

## NRW.Europa

## Taking innovations into new markets



# Editorial

Who can advise me about possible sources of funding for my innovation project, where can I find associates for transnational partnerships or suitable research partners? Questions to which the NRW.Europa team in North Rhine-Westphalia has provided competent and goal-oriented answers since 2008.

North Rhine-Westphalia is a high-tech region and it is especially its predominantly SME-based economic structure which helps NRW rank top in foreign trade. Innovative, global and future-proof products are often developed in cooperation with partners from research and other quarters. That's why bringing together people, ideas, enterprises and academia is one of NRW.Europa's core tasks. Many of the products which have evolved in this way are today helping to master global challenges.

## A powerful consortium

NRW.Europa is part of the international Enterprise Europe Network of the European Commission, to which meanwhile belong over 600 partners in over 60 countries, making it the largest consulting network worldwide for small and medium-sized enterprises. To make it easier for innovations to penetrate European and international markets, the Network unites international know-how and local expertise. By means of customized support, platforms for new technology and business partnerships as well as information on funding programmes and financial instruments, the Network helps businesses to grow at a faster pace.



The consortium responsible for NRW – ZENIT GmbH, NRW.BANK and NRW.International – is not only the contact point for the technology-based firms amongst the total of about 765.000 small and medium-sized enterprises in the region, but also for the 72 universities and 50 non-university research institutions located here.

NRW.Europa is funded by the EU, the Federal State of North Rhine-Westphalia and NRW.BANK. Most of its services are free of charge.

**We look forward to hearing from you!**



*The NRW.Europa experts helped us to find an interesting partner in Lithuania whose know-how in the area of steel-rubber composites complements perfectly our own portfolio.*

**Kai Okulla**  
Managing Director, Wilhelm Schröder GmbH



*Above all the requirements in the area of financial planning were at first completely new ground for us in our application for EU funding. The advice we received from the NRW.Europa team was a great help and a deciding factor in our success.*

**Sascha Devigne**  
Editor-in-chief, Studio 47, Stadtfernsehen Duisburg



*As an innovative mechanical engineering firm with a strong international focus, we have made use of NRW.Europa's expert know-how for a long time now to raise funding for product innovations, research projects or demonstration plants.*

**Petra Bültmann-Steffin**  
Managing Director, Bültmann GmbH



*With the support of the NRW.Europa team, we have further enhanced our core technological expertise. In the framework of an innovation management process, measures were developed which will strengthen our competitiveness in the medium term.*

**Manfred Gante**  
Managing Director, Kunststofftechnik Backhaus GmbH

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Our services at a glance





# Novihum<sup>®</sup> Technologies

## With Horizon 2020 to better soil


This company stands above all for one thing: Successful technology transfer of university research results into practice. The aim is to contribute to the immediate and sustainable improvement of soil quality through a new type of permanent humus. One of the measures undertaken to this end is to make use of funding from the EU programme Horizon 2020 for a pilot plant in Dortmund.

### How should we use resources in the long term, how can we secure livelihoods and safeguard the climate?

Questions which are highly significant for mankind's future where those products which contribute to a considerable improvement in land used for agricultural purposes will play an important role. A new type of lignite-based soil conditioner for land recultivation is a promising solution. The initial idea was to feed lignite, which is a natural product, into a valuable closed-loop

cycle instead of combusting it: 100 percent raw material yield, top-rate energy efficiency and a high-value humus product which can solve all the problems of poor humus supply. Put simply: Novihum<sup>®</sup> is a technology with which the step from humus to lignite is reversed and high-quality humus rich in nutrients is produced in a gentle process. The intention is to make even extremely nutrient-poor soils in desert regions or the steppes in China, South America, the Middle East and the Arabian Peninsula fertile again in this way. Since increased plant growth contributes to the sequestration of CO<sub>2</sub> in the soil, lignite is not a "climate killer" in this case but instead a climate improver.

The idea evolved at TU Dresden (Technical University of Dresden) in cooperation with the Forschungsinstitut für Bergbaufolgelandschaften e.V. (Research Institute for Post-mining Landscapes) in Finsterwalde. What was lacking, however, was investors who were in a position to develop the product to market maturity.



