



Progress Report

Werner & Mertz Group – 2015/2016

On the Leadership Declaration of the Biodiversity in Good Company Initiative

Leadership Declaration

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Leadership Declaration

The signatory companies acknowledge and support the three objectives of the international Convention on Biological Diversity:

- conservation of biological diversity
- sustainable use of its components
- fair and equitable sharing of the benefits arising out of the utilization of genetic resources and commit themselves to

1. analyzing corporate activities with regard to their impact on biological diversity;
2. including the protection of biological diversity within their environmental management system;
3. appointing a responsible individual within the company to steer all activities in the biodiversity sector and report to the Management Board;
4. defining realistic, measurable objectives that are monitored and adjusted every two to three years;
5. publishing activities and achievements in the biodiversity sector in the company's annual, environmental, and/or corporate social responsibility report;
6. informing suppliers about the company's biodiversity objectives and integrating suppliers accordingly and incrementally;
7. exploring the potential for cooperation with scientific institutions, non-governmental organizations (NGOs) and/or governmental institutions with the aim of deepening dialogue and continuously improving the management system.

To demonstrate ongoing commitment, member companies will provide the Initiative with a progress report every two years.





Introduction

In 2012 we established the Frosch Initiative to smooth the way for sustainable solutions. Today the initiative encompasses numerous activities and conveys the message that Werner & Mertz is an ecologically-oriented and socially responsible sustainable company which actively pursues environmental goals at its production sites and beyond. Our commitment to sustainability and our promotion of biodiversity are long-lived company traditions.

Biological diversity is our focus when we select natural ingredients for our products, cooperate with NABU and WWF to preserve ecologically valuable habitats and engage in cross-industry initiatives.

As a founding member of Biodiversity in Good Company, Werner & Mertz brought its convictions to this coalition of companies and today, as a board member, has a hand in shaping policy. This progress report explains how we carry out our self-imposed tasks, drive sustainability forward and work continuously to conserve and protect biological diversity.

From Environmental Management to Sustainability Management

Since 2002 Werner & Mertz has had an EMAS-validated environmental management system and since 2007 a sustainability management system. Both ensure that we consider the ecological impact and our social responsibility in our corporate activities, which we plan with economic foresight from an integrally sustainable perspective.

Biodiversity is an important component in our ecological sustainability along with resource and climate protection. Wherever raw materials are extracted, biodiversity has to be taken into account. Because we know that climate change alters the range of species and symbiosis, we rely on renewable energy and manufacture our products – wherever possible – petroleum products and non-renewable resources. Wherever possible, we turn instead to ingredients based on plants cultivated in Europe.





Environmental activists since 1986 – engaged and innovative

Many people remember the year 1986 in several respects as an ecological turning point. Prompted by the April 26 incident at the Chernobyl atomic reactor, the German government established the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety.

In the same year Werner & Mertz introduced the Frosch brand, the successful product line of environmentally friendly household cleaners with natural ingredients. Since then the umbrella brand has shaped our company.

Frosch has an environmental impact beyond its broad product portfolio. The power of our trusted brand stands behind the Frosch Initiative for sustainable solutions. Through the initiative we provide new stimulation for environmental and resource protection with our Recyclate Initiative, for example, and with the project Native Surfactants from European Cultivation.

www.initiative-frosch.de

The open innovation project known as the Recyclate Initiative develops and establishes closed material loops for genuine recycling of plastic recovered from the Yellow Bag collection system. Resource conservation and recycling are important contributions to preventing marine litter, which must be stopped in order to protect biodiversity in the world's oceans. This particular type of pollution is increasingly moving into the focus of our corporate sustainability activities.





Many milestones in environmental protection mark the company's path toward rigorous sustainable management in the years since 1986.

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|------------|--|
| Since 1995 | Relocation of business partner to Werner & Mertz premises to put packaging manufacturing close to the production line. The move eliminates about 1,700 truck trips, which represent annual savings of about 600 tons of carbon dioxide. |
| 2001 | Participation in ÖKOPROFIT project initiated by the City of Mainz and the first of regularly received distinctions as a Mainz ÖKOPROFIT business. |
| 2002 | Introduction of environmental management system with the goals of obtaining DIN EN ISO 14001 and EMAS certification for Werner & Mertz GmbH in Mainz. Set up of energy management system in Mainz. |
| 2003 | Publication of first Environmental Statement by Werner & Mertz GmbH for the Mainz site. |
| 2004 | Introduction of environmental management system for the three Werner & Mertz Group companies at the Hallein site and successful EMAS and DIN EN ISO 14001 certification audits. |
| 2005 | Implementation of sustainability guidelines and participation in the A.I.S.E.-Charter for Sustainable Cleaning, a voluntary initiative of the European soaps, detergents and maintenance products industry. |
| 2007 | Top management orders the further development of the environmental management system into a sustainability system for the Werner & Mertz group, including the Hallein site. |
| 2008 | First Sustainability Report issued by Werner & Mertz Group. |
| 2009 | Werner & Mertz wins the German Sustainability Award for its umbrella brand Frosch. |
| 2010 | The new Werner & Mertz headquarters building receives the Environmental Award from the federal state Rhineland-Palatinate. It is the first office building in Germany which generates more energy than required for heating and cooling by means of wind turbines and photovoltaic cells on the roof, combined with a geothermal system. |



