11 May. The exhibits are photographs and photographic objects illustrating our consumption and throwaway society. REMONDIS is supporting this exhibition, especially as it believes this art may truly succeed in changing people's opinions about their waste-producing habits. Looking at the venue and the subject, it was only fitting that the waste management specialists, Essener Entsorgungsbetriebe, and NABU (German Nature and Biodiversity Conservation Union) were there to provide their support.



Go to remondis-aktuell.com to see a film about this exhibition The way the large photographic collages and three-dimensional pictures combine the senses of sight and touch is truly remarkable. All exhibits illustrate a stage of a recycling process. At first glance, viewers see pre-sorted categories of recyclable substances. A longer look, though, and these materials are seen in a completely different way. One common feature throughout the whole of the exhibition is that the material on which the works of art have been placed reflects the subject

#### **Thomas Luettgen**

Thomas Luettgen (born in Leverkusen on 27 March 1952) is a German photographer and fine artist. He has focused on fine art since 2007. Having trained to become a colour lithographer, he then set up his first communications agency, which soon became one of the most successful agencies in Germany with him at the helm as managing director and creative head.

Inspired by a trip to Namibia in 2007 and the power of the imagery he found there, he decided to focus on creating art. In 2010, he produced a series of works entitled 'crossTHing' which were based on the photographs he had taken in Africa. These pieces of art took a detailed look at the country, people and nature of Namibia and clearly illustrate his fascination for the region. During his trip, Thomas Luettgen spent

much time looking at the lives and culture of the Namibian Himba tribe. He documented their way of life in a series of photos and produced a stunning portrait of this indigenous tribe.

Whilst visiting the Namib Desert, Thomas Luettgen came face to face with the legacy of our modern society: plastic bottles carelessly discarded without a thought for the consequences. The sight of these foreign objects lying in the middle of one of the world's oldest deserts prompted him to use art to take a critical look at the way humanity handles its natural resources. His first series of photos about this subject – entitled "Valuable" – was published in 2012.

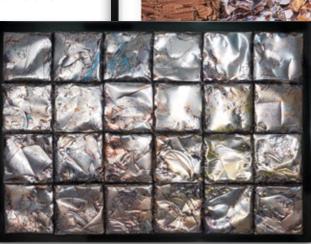
Thomas Luettgen

of the picture itself. Thus, for example, a picture with a metal theme has been printed on a metal surface. Thomas Luettgen has also created a limited number of three-dimensional pictures. The impression is that of a relief giving the visual image a three-dimensional surface. The aesthetics of the recyclable materials combined with the 3D effect has the potential to change the way people think and to get them to re-assess what is important to them. This exhibition gives a clear message: with the world's population continuing to grow and our natural resources continuing to decline, there can and must be no waste – only recyclable materials.

The high number of visitors is a clear sign that this message is getting across. Over 5,000 people travelled to the Zollverein Coal Mine Industrial Complex to see the "Earth Worth" exhi-

bition. Thanks to this success, Thomas Luettgen's art has resulted in many people learning more about the true value of recycling.

Metal – one of oldest materials to be used by humans and one that can be endlessly recycled – takes on a completely new meaning in this 3D exhibit



Cardboard is becoming ever more important as online sales continue to grow. Thomas Luettgen is using his artistic skills to get people to think about this material as well

## And action!

#### **REMONDIS HELPS OUT AN UP-AND-COMING FILM DIRECTOR FROM HANOVER**

"Every day, a waste collection truck drove past while I was waiting to be picked up from school," explained Ceylan-Alejandro Atamann-Checa. This up-and-coming film director from Hanover recently made a film entitled "Tears of the Past" which tells the story of his childhood.

Sebastian – the name of the character in the film playing Ceylan as a child – grew up alone in Hanover with his mother and has always dreamed of becoming a pilot. He has never met his father and learned to fend for himself at a very early age. Now 30, Ceylan has not become a pilot but is studying film directing at the prestigious DFFB (German Film and Television Academy) in Berlin. He has taken a trip down memory lane for his final course project, making a 60-minute film about his childhood in the same places in Hanover where he grew up. The image of the waste collection truck is still etched on his mind and so it has taken on quite an important role in his film: it can be seen in the one-minute opening scene.