*Made out of lignite:  
A high-quality humus product*



*“The assistance provided by the NRW.Europa team in compiling our funding application was very important to its quick and successful submission.”*

**Dr. Peter Langer**  
Managing Partner  
Novihum® Technologies GmbH



To change this situation, in 2012 Novihum® Technologies GmbH was founded. The following year, it acquired patent and trademark rights, brought on board venture capitalists in the shape of Munich Venture Partners, Technologiegründerfonds Sachsen, a fund for technology-based start-ups in Saxony, and later Cultivian Sandbox Fund in the USA, and thought about where a pilot plant could best be set up. NRW.BANK was also involved. Through the investors, contact was established with TZ Dortmund (Dortmund Technology Centre) and the economic development office there, which was able to offer a plot of land which matched perfectly the requirements for electricity, steam and cooling water: The site of the Deutsche Gasrößwerke in Dortmund's port district. A new centre of excellence – the Cleanport project – will emerge here over the coming years: A thematically fitting location for the new company.

#### **Pragmatic and fast**

The decision in favour of Dortmund was further helped by the support provided by the city in the form of a rental-purchase model for the hall to be built and the



Funding information and advice

Early-stage information and funding hotline

Identification of funding programmes, funding workshops

Help with funding applications

Advice on Horizon 2020

Networking of research and business players

pilot plant. In order to find potential sales and distribution partners, TZ Dortmund called in the NRW.Europa team, which was able to present some contacts to interesting companies in the Netherlands.

What was, however, even more important was the help NRW.Europa provided in submitting an application for funding within the SME Instrument (Phase 2) of Horizon 2020, the EU Framework Programme for Research and Innovation, for the construction of a pilot plant as well as the product's further development and market introduction. In the framework of a half-day workshop, how the project matched the call for proposals, fundamental arguments as well as cost calculation were discussed and assessed. Having reworked the proposal, the project was evaluated positively and approved after just two months, including a negotiation phase. Building commenced at the end of 2015 and sales of the innovative soil conditioner are likely to start in the summer of 2016.



# IMST (D) and Caveor (NL)

## Symbiosis of technology and design

When the concept of “form follows function” is put into practice, this does not necessarily meet the user’s taste. Above all in the area of patient care, the focus is all too often on purely functional criteria. A Dutch company and a German engineering office show that things can be done differently. Together they developed a piece of jewellery with an innovative content, which emits an alarm if the need arises.



*Jewellery with an inner life*

Sometimes it’s ordinary everyday things which ring in innovative processes. Such as when This Sondag noticed that his grandmother didn’t want to wear her emergency call transmitter because the ugly red button was simply too bulky and conspicuous.

Together with his colleague Joost van den Broek he set up the start-up company Caveor in Nimwegen. They developed the idea of both improving the technology for the emergency call system as well as integrating the whole thing in an attractive piece of jewellery. With “Abel”, a name was quickly found for the idea, but a partner for its further development was still needed. That’s why in 2013 the Dutch businessmen got in touch with their local Kamer van Koophandel, a partner in the Enterprise Europe Network.

In turn, the Dutch Network partners told the NRW.Europa team about the young company’s project and in so doing triggered an intensive search for potential cooperation partners. Several contacts and meetings were organized and just a short time later the search was successfully completed.

A centre of excellence and professional developer of high-frequency circuits, radio modules, and communications systems was found in the shape of IMST GmbH in Kamp-Lintfort. The firm accompanies individual clients’ product ideas in each stage of development: From initial advice to series manufacture. IMST works with partners both in commercial markets as well as public-funded research.



*“Thanks to the support of the Enterprise Europe Network, two partners have found each other who through their partnership were able to advance the development of an innovative product which will have high social added value for dignified ageing.”*

**Frank Meyering**  
Group Leader Systems and Software Development  
IMST GmbH



Individual mediation of cooperation partners

Use of the international cooperation partner database

Participation in international matchmaking events

Networking with higher education and research institutions in NRW



### Public funding

To develop the product further, in 2013 the two partners took advantage of funding available within the Interreg Programme for the German-Dutch Border Region.

“We have good and long-standing connections and so knew about the funding scheme, which was very interesting for us because of its cross-border character”, reports Norbert Schmidt, Head of the Information and Communication Systems Department at IMST.

In the framework of the one-year project, the partners developed an innovative technology. “Conventional systems work via a telephone landline. We, by contrast, have developed a system together with our partner where the button is connected wirelessly to a smartphone, tablet or router”, explains Jost van den Broek. The patient’s

whereabouts can be communicated at the press of a button, which means that the alarm can be used anywhere outside too.

First field trials in the spring of 2015 showed that potential users have different ideas as far as the design is concerned. Men prefer to have the button integrated in their belt buckle, whilst women prefer a necklace. The product was formally approved in the autumn.