- 2011 **Mainz:** Werner & Mertz develops its own assessment system for raw materials, substances and packaging with the goal of designing even more sustainable components.
All production buildings and warehouses are now heated via district heating; process steam is produced economically by high-speed steam generators. CO₂ emissions decline by about 1000 tons per year, compared to 2004.
Separate areas in the new water center treat wastewater and produce deionized water for chemical production. The previously used ion exchange facilities, which required approximately 100 tons of hydrochloric acid and about 35 tons of sodium hydroxide per year, were replaced with the eco-friendly reverse osmosis system.
- Hallein:** A filling line for “Frosch-Oase” is equipped with an energy-optimized LED system which adjusts to daylight conditions.
- 2012 The new headquarters receives the LEED Platinum certificate, the highest international rating for sustainable construction. Werner & Mertz kicks off the Frosch Initiative, whose first activity is the Recyclate Initiative, followed by the research project “Native Surfactants from European Cultivation”.
- 2013 ISO 50001 certification of the energy management system in use at Mainz and Hallein sites.
- 2014 For the first time Werner & Mertz earns certification by meeting the international IFS HPC and IFS Broker standards. The certification is proof of the safety of our products and the continuous improvement of our production processes.
- 2015 The international Cradle to Cradle Products Innovator Award was presented to Werner & Mertz for its brands FROSCH and green care PROFESSIONAL on 16 November 2015 in New York.
- 2016 Roll-out of ISO 15001 in separate companies at Mainz site
- 2016 For his engagement, Werner & Mertz owner Reinhard Schneider receives the renowned B.A.U.M. Environmental Award in the category “Small and Medium-size Enterprises”.

1. Impact of Corporate Activities

Werner & Mertz continuously monitors the impact of its corporate activities by means of several validation tools, some of which were developed in-house.



EMAS – Demanding environmental management since 2002

The analytical foundation was laid with the introduction of the DIN EN ISO 14001 and EMAS-compliant environmental management system in Mainz in 2002 and in Hallein in 2004. Today EMAS (Eco-Management Audit Scheme of the European Union) is still considered the most demanding environmental management system on the market. Key indicators are regularly checked as part of the validation process conducted by independent auditors.

We regularly publish the results in our Environmental Statement for the two production sites in Germany and Austria. Our long-term analyses document our achievements in resource protection and reveal areas where more work can be done. EMAS therefore serves as both confirmation and stimulus.

NOTE: The current Environmental Statements for the Werner & Mertz sites in Mainz and Hallein are in the Sustainability Report 2016/2017 at www.werner-mertz.de

Exacting assessment of raw materials, formulas and packaging components



At Werner & Mertz the raw materials and formulas we use are assessed with regard to their origin (preferably from renewable sources), their properties during use (minimization of potential hazards) and their fate after use (degradability).

The raw material and formula assessment system applies to the entire product range. Since 2011 we also have used an internal system to assess packaging components with the objective of improving packaging.



Purchasing considerations

Our company involves suppliers in our own environmental and biodiversity goals. We have worked out an extensive criteria system for our supplier questionnaire and assessment. It helps us to find suppliers that ideally support our efforts in sustainability, environmental protection, biodiversity conservation, and occupational safety and health.

A good example: Our Purchasing department takes care that office equipment always satisfies sustainability requirements. The veneer on our office furniture comes only from FSC-certified wood of European origin. At first glance that detail may seem unimportant in the realm of corporate action, but it is representative of the whole and relevant for the conservation of biological diversity.

Frosch Initiative



In keeping with our integral approach to sustainability, Werner & Mertz launched the Frosch Initiative in 2012 to develop groundbreaking and sustainable solutions to environmental problems. It deliberately concentrates on specific fields of activity. The Recyclate Initiative, for instance, is devoted to high-quality reuse of plastic waste (PET and PE at this time) obtained from the Yellow Bag collections system. The Initiative contributes to waste prevention, resource conservation (petroleum), climate protection and the conservation of biodiversity.

