



Environmental declaration

Sustainability report 2014



AURO



Passion for natural paints

Content

History of the company in the course of time

History of the commercial property	5
History of the company location	5

Company structure

Occupational safety panel and works council	7
Laboratory and production	7
Sales and shipping	7

On-site activities

Raw materials	8
Production	9
Finished products	11
Services	11
Communication	12

Environmental aspects

Man	13
Water	13
Soil	15
Air	15

Environmental policy and guidelines

Declaration of Executive Board and Supervisory Board	16
Environmental policy	16
Environmental guidelines of the company	17

Environmental management

Environmental management	18
Task and incorporation	18
Structure and responsibilities	19
Monitoring of procedures	19
Trainings	19

Production site - key figures

Soil; machinery	20
Office machines; office furniture	21
Car pool and logistics; EDP equipment	22

Energy and raw material – key figures

Revolving goods and raw materials; product packaging	24
Operating supplies; water	25
Energy	26
Input - Output	28
Waste and other output	29
Proofs and certificates	30

Final consideration

Prospects	31
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Introduction

On nature's trail

AURO ranks with the recognised pioneering enterprises in the field of ecologically oriented production. The impulses that led to its formation date back to the early seventies of the 20th century, to a time when the idea of a sustainably ecological chemistry still was a world away from its present-day social acceptance.



Four decades ago, the concept of chemical-technical everyday products principally made from organic and therefore renewable raw materials was far ahead of the times.

The general direction of the chemical industry still was based, in a virtually unrestricted way, on fossil raw materials like crude oil or gas which caused heavy environmental problems and led to products that were harmful to people's health.

Therefore, it is understandable that, at the beginning, the idea of a new kind of everyday chemistry that relinquishes petrochemical raw materials was ridiculed and strived against by representatives of the conventional chemical industry. As the founder of AURO Pflanzenchemie AG, I experienced, endured and finally overcame all phases of this early resistance at first hand.

However, little by little the circle of supporters of this idea grew. A main group consisted of consumers that were aroused or even themselves affected by the chemical scandals of the 1970's and 1980's. Thus the idea of a sustainable chemistry that AURO implemented insistently and tirelessly from the beginning moved towards the middle of society and soon found imitators.

Just like the idea of sustainability can matter-of-factly be derived from scientific principles and ideas, AURO's concepts are developed following strict scientific criteria. This scientific approach is the inherent basis of the company.

As a qualified and graduated chemist and founder of the company, this basis allowed me to constantly withstand ideological or political usurpation.

The technical-chemical quality of the products, documented by the enormous consumer acceptance as well as numerous prizes and awards, is only one of AURO's key success factors. Many of the ecological pioneering enterprises did not survive the initial phase. AURO escaped this fate by adding economic solidity to the scientific integrity from the beginning. Today AURO is the undisputed market leader for natural paints. The sustainability of our actions is also mirrored in the company's economical and organisational structure and in the very low staff turnover.

In the end, even technical quality and economic strength cannot sufficiently explain AURO's sustained success. Both only constitute necessary qualifications for the success on the market. A strong marketing team under the guidance of AURO's CEO has laid the groundwork for this. The essential foundation of this marketing strategy and AURO's sustained success are the worldwide brand awareness and the excellent reputation of the brand AURO.

We look upon achieved successes only as waypoints. Our view is constantly directed towards the future because, strictly speaking, sustainability is not a status quo but can only prove itself in times to come. The sustainability of the inspiring organisational and procedural example, the living bio-sphere, has always been a result of its flexible reaction to new challenges. Looked upon from a longer distance of time, we call this: evolution. AURO feels obliged to this thought. The future success of the enterprise as a living organism will therefore always depend on how innovative we will continue to be in the years to come.

A handwritten signature in black ink that reads "Fischer". The signature is written in a cursive, flowing style.

Dr. Hermann Fischer, company founder

AURO Pflanzenchemie AG

The company head office is located in southwest Braunschweig, directly at the urban motorway A39. To the east, the area borders on an expert office, a car dealer is to the south of AURO, an allotment-garden area to the west, and our northern neighbour is a rubber processing company.



History of the company in the course of time

History of the commercial property

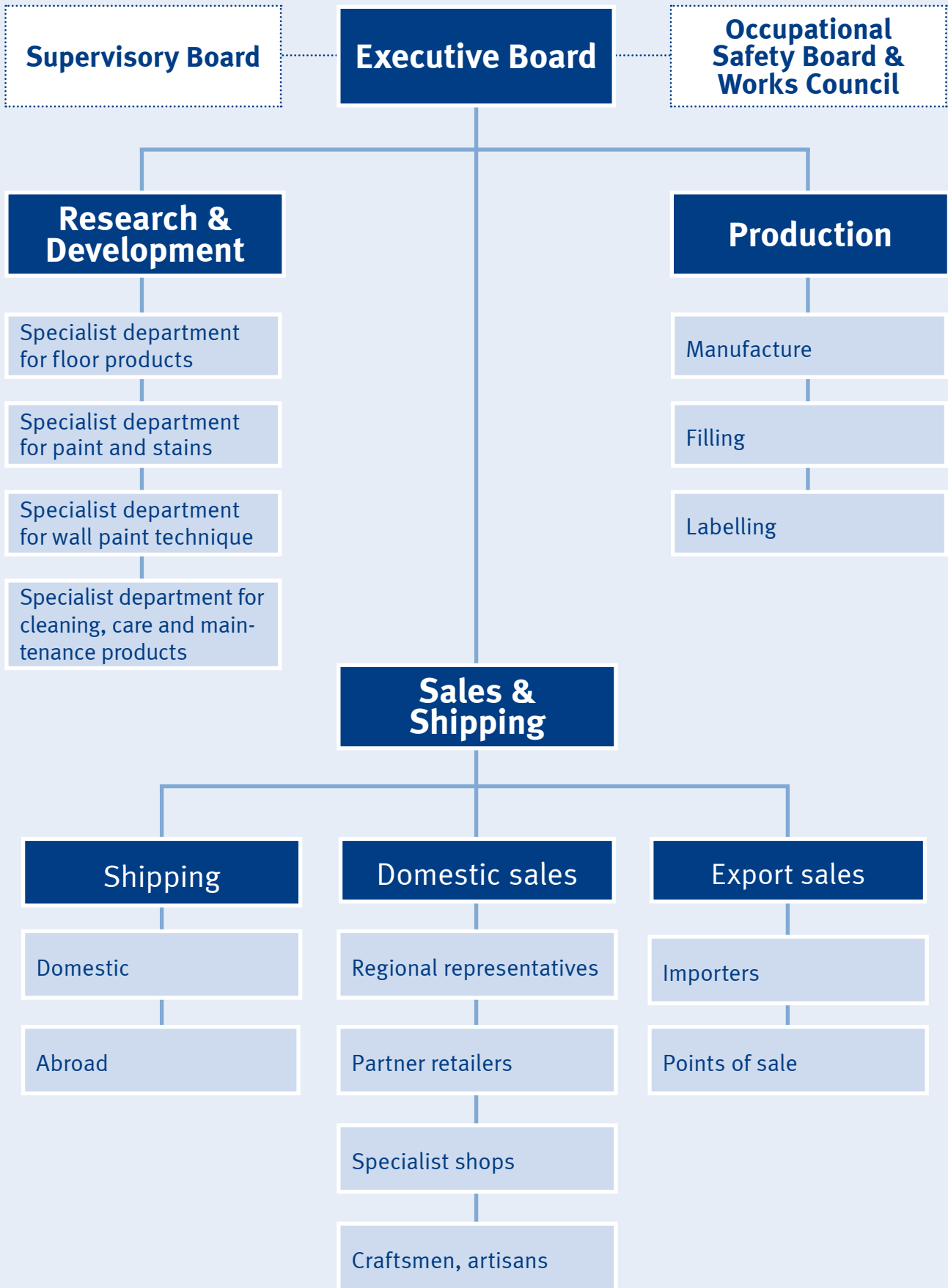
End of 19 th cent.	Candle manufacturer „Chemische Fabrik Eisenbüttel“, as from 1925 Canning factory „Reichelt & Heinemeier“.
1957	Extensive reconstruction work by „Reichelt & Heinemeier“.
1971	Acquisition of the area by the beverages company „Wolters Getränke-GmbH“.