The Dutch company isn’t in the least worried about sales. Having developed a standard product, it plans to work on individual pieces together with jewellery designers and has already identified other target groups, such as extreme athletes. “Abel” will be introduced on the market in the course of 2016.



# Schwaneekamp

## From natural stone specialists to innovative interior designers

“Where do my strengths and weaknesses lie? How can I find new markets? How do I hand over to the next generation?” Questions which innovative interior designers Schwaneekamp in Gescher asked themselves at the beginning of 2015 and then brought on board NRW.Europa’s innovation experts to deliver the answers.

When Walter Schwaneekamp took over the company from his father in 1976, it was a traditional stonemason’s business. Step-by-step he expanded it to include professional design services and laid the foundation stone for the firm’s transformation from natural stone specialists to innovative interior designers. The circle of customers grew in parallel and was equally diversified. Both discerning private clients were served and from 1985 onwards SieMatic, one of the most important German manufacturers of top-of-the-range kitchens. Schwaneekamp supplied high-grade stone worktops for both groups. An important milestone in the company’s success story was the development of a “lightweight worktop” in 1996. This development was funded by NRW’s Technology Programme, for which a NRW.Europa partner was the contact point – a partnership which has

continued to this day. This innovative product, which received many awards, revolutionized the market and led to rapid growth in turnover and workforce. Yet despite all its innovative ideas, the poor economic situation from 2009 onwards did not spare Schwaneekamp either. True to the owner’s guiding principle of reacting to crises with new developments and innovations, the company with its 70 staff succeeded in asserting itself in the face of strong competition.

### Developing the visions of the future

So that this remains so in future too and the handover to the next generation is anchored in corporate strategy as a targeted objective, 60-year-old Walter Schwaneekamp made use at the beginning of 2015 of NRW.Europa’s

*High-tech products for private and industrial customers*





*“Thanks to the consulting services provided by the NRW.Europa team, we were able to start planning the future and setting the course for important structural changes in our company in the framework of a workshop with our management team.”*

**Walter Schwanekamp**  
Owner of Schwanekamp GmbH

**SCHWANEKAMP®**

service offer in the area of innovation management. First of all he used an internet-based self-assessment tool ([www.nrweuropa.de/Innovationsaudit](http://www.nrweuropa.de/Innovationsaudit)), which discloses a company's strengths and weaknesses in an innovation report. In a subsequent workshop, core competencies and success factors were identified. These include above all the firm's strong customer focus which, however, also puts pressure on its profit margin.

In an analysis of the value chains, NRW.Europa and Schwanekamp together discussed starting points for improvement measures which would lead to leaner cost structures without compromising quality. Another task was to revise the company's communication strategy for new and existing customers.

Alongside these short-term measures, “Schwanekamp 2020” was developed, a vision for the company's future. This could take the shape of a strategic relationship with a premium kitchen manufacturer or – if Schwanekamp continues as an autonomous company – in the

Innovation audits and potential analyses

Discussion of strengths and weaknesses, opportunities and threats

Technology management and sales organization

Process description and optimization

Implementation concepts and measures

consolidation of its private and new client base and the opening up of new distribution channels. In this case, a new balance would need to be found amongst management-level tasks and additional qualified staff employed.

*Into the future with innovation and quality*





# AQUABION

## Innovative and environmentally friendly

The losses for insurance companies caused by limescale and corrosion in pipelines for drinking, industrial and waste water amount each year in Germany alone to at least € 1.5 billion. An innovative and patented water treatment system from Düsseldorf represents an interesting solution which was successful, also thanks to the aid of the NRW.Europa team, in further expanding its position in foreign markets.

No consumer is completely safe from pipelines damaged by limescale and rust as well as the related and often immense costs. What's annoying for one person is a real market opportunity for the next. Like for Marc A. Flettner, Managing Director and owner of AQUABION GmbH, which was founded in 2003. Its establishment evolved out of the development of an environmentally friendly water treatment system with the same name, for which international patents were registered in 2009. The system is maintenance-free and does without an external electricity supply, chemicals, salt or magnets. It is produced in sizes from ½" to 10" and is an environmentally friendly alternative to well-known softening systems which work with salt. The AQUABION® is manufactured exclusively in Germany.

That there are excellent market opportunities in the area of building technologies is a fact of which the firm, which belongs to ION Deutschland GmbH founded by Flettner in 1990, has been aware for over 25 years.