Today the transparent bottles of Frosch products contain up to 100% PET recyclates. About one-fifth of this recycled material is made of used PET from the Yellow Bag; that share is expected to increase. More than 40 million bottles of this type have passed practical tests in household use. In 2016 the brands emsal and green care Professional succeeded in producing HDPE packaging



made completely of old plastic recovered from the Yellow Bag. Together with its partners in the initiative, Werner & Mertz tapped into the enormous pool of secondary raw materials from the Yellow Bag collection system. The proof is at hand. High-quality reuse is feasible and a much better alternative to conventional downcycling or incineration of the material.

More information at: www.we-for-recyclates.com

The second focus of the Frosch Initiative – Native Surfactants from European Cultivation – also has an impact on biodiversity.



Surfactants based on European vegetable oils

Surfactants are wash-active substances used to make laundry detergents and household cleaners effective. During the wash cycle for clothes or dishes, surfactants act to suspend grease and other non-water-soluble substances in the water so that they can be rinsed away.

Companies like Werner & Mertz that want to forgo use of petrochemical surfactants currently cannot completely avoid reliance on palm kernel or coconut oil. As a member of RSPO (Roundtable on Sustainable Palm Oil), we are very much aware of the controversy surrounding the use of tropical vegetable oils. Since 2013 we have been working on developing surfactants based on native plants for use in Frosch brand products with the ultimate goal of doing without tropical vegetable oils.

The composition of native (European) vegetable oils differs greatly from that of palm kernel and coconut oils. Our company, however, has mastered the challenges posed by the use of surfactants made from native plants in cleaning products. We have resolved issues with the chemistry, re-engineered production processes and retained the familiar product characteristics that consumers know and like.

Since 2013 Werner & Mertz has converted 20 formulas for Frosch cleaning and care products to contain up to 100 percent surfactants based on European vegetable oils.



Native plants preferred

Besides surfactants, other ingredients from plant sources are found in the products from Werner & Mertz. Here too we prefer plant-based active substances from domestic production and from European partners. Many advantages come with the use of surfactants made from plants cultivated in Europe, including:

- 100 percent renewable raw materials
- Protection of rainforests by precluding their use for cultivation
- Short transportation routes
- Promotion of traditional crop cultivation
- No reliance on surfactants from tropical cultivation
- No monocultures
- No competition with food production
- Conservation and promotion of biodiversity

Werner & Mertz relies on the oils from native European crops such as rapeseed, linseed, olives and sunflowers. We make sure that only industrial-grade (e.g., from a third pressing) or industrially utilizable oils are used in order to avoid any competition with food products.



Organic ethanol from straw for Frosch multi-surface cleaner

After making surfactants from rapeseed, olive, sunflower and flax oils, Werner & Mertz came across a new plant-based raw material from domestic cultivation. It is sunliquid® cellulosic ethanol, an organic alcohol of the second generation, made from straw, an agricultural residue. The specialty chemicals producer Clariant developed an innovative process in which pure organic ethanol is obtained, which is used in Frosch Bio-Spiritus Multiflächen-Reiniger (organic alcohol multi-surface cleaner). In the process the straw is mechanically and thermally prepared, liquified and then fermented into alcohol. The new organic ethanol fits perfectly in the Cradle-to-Cradle® philosophy, which Werner & Mertz long ago adopted. (See below.)

By using the plant residue straw, Werner & Mertz can draw from regional resources and reduce petroleum consumption. The cultivated areas are mostly in Germany, production takes place in Straubing and bottle-filling in Mainz. Transportation routes are shortened and energy expenditures are kept low.

Straw is obtained from native agricultural waste material such as wheat straw without competing with foodstuff or fodder production. There is no need to create new cultivated areas or to convert arable land with high biodiversity. Furthermore, organic ethanol is practically CO₂-neutral with greenhouse gas emissions reduced by ninety-five percent compared to fossil fuels.

Renewable raw materials in accord with biodiversity

The use of surfactants, organic ethanol and other substances that come from European cultivation delivers tremendous ecological advantages. In this case too Werner & Mertz cooperates with NABU on the protection of biodiversity.

Such action is required of Werner & Mertz and other companies that rely on renewable raw materials. We see in the Biodiversity in Good Company Initiative a dedicated discussion platform where solutions can be found for these environmental and nature conservation issues.





Cradle to Cradle®

The Cradle to Cradle® recycling principle was invented by Dr. Michael Braungart and further developed by the Environmental Protection Encouragement Agency (EPEA) in Hamburg.

Werner & Mertz has had selected products certified by this integrated process. Cradle to Cradle® Design is based on a detailed evaluation key which assesses the materials used, their recyclability, energy and water consumption and the social impact of product cycles and production methods.