History of the company location

End of 1983	AURO leases the area:	2006	Aqua Woodstain no. 160 is nominated “test winner” in Germany’s best known consumer magazine “test” (issued by the Warentest Foundation; no. 5/2006). Tested were 22 Woodstains for exterior use.
1984	After extensive reconstruction and renovation work, the manufacture of the complete assortment starts.		
1985	AURO acquires the area and the buildings		
1992	A new warehouse, bordering on the area, is entered into service.	2007	Installation of a new caloric value steam generator.
1994	AURO is the first natural paint producer to publish an environmental report following the EU norm.	2007 – to date	Annual certification of CO ₂ neutrality.
1996	Acquisition of another area and warehouse on a neighbouring property.	2008	Market launch of the new high-grade lime product range.
1996	Initial startup of a facility for the use of rainwater as process and cooling water.	2009	A new office building is built and integrated into the existing structure.
1996	Neutral ranking lists AURO as no. 1 in the industry for the best environmental report.	2009	Full thermal insulation for the old office building.
		2010	Insulation glazing for the staffroom (winter garden).
1997 – 2001	Research project „Consistently natural paints without solvents“.	2011	Market launch of the Sol range of emission-free wall paints and plasters.
1999	Environmental award of the international environmental foundation „Friends of the Earth“.	2012	Oils and fats from controlled biological cultivation (kbA) are used in various AURO products, certified by ECOCERT and approved by organisations like IMO or Grünstempel (Green Stamp).
2000	Market launch of the solvent-free product range „lacquers and stains“.	2012	A variety of AURO cleaning and care products get certified by ECOCERT.
2002	AURO presentation at the „Day of the Environment” at Bellevue Castle, at the invitation of the Federal President of Germany.	2013	AURO is the first paint manufacturer to offer future-oriented products from each field of application that match the strict criteria of the AgBB evaluation scheme and are certified by the DIBt.
2005	First operation of a 30 m ² photovoltaic system for electricity generation.		
2005	First operation of a new condensing boiler		
2005	First operation of a 21 m ² solar thermal plant for heat production.		

„One should not want to foresee the future but make it possible.“

Antoine de Saint-Exupéry



Company structure



Examination of a paint batch



Shipping and logistics dept.



Practical test of new products

Occupational safety panel and works council

A lean company structure gives the company more flexibility in all matters and allows for a fast implementation of decisions. Therefore it is guaranteed that the essential basic concept of a gentle chemistry, which led to the founding of the company, is continually refined in terms of sustainable use of the (raw) materials.

Safety matters in the workplace are always affiliated with environment protection and are therefore being discussed in the Committee for occupational safety (ASA) where solutions are easily found. This group consists of the safety inspector, an external qualified safety person, a member of the work council and a member of the management board.

In addition to that, the work council guarantees that the interests of the employees are being considered and put into practice. Along with important social and labour law related questions as well as workplace design, the work council deals with matters of environment protection in the workplace.

Laboratory and production

The research and development department consists of highly qualified specialists with longtime experience in handling natural materials. New production processes are permanently checked for their environmental and technical capabilities by the respective specialised departments.

The raw materials we use and the resulting products are subject to a rigorous quality check in order to guarantee consistent product standards.

Almost all our products are produced in our German and Austrian factories. The optimal use of the material and short production ways allow a lean and sustainable production. Moreover, the use of rain water, as well as our own solar collector, helps to minimise the use of energy and resources.

Sales and shipping

Committed employees with substantial ecological and economical knowledge assist our specialised dealers and importers on domestic and foreign markets, from Europe to Asia.

In order to guarantee a secure and environmentally friendly transport of all orders, we pay attention to solid and sustainable transport packaging and the compliance with the instructions for dangerous goods. The selection of highly productive transport partners as well as the transparent and fair terms and conditions of delivery and payment make us reliable partners for customers and distributors.

On-site activities



Traditional extraction of gum elastic



Madder roots for colour wash plant glazes



Beeswax for products containing wax

Raw materials

Throughout the complete assortment, we preferably use raw materials originating from plants and minerals that are extracted and processed as gentle as possible. Wherever it is economically and practically viable, the company exercises influence over the concrete social and ecological framework conditions.

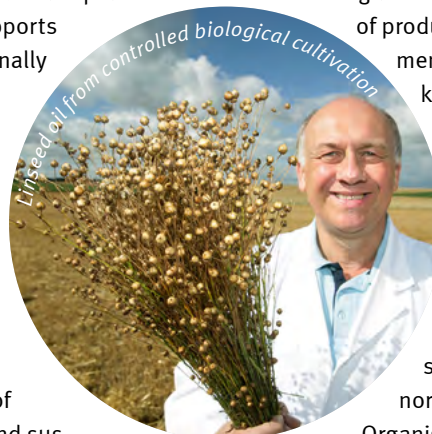
By way of example, the red colourant Achiote (Ipiak) found its way into AURO's range of raw materials and is now used to complete the colour palette of the Colour wash plant glazes. By using this colourant, AURO supports the Shuar Indians in Ecuador who traditionally produce and use it and also helps the organisation „education biotropical“ to achieve their goal to recultivate a destroyed rain forest area west of the Andes Mountains.