The group has already successfully sold over 120.000 chemical-free water-treatment systems worldwide from different manufacturers and in various sizes. The AQUABION® has an extended guarantee period of five years. Once the zinc anode is exhausted, the AQUABION® is exchanged in the frame of a clever deposit system and the old product taken back by the distributor network. Then a new system is installed at the customer's facilities and the old one recycled in the factory in Germany.

### Strategic partnerships for more turnover

Despite continuous international expansion, there were still some gaps on the map of Europe. In order to introduce the technology into further markets, Marc A. Flettner got in touch with the NRW.Europa team. Thanks to having participated in several matchmaking events in the past, personal contacts were already in place and both sides already knew each other's strengths.

Water treatment for small and large applications





*“The Enterprise Europe Network found us a reliable and competent distribution partner. Our turnover has substantially increased thanks to this partnership. We look forward to continuing to work with the Network.”*

Marc A. Flettner  
Managing Director  
AQUABION GmbH



A search profile for potential distribution partners was entered into the Partnering Opportunities Database of the Enterprise Europe Network which paved the way for a number of meetings with interested firms abroad. Particularly promising was the contact to Rabmer, a family-owned company in Linz, which was initiated by Network colleagues at the Oberösterreichische Wirtschaftsagentur, the business agency for Upper Austria. Rabmer GreenTech GmbH has been operating worldwide for almost 30 years in the field of environmental technology, with a focus on water, waste water, and renewable energies.

After several meetings it was clear that the German system was the ideal addition to the Austrians' product portfolio. The latter had namely been on the lookout for some time for innovations in the area of water and energy, with the aim of achieving business growth and generating more turnover through environmental technologies.

Entry of offers and requests in the database of the Enterprise Europe Network

Organization of matchmaking events at international trade exhibitions and congresses

Organization of company missions

The two companies are meanwhile working closely together and profit from their strategic partnership: Rabmer GreenTech from the exclusive sales rights they enjoy not only in Austria but also in the Czech Republic, the Slovak Republic, Hungary, Romania, Poland and Spain and AQUABION from a reliable partner with a good distribution network. After all, says Marc A. Flettner, each new distributor means around 10 to 15 percent more turnover per year.





# Power Toons

## Transnational creativity network

Visually powerful film, TV and media productions don't just come from the creative cities along the Rhine. In provincial regions too, creative ideas are generated which seek to go international. The NRW.Europa team was able to help them on their journey.



Breathing life into fantasy, putting ideas into practice and the visualization of dreams is everyday work for Michael Schwertel. He has been designing 3D animations for 15 years and in 2007 founded Power Toons in Waldbröl. The clientele of this creative hotbed, which is at home in the green hills to the east of Cologne and Düsseldorf, includes service providers, educational institutions and economic development bodies. For example, a clip was produced for the Goethe Institute in New York which encourages Americans to learn German. For Cologne Chamber of Commerce and Industry, animated films were created which present various professions and for a health insurer an advert showing their different services.

Creating new worlds requires reliable partners. To this purpose, Michael Schwertel, himself initiator of a network of players in business, art and culture, relies regularly on the services offered by the NRW.Europa team. This included, for example, taking part in the summer of 2015 in the international "gamesmatch" matchmaking event at Gamescom, the trade exhibition

for interactive games and entertainment in Cologne. Thanks to the catalogue with over 160 participant profiles published prior to the event, he was able to hold some interesting talks with potential business partners.

### Good connections

A short time later, Michael Schwertel was amongst the participants of "Games Hub Sweden", a two-day company visit organized by NRW.International GmbH. The trip began with a visit to the annual "Invest in Games" event staged by the Swedish games industry. A highly informative visit, as Sweden has been a convincing trailblazer of serious games applications and gamification for a long time in the B2B segment. Interesting points on the second day's agenda to do with games: A business breakfast, numerous company visits and a presentation by northern Europe's largest ICT cluster gave an exciting insight into the latest trends and business models as well as sufficient opportunities for networking and discussion.