Werner & Mertz passed the ambitious tests with flying colors. At the end of 2013 tana-Chemie GmbH, a wholly-owned subsidiary of the Werner & Mertz Group, celebrated a world premiere. For the first time in the history of Cradle to Cradle® certification, an entire professional cleaning and care product line of products – the eight eco-effective green care PROFESSIONAL products – received the distinction Cradle to Cradle Certified Gold.

In June 2013 Frosch Citrus Shower & Bath Cleaner became the first product from the cleaning industry in Europe to earn the same award.

In November 2015 Werner & Mertz received the Cradle to Cradle Products Innovator Award at a ceremony in New York. The award honored the manufacture of Werner & Mertz products in closed cycles in order to achieve maximum sustainability.

Summary: EMAS, the Werner & Mertz in-house assessment system and the Cradle to Cradle® product philosophy contribute greatly to reducing environmental impact and conserving resources. Innovative, sustainable development and stimulus extend way beyond the company and create conditions required for the conservation of biodiversity.



Cradle to Cradle® is a registered trademark of McDonough Braungart Design Chemistry LLC.



2. Integration in the Environmental Management System

The protection and sustainable use of biological diversity, indicators in EMAS regulations since 2009, have been integrated in the Werner & Mertz Environmental Management System.

Werner & Mertz developed its Environmental Management System in 2007 into a Sustainability Management System for the company's sites in Mainz and Hallein. Accordingly, the focus lies equally on ecological goals and corporate social responsibility from a sustainable, long-term economic perspective. Sustainability Management is involved in all relevant investment decisions made by Werner & Mertz.



All the responsible corporate areas such as Marketing, Product Development and Corporate Communication are represented at the Sustainability Team's quarterly meetings. Broad participation ensures a continuous flow of information internally and externally. Concrete nature protection projects on biodiversity are likewise communicated by team members. The Head of Sustainability Management is a member of the board of Biodiversity in Good Company.

Summary: *The topic of sustainability is ideally conveyed at Werner & Mertz by Sustainability Management through with internal and external communication. The specific cooperative conservation projects in the surrounding area and related activities on company grounds make biodiversity visible and real for the public and employees.*

3. Responsible Parties in the Group

As previously mentioned in earlier progress reports, Werner & Mertz created the staff position Sustainability Management in 2007. The head of Sustainability Management regularly reports to top management at Werner & Mertz. Reinhard Schneider, CEO of the family-owned business, has great personal interest in sustainability activities. He was the catalyst behind the Frosch Initiative and the Recyclate Initiatives.



Reinhard Schneider, managing partner of the Werner & Mertz Group in Mainz, caused a stir at the G7 Summit Resource Efficiency in Berlin in October 2015 when he called for sweeping waste management legislation as a bold step toward greater sustainability. Schneider, the sole representative of German industry at the Resource Efficiency workshop, presented the Recyclate Initiative to an international audience at the invitation of the Federal Ministry for Economic Affairs and Energy. ‘Thermal recycling’ – such as a reduction in DSD fees for packaging that’s recyclable, and even more importantly, for packaging containing recyclates – could open the way for investment in processing technology that makes incineration of plastic unnecessary. For so-called , is unacceptable in the pursuit of sustainability,“ he said, making clear his opinion of conventional practices in waste management.

Furthermore, employee feedback and news of employee activities, such as the internal assessment system, are captured and later communicated by Sustainability Management and Corporate Communication.

Summary: *The conservation of biological diversity is a part of sustainability activities at Werner & Mertz and therefore an integral component in Sustainability Management.*



4. Measurable Objectives

In accordance with our sustainability orientation, we set concrete objectives for resource conservation in our Environmental Program:

4.1 Environmental Program for the Mainz site (excerpt)

Objective	Measures	Responsible	Status
Recycling of PET and HDPE waste collected from consumers by Yellow Bag system	Promote the use PET and HDPE recycles sorted by type from the Yellow Bag for the production of new PET and HDPE bottles. Frosch Recyclate Initiative	Erdal-Rex and Packaging Development	Successful market launch, more than 40 million bottles sold to date
Use of surfactants from European cultivation	Increase use of surfactants based on European plants in formulas for Frosch brand products	Product Development	Proportion of 11% to 100% European vegetable oil in total surfactant content in formulas for Frosch products
Use of native-grown straw	First-time use of native straw to yield sunliquid® cellulose alcohol, an organic ethanol	Product Development	For use in Frosch multi-surface cleaner
Eliminate distances traveled, emissions and travel time	New regulations for customer visits and route planning for tana field sales staff; no daily return trip for distances of more than 100 kilometers from home; overnight stay instead	Management at tana-Chemie	Rules in effect since Jan. 2015
Increase efficiency by doing without accompanying documents, shorten the distance covered and trip time; Avoidance of about 5 tons of CO ₂ emissions/year	Replacement of the semi-trailer used for transfers between LZ1 and LZ2 with an electro-tractor with trailer; shortened routes within the factory site and no longer over public roads	Plant management at Werner & Mertz Service & Logistik	In operation since April 2015
Promotion of biodiversity on company grounds	Measures to establish typical plants for the site and to create habitat for bees	Sustainability Management	Plant herb garden and wild plants, install three insect hotels
Continuous measurement of waste water pollution and potential for quick reaction when high levels are recorded; Reduce the number of test cuvettes containing quicksilver used to take COD measurements	Online measurement of TOC and COD levels in the feed of waste water tanks from waste water lift stations in production buildings	Engineering	Measuring device in use since May 2015