These biogenic and mineral raw materials are systematically scrutinised and, given their ecological and chemical-technical suitability, used for the production of high-quality natural paints. Their origin and sustainability is taken into account, every single batch is tested and archived by our laboratory workers before it is cleared for use in our products. The consistent colour quality and product stability are under permanent review.

All raw materials that are used are declared on the product labels and on AURO's website. This makes it easy for consumers to understand which materials are used in AURO products. Moreover, we inform about essential characteristics of the raw materials, e.g. if they are of organic (i.e. sustainable) or mineral origin.

With the current use of oils from controlled biological cultivation (kbA), we continue our way to use more and more certified organic raw materials. The oils are used in a variety of products so that a large portion of our assortment profits from these materials. Well-known organisations like ECOCERT or IMO control the oils and guarantee the superior quality required for our high production standards.

For AURO raw materials coming from exotic areas of cultivation, we ask our suppliers to sign declarations on social standards that are based on the core norms of the ILO (International Labour Organisation). These norms include the abandonment of child labour, wages that secure a livelihood, decent working conditions, as well as the freedom of association and free negotiations on pay.

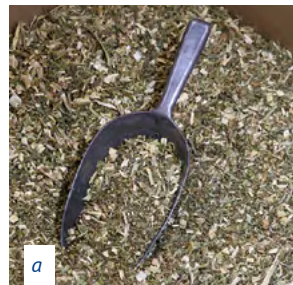


On-site activities

Production

The most frequent and most important operations in the mechanical process engineering of our production programme are volumetric dosing, mixing and filling. Nearly all primary products are manufactured on-site, the production intensity therefore is high and the value chain stays intact as far as possible. Steam-heated melters ensure that natural waxes are gently worked into resins and oils at a maximum temperature of 80 °C. Pending commissioning and delivery, the finished products are stored, in keeping with legal provisions, in our warehouse that was built in 1992.

Raw materials for the production process partly have to be transported with low-floor vehicles over longer distances from the storage area to the production area. The resulting dangers of this in-house traffic were reduced to an absolute minimum.



Wall paint production



Labelling

Due to the potential danger of flammable substances like essential oils, safety-related requirements have to be accounted for. Examples are explosion prevention measures, a fire detection system with a direct through-connection to the fire service that was technically updated in 2010, as well as other measures in the production area.

It is the stated aim of the company to further reduce the danger of fire. The storage containers for flammable liquids with a capacity of 850 l each have been equipped with flame filters that can prevent the flames from spreading to the contents in the event of fire and thus prevent their ignition. The parts of the building are divided into fire sections in order to avoid a potential fire from spreading. All employees are trained in the practical handling of the stationary fire extinguishers in order to already stop a fire in its early stage. The annual training of the employees sharpens the awareness of the fire problem.

- a) Reseda for plant paints b) Linseed oil for better product elasticity
c) Dammar as binding agent d) Chlorophyll pigment for green shades*



Shop & Showroom

As from 2009, consumers can also buy AURO products directly on the company site. In our shop and showroom, the customer can choose from the complete product range and gets competent advice on all aspects of ecologically aware building and renovation. Various appealing samples and the handy tips from our experts make a visit to our shop and showroom worthwhile.

On-site activities



Wall paints and painting tools



Product diversity at a glance



AURO concrete look – trendy and creative

Finished products

AURO is the pioneering enterprise in the field of ecological paints that are technologically advanced and sustainable at the same time. The AURO product range comprises coating materials, cleaning, care and maintenance products for nearly every area of application: construction, renovation, household, hobby, or garden. All products are manufactured using predominantly biogenic and mineral raw materials.

Under the brand name AWALAN, we also produce and distribute a complete assortment of washing and cleaning products following the same strictly ecological criteria.

AURO offers the biggest assortment of coatings for all ranges of application, free from solvents and plastics, that is to be found on the market. The current and future research and development work will concentrate on the reduction of emissions and indoor air improvement. AURO is the first paint manufacturer to offer future-oriented products from each field of application that match the strict criteria of the AgBB evaluation scheme. The positive AgBB evaluation is the precondition for the certification of building products by the DIBt (German Institute for Building Technology). More information on the DIBt standards on www.auro.com.



Services

The technical advice service is a fundamental part of AURO's company philosophy in order to support the customer applying the products in an optimal, resource-efficient and technically adequate way. In our on-site shop and showroom, we offer customers competent personal advice and additional service.

Comprehensive advice on the application of AURO products can be obtained at various levels. Labels, data sheets, brochures and the website www.auro.com provide extensive product documentation. If more information is needed, specialised retailers on the domestic market or abroad, as well as AURO representatives, importers and distributors can give advice. The service hotline or other AURO employees are also at the customers' service to help via E-Mail or telephone. Highly specialised experts with long-term experience permanently supervise and optimise their particular product groups. AURO colour tone specialists mix colour tones that are requested by customers, of course following our raw material philosophy. With their own formulation and label, these special colour tones are highly individualised products.

At regular intervals, trainings and seminars take place in order to convey AURO basic knowledge and new information to retailers as well as private or commercial users.

On-site activities

Communication

The consumer gets comprehensive and complete information on the basic ideas, the contents (full declaration) and of course the technical characteristics and potential dangers that can be associated with paint products, e.g. fire hazard, self-ignition of oil-drenched cloths, allergies on natural materials, general safety advice. The products are accompanied by technical data sheets and safety data sheets that hold comprehensive information on product applications and safety advice.

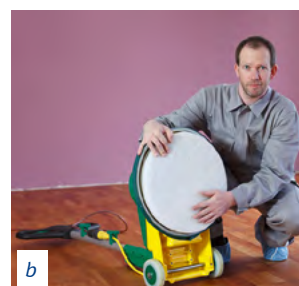
On our website, www.auro.com, consumers and users find numerous information brochures, our comprehensive product catalogue, references and a product database with up-to-date relevant information. The AURO philosophy and the idea of a gentle chemistry are explained in detail in various special essays and lectures on subjects like building biology, sustainable economics and ecology.

In addition to that, the idea of an ecological building that creates a healthy living environment is conveyed to users and consumers in numerous seminars and trainings held by AURO retailers and distributors, often supported by AURO representatives or importers.

A successful communication strategy involves the regular presence on trade fairs and continuous public relations activities. This way, the public recognition of the brand can be guaranteed and new partners and customers be acquired.



a



b



c



d



International AURO fair stand

Consumers on the domestic market can subscribe to the AURO Newsletter to be regularly informed about new products, application tips and tricks, creative techniques and a lot more first-hand knowledge. Videos on current topics are published (in German and English) on the YouTube channel „AUROtv“ in order to show the interested public how easy it is to apply AURO products.