The REMONDIS extras had to repeat their scene twenty times before the film director was happy with the results



REMONDIS' branch in Hanover stepped in to help Ceylan here providing him with a collection truck and three employees. The scene was filmed in front of the 'Auf dem Loh' primary school near the train station on a Saturday in March. An exciting day for the REMONDIS team who had never been in front of a film director's camera before. Axel Raula and Marcel Heidel, responsible for emptying the bins, weren't given their text until the morning of the shoot and so they had to quickly learn their lines off by heart whilst helping the film crew at the same time. To make the scene more realistic, they had to fill the bins with paper and cardboard. Within just 30 minutes, they were word perfect and beginning to enjoy their role as an actor. The whole day was made even more enjoyable by the fact that the scene had to be filmed twenty times before the director was happy with the results.

Ceylan had just two weeks to make the film and only had a small budget at his disposal. All this meant that they didn't have the communications technology normally found on film sets, such as walkie-talkies, nor were the roads cordoned off to the public. Truck driver, Andre Dröst, therefore, spent the whole day driving round the block again and again to be in the right place when the camera was rolling. He stayed calm throughout and, at the end of the shoot, the crew's hard work was rewarded with a large plateful of pasta in front of the school. The team from REMONDIS' Hanover branch certainly enjoyed the experience and they all agree on one thing: they'll be more than happy to help out if Ceylan needs some extras for his next film.

#### > Impressions



 Ludger Rethmann welcomes a delegation of FDP politicians from Lower Saxony to the Lippe Plant: (from left to right) Wilhelm Bies, REMONDIS Region West, Dr Werner Kook, NIAG Board Member, Dietmar Brockes, FDP MdL NRW, Spokesman for Economic Affairs, Industry & Energy, Ludger Rethmann, REMONDIS Board Chairman, Jörg Bode, MdL, Deputy Chairman of the FDP Parliamentary Group, former Minister for Economic Affairs for Lower Saxony, Dr Stefan Birkner, MdL, Deputy Chairman of the FDP Parliamentary Group, Chairman of the Lower Saxony FDP and former Environmental Minister for Lower Saxony, Axel Rehwinkel, Scientific Assistant to the FDP Parliamentary Group, Arend Cobi, Head of Municipal Sales at REMONDIS, Dieter Helkenberg, REMONDIS Aqua



(from left to right) Norbert Rethmann, Honorary Chairman of the Supervisory Board of the RETHMANN Group, Dr Martin Lebek, REMONDIS Aqua CTO and Head of the TetraPhos project, Thomas Conzendorf, REMONDIS Board Member, Johannes Remmel, Environmental Minister for the state of North Rhine-Westphalia, and Herwart Wilms, REMONDIS Managing Director, during a meeting at the IFAT in Munich

Bret Collins, Regional Manager of REMONDIS Queensland, welcomed an unusual guest to his office at the Brisbane landfill. Snakes are a common sight at REMONDIS' branches in Australia



 Hannelore Kraft (centre), Minister President of the state of North Rhine-Westphalia, surrounded by the winners of the KlimaExpo.
NRW award. Behind her: Herwart Wilms, REMONDIS Managing Director. Far left: NRW Environmental Minister Johannes Remmel

REMONDIS' exhibition team at the IFAT 2016





#### Perhaps the most important step: To take a look in the mirror

Germany is often seen as a global role model when it comes to recycling. There is, however, still plenty of room for improvement. A study drawn up by the INFA Institute has revealed that a further 95 kilograms of recyclables could be recovered from municipal waste per person per year – if the materials were segregated at source. REMONDIS is, therefore, promoting a recyclables law that makes it easier to separate and collect different types of waste. Learn more about our work in this area and our innovative recycling solutions at > remondis-sustainability.com

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