Excerpt from the current Environmental Program Mainz. The complete program for the Mainz and Hallein sites is in the Sustainability Report 2016/2017 at <http://werner-mertz.de/files/epaper/nhb-de>



4.2. Development goals for nature conservation projects

The highly varied conservation projects in which Werner & Mertz participates as a partner are aimed at individual conservation development goals. We do not exercise any influence, but rather rely on the know-how of our cooperation partner. Over the years this type of task distribution has proven effective and highly suitable for our activities in conserving biodiversity where we live and work (see page 18 ff).

Summary: *Sustainability in concrete terms! The individual objectives in the Environmental Program for the Mainz and Hallein sites define the relevant ecological optimization step, the responsible parties and timeframe for implementation.*

5. Publication in Sustainability Report



The results of the EMAS validation in the form of Environmental Statements make up the central component of our Sustainability Report, which we have published since 2008. The current report 2016/2017 contains the developments of individual parameters of EMAS key performance indicators from previous years and our in-house assessment system.

Our cooperative projects in environmental protection are covered in the reports as one aspect of the sustainability activities carried out by Werner & Mertz.

The current Sustainability Report 2016/2017 can be read on the Internet site at

<http://werner-mertz.de/files/epaper/nhb-de>

Summary: *The Werner & Mertz Sustainability Reports summarize the many different corporate activities and serve as status reports and proof of our company's integrally sustainable orientation.*



6. Supplier Involvement

Werner & Mertz has involved suppliers in its environmental goals for many years (see reports from previous years). It is one way we send a clear signal of our commitment to sustainability. We also conduct regular surveys of our suppliers or request information from them on their environmental and sustainability management, corporate social responsibility and their activities in the conservation of biodiversity.

We greatly relieved the stress on our environment in 1995 when we invited a business partner to set up his packaging manufacturing facilities close to the production line on Werner & Mertz premises. The move eliminated about 1,700 truck trips and prevented approximately 600 tons of CO₂ emissions annually. Based on our positive experience with the ÖKOPROFIT project run by the City of Mainz, we were able to persuade the same supplier to participate along with us.

Summary: Werner & Mertz keeps an eye on its suppliers where resource protection is concerned as it is an essential prerequisite for the conservation of biodiversity.

7. Cooperation

To encourage sustainability on many fronts, Werner & Mertz continues long-term cooperative efforts with many different organizations and associations. (See page 18 ff).



EMAS Club Europe

The EMAS Club Europe, made up of EMAS-certified companies and organizations, regularly meets in regional groups to share practical experience and ideas. In committees at country and EU levels, club members work to further develop EMAS into an important instrument in sustainable production and a sustainable economy. Werner & Mertz is therefore an active member of the EMAS Club Europe. (More about EMAS is in Section 1.)



ÖKOPROFIT Mainz

Since 2001 Werner & Mertz has participated in the ÖKOPROFIT project, which the City of Mainz initiated in cooperation with the Rhine-Hesse Chamber of Commerce & Industry, the Rhine-Hesse Chamber of Trades and others.



A.I.S.E.

Since 2005 Werner & Mertz has been involved in the A.I.S.E. Charter for Sustainable Cleaning, a voluntary initiative for the European soaps, detergents and maintenance products industry. Member firms commit to using sustainability procedures in resource procurement, manufacturing and product usage.



B.A.U.M. (German Environmental Management Association)

B.A.U.M. works at raising awareness of environmental protection and a sustainable economy among companies, institutions and political organizations. Werner & Mertz is particularly interested in widespread use of integrated systems in sustainable business management.



Ellen MacArthur-Stiftung

Founded in 2010, the British Ellen MacArthur Foundation works with companies, governments and academic institutions on a framework for a circular economy.

Werner & Mertz is involved with the foundation through its Recyclate Initiative, which serves as an example of how a medium-sized enterprise develops and implements solutions to environmental problems.