Last but not least, our field service, as well as numerous reference objects of satisfied customers, contribute to the establishment of AURO as a competent and sustainable brand in the public perception.

a) Product training

b) Workshop floor treatment

c) Demonstration „concrete look“

d) AURO movie on www.youtube.de

Environmental aspects

Man

Locatable on-site dangers to the environment can also constitute dangers to the employees at their respective workplaces. Particularly noteworthy are fire hazards, allergies against natural materials and dangers inherent in the raw materials, e.g. irritation, cauterisation, or the danger of scalding one's skin while melting wax or boiling plant colour pigments.



Boiling of plant pigments

It is part of AURO's management by motivation that every single employee has a substantial influence on the configuration of his or her workplace. At the same

time, the workplace design conforms to occupational medicine and safety specifications. In the laboratory and office areas, aspects of building biology are taken into account, e.g. by equipment with solid wood furniture.

The workplace layout in the production and warehouse areas has to observe additional factors regarding safety regulations and measures that avoid working processes with a permanently uneven load that can cause or further diseases. A system of flexible working hours provides a balance between the personal wish for individual organisation of the employees' leisure time and the company's need to plan working times in an optimal way.



Commissioning hall

The responsibility for an efficient and humane workplace layout is carried concertedly by the work council, the committee for occupational safety, the safety inspector, and the executive board.

Water

Anytime soon, water will be the most precious substance for mankind. Therefore it is important to handle this raw material carefully and economical already today. For more information on AURO's water consumption, see chapter „Energy and raw material – key figures“ (p. 25). Here, it must be referred to the operation of our rainwater harvesting installation that has helped to replace a considerable amount of municipal water in recent years. After preparatory treatment in a special installation, the wastewater accruing in the production processes is fed into the local clarification system. Retention ponds and collecting points are part of a system that prevents raw materials or finished products from entering the groundwater or the clarification system.

The sealed parts of the company site serve as parking space or storage area for containers for waste or recyclable materials. These areas were sealed for constructional purposes and cannot be unsealed for economical reasons (high cost of renaturation). The green areas are cultivated according to ecological guidelines. The plants are watered with water from our rainwater harvesting installation.



Wall paint filling



Climate neutral shipping

Every day, we ship many parcels with paint to our retailers and craftsmen. The logistics branch contributes considerably to the CO₂ emissions. Therefore we are glad to work with a logistics partner who takes responsibility and delivers all parcels in a climate neutral way, i.e. transparent reduction and compensatory measures are taken.

Environmental aspects



Intact soil...



...and clean air...



...for future generations.

Soil

Catch pans within the production and storage areas prevent escape of liquid raw materials out of the buildings and into the soil in the case of leakage of the storage containers. The storage hall 7, erected in 1992 and provided with a transfer location equipped specially according to the WHG (water resources legislation), ensures that there is no danger to the soil or water resources when transferring raw materials and products. All drains in the production and storage areas are sealed, so that on these routes too it is impossible for raw materials and products to escape into the canalisation. Further facts on the subject of the soil are considered under "Production site - key figures".

Air

Hydrocarbons of vegetable-origin are released directly into the environment when processing essential oils in large quantities. Measurements made in the seven exhaust air shafts have shown that about 1400 kg total hydrocarbons are emitted annually. This means that the emission lies considerably below the maximum mass current of 3 kg/h (measurement obligatory) permitted according to the legislation TA Luft 86.

The seven exhaust air shafts discharge annually a total quantity of 21 million m³ room air. The odour substance concentration fluctuates between 0 and 1820 GE/m³ (GE = odour units) of exhaust air. It is not possible to deter-

mine the total annual emission of odorous materials. On a long-term basis, the odour emissions can be reduced by optimising formulations and improving the process technology (closed systems).

Further aspects to be considered are energy emissions in the form of discharged heat and acoustic noise. Except for those originating from the heating plant, they cannot be quantified. However, the levels are very low, so no measurements have been made and none will be made. Noise is produced at the seven exhaust air shafts because the fan motors are on the outside. However, the noise which they produce is perceptible only on windless days. The noise origination from the urban motorway close to the site is much greater.

Thermal discharge is produced by the gas-powered 250 kW condensing gas boiler (exhaust gas temperature: 53 °C) of the heating plant, by the steam generator (exhaust gas temperature: 143 °C) and by the boiler used for the production of plant paint pigments. Moreover, heat is discharged with the room air through the exhaust air shafts.

As from the year 2007, AURO is annually certified as CO₂-free company by the Climate Neutral Group.



Environmental policy and guidelines



An ongoing environmental awareness...



...has to become the fundamental attitude...



...to support future generations.

Declaration of Executive Board and Supervisory Board

The management and board of directors of AURO Pflanzchemie AG pledges full compliance with and implementation of all statutory requirements and regulations and the environmental policy and environmental protection principles as set forth in this chapter. The management system described in the chapter “Environmental Management” ensures that all employees too are obliged to observe these principles and monitors their behaviour accordingly. We fulfil the call for best available technology by letting the synthesis of our raw materials take place in the botanical plants and ensuring that the subsequent technical processes are carried out with modern well-planned process engineering plants.

Environmental policy

Our company attaches great importance to ongoing dialogue with consumers, the wholesale and retail trade as well as suppliers concerning environmental protection projects and their implementation. The goals we pursue for continual improvement of environmental protection extend beyond the time when products leave our factory premises. Implementation of environmental protection principles must be observed not only in the factory, but also wherever our products are distributed and used. For this purpose, we annually hold six to eight one day seminars and training courses in our factory with the purpose of making our company philosophy available to a wider public.

The company policy also includes active cooperation with government authorities, environmental protection groups like the NABU (Naturschutzbund Deutschland / German

nature protection group). Our cooperation with government authorities extends far beyond the statutory requirements (approvals, reports by responsible persons, notification of incidents, etc.). For example, we have included the competent factory inspectorate for our site in the initial and subsequent validations within the scope of ecological audits. Since 2007, AURO is member in an enterprise initiative that supports the work of the NABU with regular sponsoring campaigns.

AURO natural paints have rendered successful service for more than thirty years in the sense of actively dedicated and specific environmental protection. The high ranking of our company as ecological pioneer has been recognised during this period in terms of many awards of renowned environmental prizes. Five environmentally relevant factors give the company concept of AURO natural paints its special significance and importance:

- Ecological aspects played an important role already at foundation time.
- Analysis and optimisation of the entire product line „from A to Z“ is the basis of all developments.
- Paints and other substances for treating material surfaces are particularly sensitive product sectors with regard to ecological implications.
- Natural, preferentially vegetable-origin, raw materials together with gentle production processes as guiding principles, are in keeping with modern concepts of sustainable utilisation of the materials.
- Extensive company information is published which would classically have been treated as confidential secrets.