*“By participating in the company mission, I discovered a lot of new ideas for the future development of my company. It was a very varied and informative programme which will make a lasting impact as well as a very inspiring and productive time. International networking is making my company competitive and will do so in future too.”*

**Michael Schwertel**  
Managing Director  
Power Toons



Organization of matchmaking events  
and delegation visits

Profile compilation and cooperation  
partner search

Procurement of market information

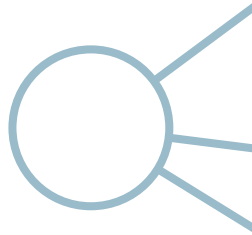
Internationalization support

*No limits to creativity: 3D animations*

Michael Schwertel used the visit for talks with important Swedish firms and big players such as Mojang and DICE. Of particular interest was his meeting with FutureGames, which he was able to continue at a reception held at the residence of the German ambassador to Sweden and during a company visit on the following day. Several meetings led also to plans for future partnerships with FutureGames, which is an industry-oriented vocational training school, as well as collaboration with Swedish developers.

The firm's cooperation profile compiled in advance of the company mission was also entered in the international Partnering Opportunities Database of the Enterprise Europe Network. Interest in cooperation was soon expressed by a Danish academy and a Dutch firm suggested they might undertake joint transnational projects together.



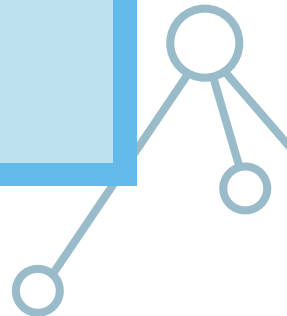


# NRW.Europa

## Your network for innovation and new markets

### You need

Information about regional, national and European funding programmes?  
 New business partners abroad?  
 Cooperation partners for EU-funded projects?  
 New and complementary technologies for your innovative products?  
 Assistance in knowledge and technology transfer?  
 Help with a technology-based start-up project?  
 Access to finance?

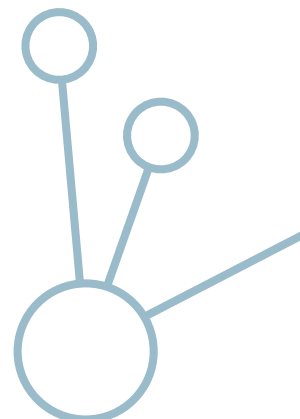


### NRW.Europa

Consortium of ZENIT GmbH, NRW.BANK and NRW.International GmbH  
 On behalf of the European Union and with the support of the State of  
 North Rhine-Westphalia and NRW.BANK  
 Part of the Enterprise Europe Network - the European Union's largest consulting  
 network worldwide with over 600 partner organizations in over 60 countries



Partner search to go:



## We offer

### Information on Europe and opportunities for feedback

Events on Europe-related topics and possibilities for EU funding  
Newsletters and publications  
EU-wide public calls for tender  
Feedback to the European Commission on Single Market issues

### Advice on funding and finance

Individual advice on and assessment of

- EU funding programmes including Horizon 2020
- Regional, national and European funding and financing instruments for innovation and internationalization

Practical assistance in compiling funding applications

### Partner search and technology transfer

Mediation of cooperation partners for international business and technology transfer  
Use of an international cooperation partner database with over 10.000 partner profiles  
International brokerage events at leading European trade exhibitions  
Trade exhibition and delegation scouting - Matchmaking between foreign delegations and North Rhine-Westphalian enterprises  
Networking with higher education institutions and research facilities in North Rhine-Westphalia

### Advice on innovation and internationalization

Audits and strengths/weaknesses profiles  
Strategy development  
Implementation support

# NRW.Europa – Our services

Information on EU topics and enquiry service  
Internationalization support  
Cooperation partner search  
Trade fair and delegation scouting  
Technology and know-how transfer support  
Innovation management consulting  
Funding information and advice  
International funding advice



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**NRW.Europa** – Your partner in the Enterprise Europe Network

[www.nrweuropa.de](http://www.nrweuropa.de) | [info@nrweuropa.de](mailto:info@nrweuropa.de)

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**ZENIT GmbH** – Centre for Innovation and Technology in NRW

[www.zenit.de](http://www.zenit.de) | [info@zenit.de](mailto:info@zenit.de)

Tel.: ++49(0)208-30004-0

**NRW.BANK** – EU Funding/Foreign Trade & Investment Promotion Department

[www.nrwbank.de](http://www.nrwbank.de) | [info@nrwbank.de](mailto:info@nrwbank.de)

Tel.: ++49(0)211-91741-4000

**NRW.International GmbH** – Foreign Trade Promotion for NRW

[www.nrw-international.de](http://www.nrw-international.de) | [europa@nrw-international.de](mailto:europa@nrw-international.de)

Tel.: ++49(0)211-710671-0