See <https://newplasticseconomy.org/>

Summary: *In partnerships and cooperative projects like the initiative Biodiversity in Good Company e.V., we stand together in support of environmental and sustainability management in companies and organizations.*





Projects

An additional, welcome effect of our many sustainability activities documented here is the protection, conservation and promotion of biodiversity. Werner & Mertz has long lent its active support to nature conservation projects through cooperative efforts and partnerships with NABU, WWF and others. We concentrate on projects to maintain or revitalize wetlands, rivers and riverscapes on the Rhine, in the March-Thaya wetlands in Austria and elsewhere.



Frosch protects frogs in Germany

The “Frosch protects frogs” project was initiated in 1998. In collaboration with NABU in Rhineland-Palatinate, Werner & Mertz works toward improving living conditions for the tree frog in the Rhine-Main metropolitan area. Many uses are concentrated in a small area in the Rhine wetlands. Here NABU develops concepts and projects to promote the peaceful co-existence of man and nature.

Recent nature conservation efforts have concentrated on practical care and development work in varied biotopes. Small bodies of water created as a habitat for frogs and other amphibians, for example, have to be released every now and then. Overly thick growth on the edge of the waters, sedimentation of the water surfaces and other changes run counter to the goal of providing a lasting home for frogs. Although the silted up areas are sometimes attractive, they are no longer suitable, sunny breeding grounds for amphibians. For this reason, conservation work sometimes involves the use of saws and mowers.





Excerpt from the annual NABU report on the Frosch protects frogs project



For more than 17 years the NABU conservation center Rheinauen has worked intensely to improve the Rhine wetlands between Mainz and Bingen as a habitat for the tree frog. As a result, NABU has been able to secure the future of the remaining specimens of this rare species of frog. Detailed inventories conducted in 2016 show just how important the Rhine wetlands are for the tree frog and other amphibians. The population is now considered stable, thanks to the extensive work done on improving the biotope.

A highlight from 2016 was the joint exhibition featuring frogs on the Rhine (Rh)eingetaucht – Frosch und Co. am großen Fluss put on by NABU and the Natural History Museum in Mainz.

(...)



Public Relations Work

Public relations work is an important part of the cooperation “Frosch protects frogs”. At the center of attention this year was the exhibition “(Rh)eingetaucht – Frosch und Co. am großen Fluss”

in the Natural History Museum Mainz. From 23 April to 31 October 2016 more than 17,000 visitors learned about the lives of frogs, toads and newts on the Rhine and about the project “Lebensader Oberrhein – Naturvielfalt von nass bis trocken”. Approximately 160 groups were introduced to the subject and given a guided tour. Mornings were generally busy with up to five groups of children from schools and day care centers in the museum. Many unannounced groups also showed up and joined arts & crafts sessions with Museum Scouts, volunteers NABU had schooled in amphibians. They told visitors about the amphibians’ way of life and the upcoming generation and helped children make croaking frogs (Quakfrösche). The Museums Scouts were an essential part of the exhibition, for without them, visitors could not have been so well informed or entertained.

(...)

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Lowland forest on the Harter Aue

Lowland forests in floodplains are among the most biologically diverse natural habitats in Germany. The flooding of bordering rivers ensures constantly altering conditions in habitat; temporal and spatial circumstances change frequently.

The Harter Aue is a peninsula in the nature reserve Fulder Aue-Ilmen Aue near Ingelheim am Rhein. For several decades the land was farmed, but now much of it lies fallow. Some parcels were purchased and woods typical of lowland forests were planted.

The rapidly growing trees serve as CO₂ sinks. Data on CO₂ depletion and a study by the Technical University Munich report that five tons of CO₂ are removed from the atmosphere and taken up by plants for every hectare reforested with English oak and Aue wild bushes.

That makes projects like the new lowland forest near Ingelheim so important for both biological diversity and climate protection – and good reason for Werner & Mertz support of this NABU project.



Development of nature discovery area “Im Briel”

In the past two years NABU Bingen und Umgebung acquired a field at the edge of the Rhine lowland forest near Bingen-Gaulsheim. The medium-term goal is to build a new NABU-Zentrum Rheinauen there. Most of the property, however, will be home to small biotopes where visitors can experience nature firsthand.

In coming years more biotopes will be developed to serve as exhibitions that promote biodiversity in home and garden.

Bog conservation at the Mürmes

Another NABU project (Moorrenaturierung am Mürmes) for the renaturation of bogs in the Mürmes nature reserve in the Eifel region contributes to species and climate protection. From 2010 to the end of 2015 Werner & Mertz provided financial support for this project as compensation for its own CO₂ emissions. The project ran so well that it was declared a success and closed. Our cooperation with NABU now focuses on an EU LIFE project in the Hunsrück-Hochwald National Park, which was created in 2015.