Environmental policy and guidelines

Environmental guidelines of the company

Continued production of technical chemical consumer products on the basis of petrochemistry is already in the generation of our children threatening to trap humanity on a dead-end route from which there is no escape after a certain point of no return has been reached. Therefore modern industrial policy can no longer be based only on short-term preservation of its own production prerequisites. Instead, it must now pay serious attention to long-term feasibility and reasonableness of its methods for which it must take full responsibility. Here lies the first principal motivation for the choice of raw materials for AURO products which lie close to nature and are preferably renewable.

The second principal motivation was and still is to be seen in examining the toxicological, physiological and psychological

situation which has arisen through the application of modern synthetic paint materials.

The third principal motivation is the satisfaction to be gained by demonstrating on one of the core sectors of the chemical industry that alternatives exist which are feasible and practicable.

The fourth principal motivation is to prove that uncompromising ecology is possible today in a modern industrial undertaking not only as a theoretical concept or in practice subsidised from other sources, but that it can be successfully practised in fully self-sufficient independence.

Criteria for the realisation of product ideas

- Regionalisation
- Reduced consumption / increase of yield
- Conversion to ecologically optimised raw materials
- Improved keeping qualities and repair friendliness
- Improvement of domestic biological factors
- Improvement of human biological compatibility
- Perceptory hygienic advantages
- Avoidance of obnoxious materials in the case of fire
- Improvement of the compostability of product residues

Exclusion criteria for product ideas

- High consumption of energy in the production process
- Toxic precursor products and ingredients
- Physiologically abnormal effect on the senses (screaming colours, artificial odours, extremely smooth, non-breathing surfaces)
- Non-degradable (persistent) ingredients
- Genetically modified raw materials



Natural wood oils for highest standards



Lime paints create an optimal indoor climate



Solvent-free, water-thinnable woodstains

Environmental management



Enjoy nature with all senses



Photo-voltaic and solar heat installations



Climate certificate of the „Dual System“ (waste recycling system)



Green electricity certificate

Environmental management

Environmental management commences at AURO long before the actual manufacture of a product. Basic ecological questions are taken into consideration already at the time of initial provisional suggestions and ideas for a new product arising through a market need or in our own company. The social and individual sense and purpose of a product, as well as its short-, medium- and long-term effects on users, society, the world at large and the environment, are considerations which rank at the top of the list.

An important prerequisite condition for introducing the environmental management system is its acceptance among our employees. In the organisational structure, the responsibilities, competencies and authorisation of the employees for operational environmental protection have been defined at all hierarchic levels.

Task and incorporation

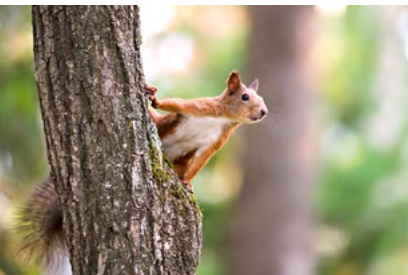
The environmental protection organisation of AURO Pflanzenchemie AG is characterised by a very short hierarchic route - from the management via the department leaders directly to the employees, and conversely. This makes possible quick and effective implementation of all decisions involving ecological and economic aspects of operational procedure. Furthermore, the operational organisation ensures that the factory processes are transparent with regard to ecological aspects and that regulations can be checked and corrective measures can be taken if the regulations are violated.

The lean management structure of the company has proved its viability in past years, thus it was possible to extend the practised outward transparency to internal operation too. One of the chief principles of the company policy is to ensure that our employees participate significantly in environmental protection efforts. An integrated company structure requires not only purely theoretical approaches and guidelines. Local practical implementation is the essential aspect ensuring agreement between intention and reality. AURO's corporate culture is based in the main on four core areas: ecology, sustainability, innovation and transparency.

INTEGRATED CORPORATE CULTURE



Environmental management



Preserving habitats...



...and the diversity of species...



...with active environmental commitment.

Structure and responsibilities

Extensive and detailed alarm and contingency plans with corresponding definition of competencies exist for the factory. These plans are revised regularly, recorded in the environmental protection manual and they are internally accessible. They define the measures to be taken in the case of major and minor factory accidents, breakdowns, fire, entry of unauthorised persons, notification of government authorities, etc. The alarm and emergency plans are intended to prevent further damage in the case of a contingency, to protect persons and the environment and to restore production and delivery capability as soon as possible.

Monitoring of procedures

A functioning management system requires continual supervision and checking. The department managers together with the company management constitute the top level supervisory authority with authorisation for issuing instructions and making checks. Regular meetings ensure that all operational processes and procedures are analysed and discrepancies are corrected.

Trainings

Specific external training of the department managers is an important measure for updating knowledge with regard to statutory requirements, regulations, engineering, etc. The inspector for safety precautions and hazardous goods regularly participates in continuation training courses and informs himself of the most recent statutory stipulations and regulations. Training and continuation training of employees is carried out internally and externally. Training measures comprise continuation training and safety instruction of all employees and conversations as and when required at the individual workplaces, as well as annually four to five obligatory training events for the entire personnel on all company-relevant subjects.

AURO EXECUTIVE BOARD AND DEPARTMENT MANAGERS



Edwin Hribek
CEO



Helmut Nieder
Production & Safety



Matthias Licht
Head of Laboratory



Dr. Markus Lettau
Research & Development

Production site - key figures

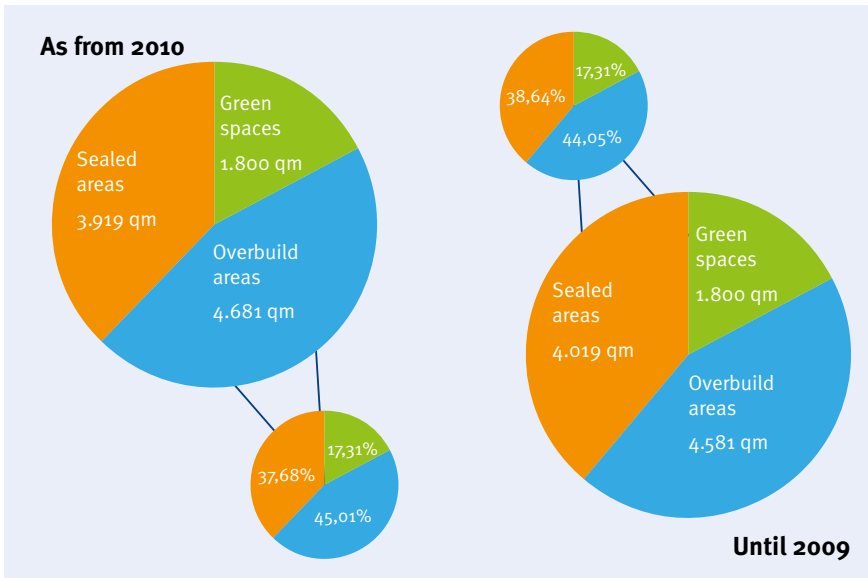
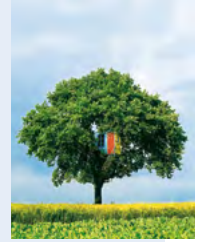


Chart Soil

Soil

The sealed surface area is used for vehicle traffic on the factory premises, as parking space and for placement of waste material collection containers. Considerable efforts have been made in recent years to remove the asphalt surfaces and replace them with visually pleasant islands of planting and wet biotopes. The percentage of surface-sealed areas increased in 1996 through purchase of a further storage hall on the adjacent land plot, and has remained constant since. A sharply higher percentage of green area could not yet be implemented for economic reasons on account of the high reconversion costs.