LIFE Project: Hunsrück-Hochwald National Park

The Hochwald National Park is a highly endangered area with the highest priority for nature conservationists. The park's large bogs make up the dominant ecological system. Road construction, draining and deforestation over the years caused significant changes and, in some cases, the loss of bog habitats. Where the moor is drained, the peat dries out, begins to mineralize and disintegrates. The process not only leads to the loss of a natural environment with unusual plants and animals, but also releases into the atmosphere the carbon dioxide which had been held in the intact bogs. Protection of the bogs, therefore, contributes to climate protection.

The EU LIFE project "Restoration and conservation of sloping and transition mires in low mountain range Hunsrück (area Hochwald)", which began in 2015, pursues the goal of reactivating the valuable wetlands so that flora and fauna typical of a bog can resettle here and halt the disintegration of the peat. LIFE is an EU funding program for nature conservation measures. The main objective is to conserve diversity in plant and animal species and to stop the loss of species through targeted conservation. Werner & Mertz works with NABU Rhineland-Palatinate on this project.



Frosch protects frogs in Austria

The Austrian subsidiary of Werner & Mertz cares about the March-Thaya wetlands. We are working with WWF to conserve this oasis of animal diversity. Located in border areas from Lower Austria to the Czech Republic and Slovakia that have been untouched for decades, the wetlands make up the most important riverscape in Austria. Some 500 endangered species find there hidden nesting areas and rich feeding grounds.

But only some parts of the 15,000-hectare wetlands are adequately protected. Industrial parks, housing developments and intensive farming are pushing out fascinating species such as the white-tailed eagle, black stork, beaver and otter and are threatening the green wetland wilderness. Moor frogs, fairy shrimp and magnificent dragonflies also need intact wetlands. A national park would be the best solution for the permanent protection of this diversity, but it may take some time for that to happen. Until then, it is all the more important to support concrete nature conservation activities in the March-Thaya wetlands, as the Werner & Mertz subsidiary in Austria has done since 2009.



Partnership for wetlands in France

In France our Rainett brand entered into a sponsorship in 2015 with the Fédération des Conservatoires d'Espaces Naturels for the protection of endangered wetlands. Two-thirds of the wetlands in France have disappeared since the beginning of the 20th century. According to estimates, the wetland area is still being reduced every year by about 10,000 hectares and thus the unusual habitats for endangered plants and animals are also lost. Werner & Mertz lends its support to these initiatives because we realize how important it is to protect and conserve existing natural habitats and to create new ones.

Biodiversity on our doorstep



Biodiversity was the central theme of joint projects conducted by Werner & Mertz and NABU. In one of those projects in 2015 we worked together to promote biological diversity on the doorstep of Werner & Mertz corporate headquarters in Mainz.

What we did:

- set up three wild bee hotels
- changed the frequency of mowing the grassy area near employee parking
- planted wild rose bushes
- obtained unusual species from the NABU propagation station for rare plants
- put up informative signs
- installed nesting blocks for wild bees

Now the grassy areas on the property are mown just once a year to allow them to develop into species-rich flower patches. The wild bees benefit most from the magnificent new blossoms.



These important pollinators have disappeared from many places due to the lack of flowering plants, the bees' source of food.

In May 2016 an area was set aside on the Hallein premises with the dual purpose of providing employees with a place to relax and space for biodiversity to thrive. Besides wild flowers, nectar-laden plants and insect hotels, an herb garden was also planted to provide fresh greens for lunch or dinner. Harvesting is encouraged!



The Hallein example shows, however, that approval is not forthcoming for all activities undertaken to promote biodiversity. To date, owners of properties abutting the factory grounds and other residents have shown little tolerance for the almost 1,000 square meters of natural meadow. Enriched with indigenous plants, the area appears quite different from the familiar, close-cropped lawn it replaced. We have installed information boards that tell visitors and abutters why the property looks more colorful and “wilder” and that valuable space has been set aside here to conserve biodiversity.



We obtained helpful recommendations for these activities right at our front door to the factory gates from the information module 2 (Enhancement to ecological value of company grounds) from the Biodiversity in Good Company Initiative. We pride ourselves on being an international company whose sustainability initiatives extend beyond our industry. And yet the information module opened our eyes to the good that we can do so close to home.



Werner & Mertz Gruppe



Violettflügelige
Holzbiene



Graue
Sandbiene



Gelbbändige Furchenbiene

Die Wildbiene

In Österreich gibt es über 650 Wildbienenarten, weltweit sind es sogar an die 30.000 Arten. Die kleinsten Wildbienen sind nur wenige Millimeter groß, während die größten heimischen Wildbienen bis zu 3 cm groß werden können. Anders als Honigbienen sind die meisten Wildbienen nicht staatenbildend, sondern leben einzeln. Wildbienenweibchen haben einen meist sehr kleinen Stachel und können auch stechen. Da sie keinen Honigvorrat verteidigen müssen, tun sie das allerdings nur in ärgster Bedrängnis.

Lebensraum und Nahrung für Wildbienen

4.000 Obst- und Gemüsesorten sind von der Bestäubung durch Bienen abhängig. Und da die Honigbiene sehr anfällig bei schlechter Witterung, Krankheiten oder Parasiten ist, sind die Wildbienen für die Bestäubungsarbeit vor allem vor und nach der Zeit der Honigbiene besonders wichtig. Eine Wildbiene besucht bis zu 500 Blüten pro Tag. Das Wildbienenweibchen legt während ihrer 4-6wöchigen Lebensdauer zwischen 10 und 30 Brutzellen an, aus welchen wiederum maximal 10 fortpflanzungsfähige Weibchen schlüpfen. Da viele Wildbienen nur kurze Strecken fliegen, müssen Unterkunft, Baumaterial und Nahrung eng beieinander liegen. Lebensraum und Winterquartier sind je nach Art versteckt unter Steinen, sandige Böden, in Trockensteinmauern, Steinhäufen oder hohlen Pflanzenstängeln.



Ackerhummel



Biologische Vielfalt



Noted briefly

Our promotion of biodiversity also leads to fringe benefits for the staff at Werner & Mertz.

Environmentally friendly tours on two-wheelers



It's so practical to have a bicycle on hand if only for just a half hour. The bike offering from the Mainz public transport system MVG is especially appealing to our employees who commute by public transportation. Anyone who holds an MVG JobTicket or FirmenCard can rent a bicycle at favorable rates. One of the many stations spread throughout the city is located right outside the gates of Werner & Mertz at Kaiserbrücke.

Employees who prefer cycling everywhere can now lease a company bike (including Pedelecs and e-bikes). With a monthly subsidy and free recharging for e-bikes on factory premises, the company promotes the fun of two-wheeled travel. Starting in 2017, employees also have the option of leasing E-Smart cars at corporate conditions, complete with free recharging on factory premises.

Healthful and regional

Baskets of organically grown, vitamin-packed apples are there for the taking at the reception desk in the administration building in Mainz and in the Production department. The employee restaurant in Mainz offers menus certified by the Deutsche Gesellschaft für Ernährung (German society for nutrition) and labeled "Job & Fit – With Gustatory Pleasure to Success".

A lavish salad bar, fresh fruit salads and a different vegetarian dish every day provide delicious, balanced meals. Because many ingredients come from local sources, they are always fresh and their transport routes are short. That too is a small contribution to the conservation of biological diversity made via resource and climate protection.

Summary: *Werner & Mertz works for the protection, conservation and promotion of biological diversity at several different levels – in general through its resource and climate protection activities and specifically through local cooperation with environmental organizations on species and biotope protection.*



Outlook

Frosch Recyclate Initiative pursues new goals

After successful large-scale tests, we put several million PET bottles made of 100 percent recyclates into the retail market. With this achievement, the Recyclate Initiative sets a standard for material recycling of plastic waste from the Yellow Bag collection system.

PET was just the beginning; in the meantime the Initiative has managed to extract yet another material, HDPE (High Density Polyethylene), from the waste mixture. The next step calls for the recovery of Polypropylene (PP) for the green caps on our product bottles. With this optimization, we will increase the recyclability of our product containers, refrain from using controversial substances in packaging and relieve the strain on the environment.

We for Recyclates

RECYCLATE-INITIATIVE



More plastic than fish in the ocean? According to a current study by the Ellen MacArthur Foundation, this unsettling scenario could become reality in about 35 years. That is, if nothing is done to stop the incredible flood of plastic waste that is polluting the world's oceans. It is not only the gigantic gyres of marine litter which are an immediate danger to sea animals and birds, but also the nearly invisible microplastic that can make its way up the food chain to our dinner plates. The plastic trash floating in the oceans is made brittle by ultraviolet light and crushed by breaking waves into tiny pieces called "microplastic". In addition to such secondary microplastic, which is a product of degrading, primary microplastic pollutes the

oceans, coastlines and beaches. Primary microplastic is the very small particles and fibers produced for different application areas such as cosmetics, cleaning and care products. Formulas without microplastic work too, as proven by our Frosch brand cleaning and care products, all of which are completely free of microplastic!



Sea creatures often mistake macro and microplastic for food. Thousands of animals are strangled by fishing nets, packaging materials and other marine litter. The situation is alarming. But there are ways to prevent marine litter up front through effective recycling and an environmentally friendly circular economy! The Recyclate Initiative and the related corporate partnership “We for Recyclates” are pursuing that goal.

Marine litter did not come to our attention first with the Ellen MacArthur Foundation study, but since then we have dedicated ourselves to finding a solution because it is so important for the protection of biodiversity in the marine eco-system.

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