A large number of parking places is required for employees and visitors to our seminars or the shop and showroom because linkage to the public transport network is not optimum and many employees come from a considerable distance. A traffic analysis including the employees showed that the required area cannot be reduced. In the year 2010, the share of overbuilt area rose by 100 m² because of the extension building to the old office building that now includes the shop and showroom. The share of sealed areas declined accordingly. The sum remained at 10.400 m².



Islands of green spaces are typical for the company site



Nature reclaims its habitats

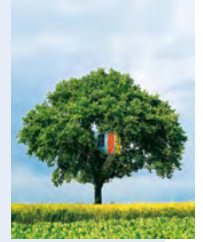
Machinery

On the one hand, the machines are optimised for minimal consumption of resources on the input side and minimal emissions on the output side. On the other hand, the energy and material balance as well as disposal at the end of the service life pose ecological problems. So far energy consumption and product output were the decisive criteria for production machine purchasing decisions. Regular internal and external maintenance overhauls preserve full functionality and therewith ecological efficiency too.

Machines pc.	2009	2010	2011	2012	2013
Dissolvers	14	15	15	15	15
Pearl mills	2	2	2	2	2
Lifting carts, forklifts	33	34	34	35	36
Labelling machines	5	4	4	4	5
Other machinery	10	11	11	11	11
Total	64	66	66	67	69

Table Machinery

Production site - key figures



Modern office design with natural materials

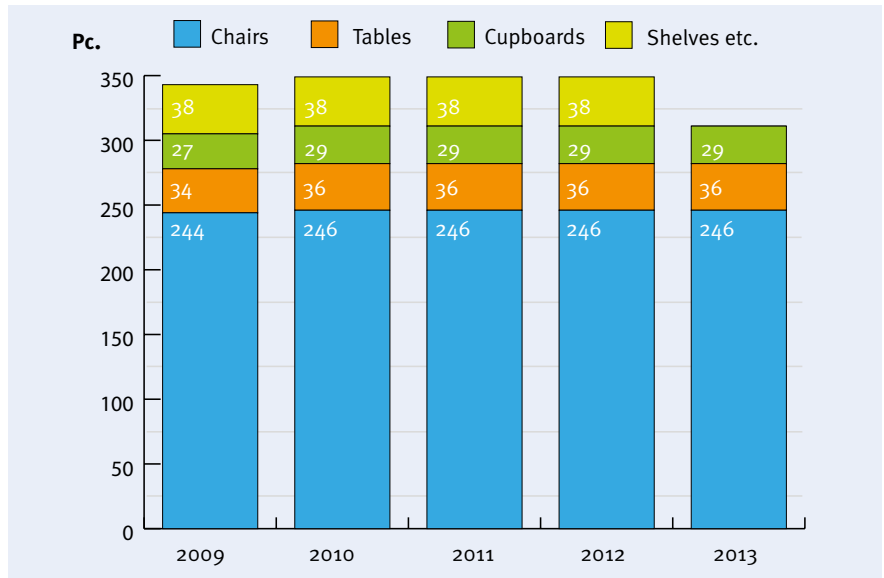


Chart Office furniture

Office furniture

A detailed listing of this kind was first made in 1994. The office furniture consists of all-timber units produced from home-grown timber types and has been subjected to our own open-pore surface treatment.

The bigger part of the chairs used chiefly in the conference and social rooms were purchased from the company Wilkening and Hahne GmbH & Co in untreated state and were then, like all other items of furniture, impregnated and regularly treated with our own products. Some of the upholstery of the office chairs, which has been manufactured free from fluoro-chloro-hydrocarbons, can be taken off for washing. An office worker spends about 70 000 hours of his life at his workplace. Since many years, consumer articles for office use are purchased according to ecological criteria.

Office machines

When selecting copying machines, special attention is given to low ozone emission, power consumption and noise emission. Recycling capability and take-back by the supplier are criteria of equal importance for making purchase decisions. The constant number of fax machines shows that this technology is losing significance.

Office machines pc.	2009	2010	2011	2012	2013
Telephones	30	30	30	30	33
Copying machines	3	4	6	7	7
Fax machines	3	3	3	3	3
Desktop calculators	7	7	7	7	7
Mobile telephones	5	7	5	7	7
Total	48	51	51	54	57

Table Office machines

Production site - key figures

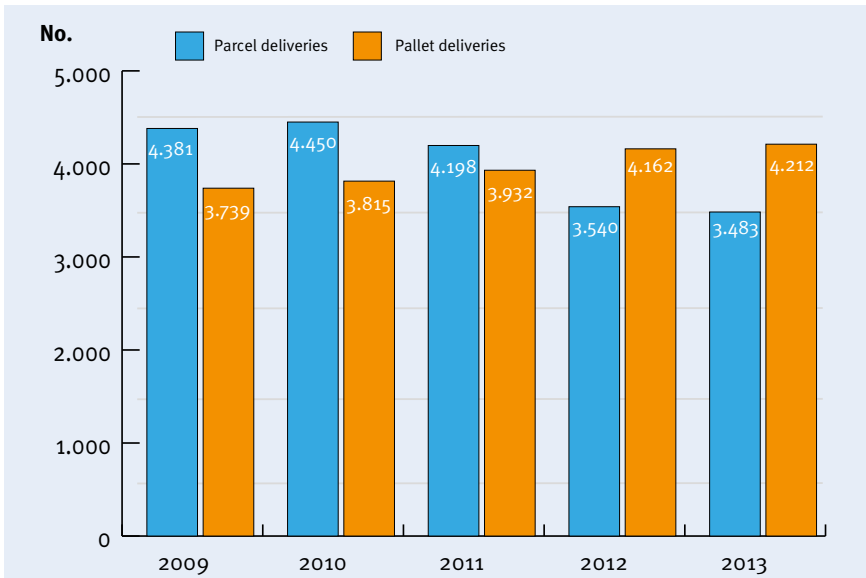


Chart Logistics



AURO event minivan

Car pool and logistics

Our fleet consists of 7 motor vehicles which are all up to date with ecological standards and subjected to regular maintenance overhauls in workshops under contract. The centerpiece of our fleet is the AURO minivan that is used by our field service and can also be used at events that are arranged by our retailers.

However, most traffic movements arise in connection with incoming and departing deliveries which are handled by external haulage agents. Parcels are delivered in a climate-neutral way by the parcel service we work with. The emissions caused by the parcel deliveries are measured and reduced in special procedures. CO₂ emissions that cannot be avoided are compensated for by projects and measures of independent partners, e.g. reforestation of damaged areas or support of programs for biogas plants. The increase of pallet deliveries helps to bundle smaller deliveries and avoid unnecessary shipments. Incoming and outgoing mail is transported by a bicycle courier service.

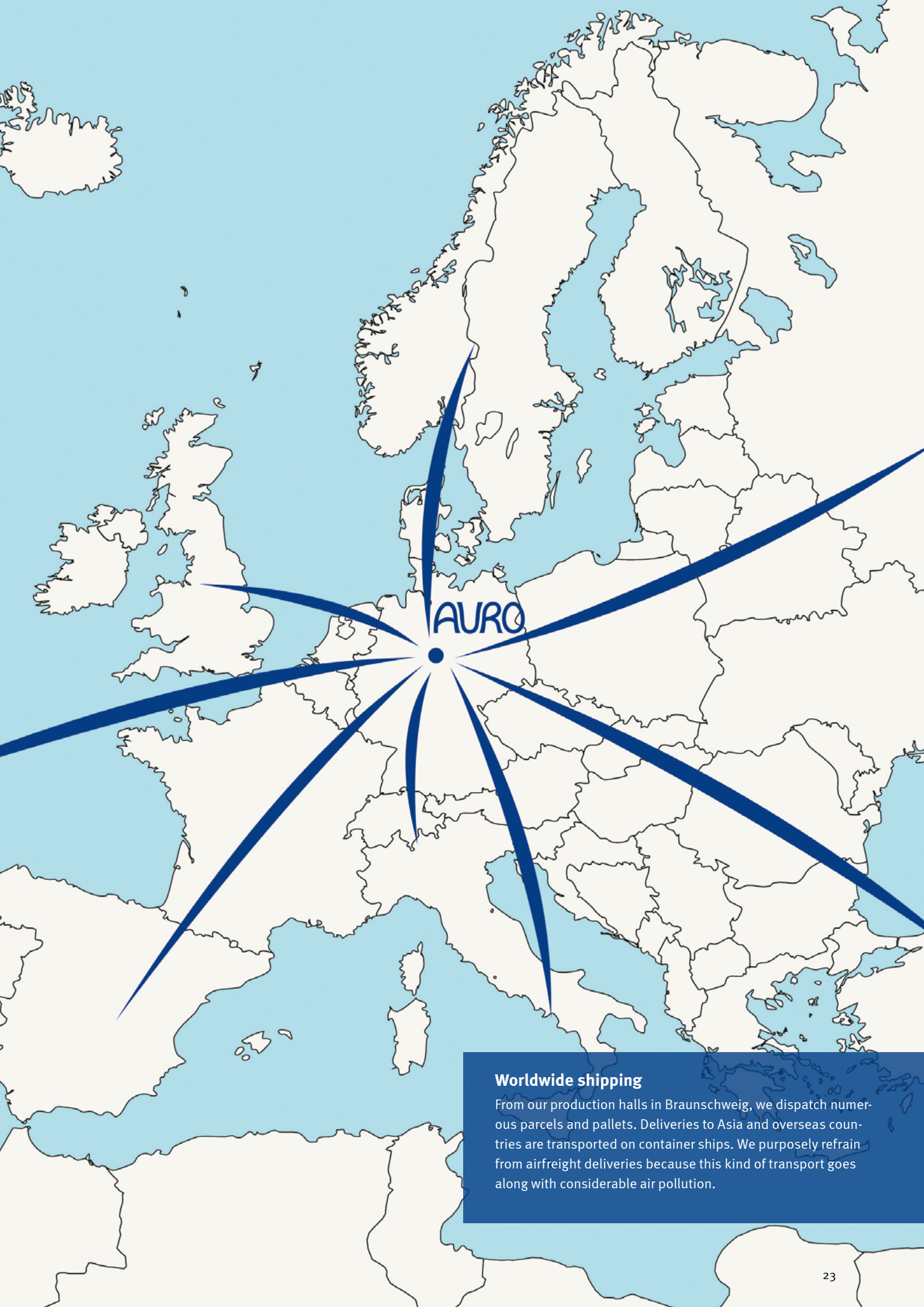
Our current aim is to work with our raw material delivers on a solution that optimises logistics by bundling the deliveries of different deliverers and thus shortens the overall transport routes of AURO raw materials considerably.

EPD equipment	2009	2010	2011	2012	2013
Screens	16	19	24	27	30
Printers, scanners	11	10	11	10	10
Workstation computers	18	17	18	21	24
Laptops	5	5	5	7	8
TV and video	2	2	2	2	2
Gesamt	52	53	60	67	74

Table EPD equipment

EPD equipment

The digitisation of the working world requires increasing investments in workstation computes and mobile EPD equipment. This is reflected in a growing number of screens, computers, printers and laptops. The resulting e-waste is collected separately and disposed of, or obsolete electronic data processing equipment and its components are returned to the suppliers.



AURO

Worldwide shipping

From our production halls in Braunschweig, we dispatch numerous parcels and pallets. Deliveries to Asia and overseas countries are transported on container ships. We purposely refrain from airfreight deliveries because this kind of transport goes along with considerable air pollution.

Energy and raw material – key figures

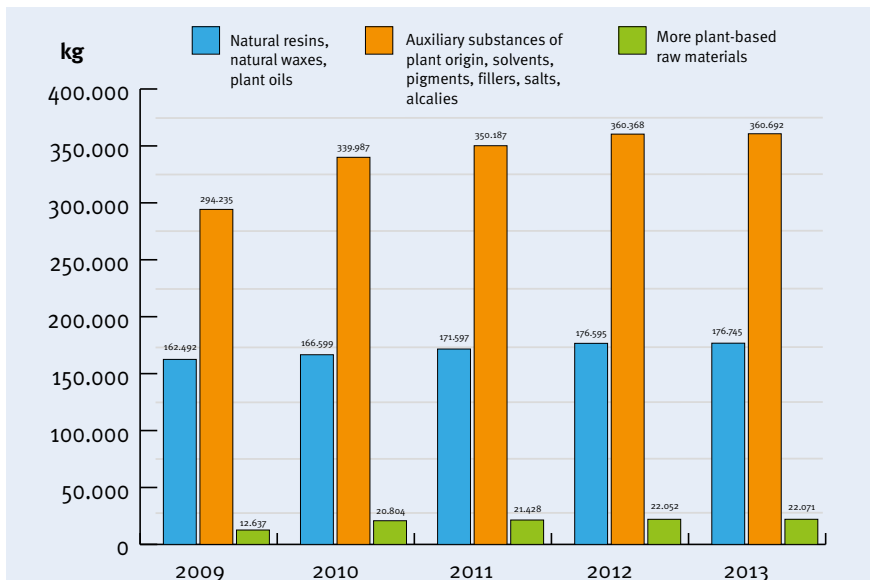


Chart Raw materials



AURO raw materials – diverse and precious

Revolving goods and raw materials

Raw materials (incl. water), product packaging and working materials are called revolving goods. All materials that enter the formulation of a product are called raw materials. From the overall supply of materials, those are chosen that originate from natural synthesis processes and have undergone long-term biological periods of adjustment. Thus it is ensured that there is no risk of persistence. When raw materials are selected and purchased, a major criterion is to find materials that have an even better ecological and social overall profile than the ones already in use.

Titanium dioxide as white pigment is obtained from a dilute acid recycling process and talcum is proven to be asbestos-free. It has to be considered that the extraction of these raw materials is accompanied by overexploitation and considerable damage to the environment. Therefore the use of raw materials for AURO products always includes efforts for the constant improvement also for the product line of non-renewable raw materials. The preferential raw materials are natural products, that have traditionally been in cultural use of human beings for millennia.

Packaging mat. pc.	2009	2010	2011	2012	2013
Corrugated cardboard	20.416	18.324	18.757	21.657	19.720
Labels	2.862	2.744	2.900	3.000	3.100
Paper, total	23.278	21.068	21.657	24.657	22.820
Tin plate	28.530	30.736	32.684	27.554	25.469
Plastics	10.596	12.253	12.553	13.572	13.378
Total	85.682	85.125	88.551	90.440	84.487

Table Packaging materials

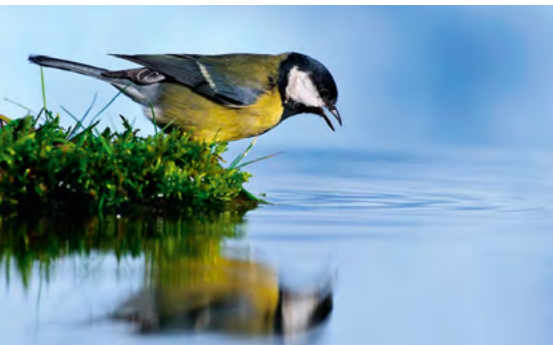
Product packaging

With about 10% of the entire product weight, packaging generates a significant input of material. All packaging can be recycled by the end-consumer.

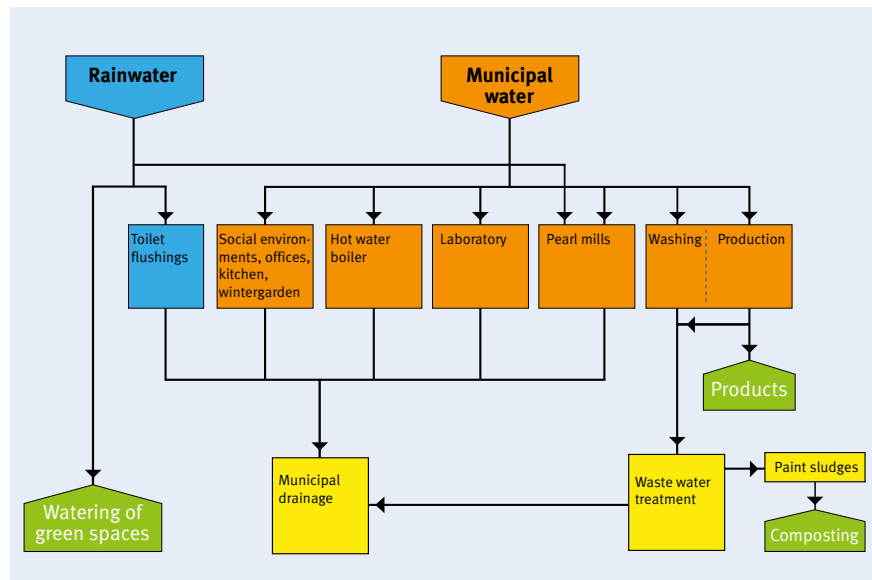
To secure a safe transport cans are packed in boxes. The amount of different box sizes is kept low by multiple use for various can sizes. Orders to be delivered are mostly packed on euro pallets. We deliberately try not to use shrinking foil and stretch film, instead strapping tapes made of PP and cardboard strips are used in order to protect the edges.

For plastic containers (PE and PP), the "Green Dot" registration was applied for and has been introduced in order to be in accordance with the obligations of the packaging ordinance.

Energy and raw material – key figures



We use this scarce resource sparingly.



Water flow chart

Operating supplies

Operating supplies are all materials which cannot be assigned to the other material turnover accounts, but are indispensably necessary for running the operating procedures of the factory.

All surfaces (furniture, floors, etc.) are cleaned with cleaning agents manufactured in this factory. Surfaces such as floors, which are subjected to severe stress, are cleaned daily. Less intensively utilised surfaces are cleaned only when necessary. For examples, the production and storage areas are kept clean only by sweeping with sawdust chip at time intervals depending on the rate of dirt accumulation. They are also treated several times annually with diluted caustic potash solutions as basic cleaning to ensure production hygiene. The dirty water is disposed of through the own waste water processing plant of the factory. Complete avoidance of aggressive disinfecting cleaning agents is a matter of principle for us.

Recycling paper is already being used to a large extent as well as still utilising smaller amounts of chlorine-free bleached paper. Copies printed only on one side or unsuitable for further use as such, are used for making notes, drafts and sketches, etc. on their rear sides and disposed of for recycling only after such usage.

Water

Water is required as raw material for the products, for cleaning the mixing and recipe make-up vessels, for the sanitary installations and kitchen. The water for cooling the pearl mills does not need to be of high quality, so a rainwater tank system was built for this purpose. This system is buried at a depth of 1.5 m in the soil and has a special water feed ensuring constant water temperature of about 10°C. The water is fed to the production plants by a pump. After the economic and ecological quality of this system has proved to be successful, the sanitary installations too were included in the rainwater utilisation system.

The water pipeline system is regularly inspected for leaks. Regular balance accounting of the input and waste water streams is necessary for improved detection and assessment of any negative effects on the environment. Additional water meters were installed at the end of 1996 for this purpose, so that internal water expenses can be charged correctly according to consumers and producers. Due to the high amount of rainfall in 2010, the input value for the water has risen accordingly.

Water, m ³	2009	2010	2011	2012	2013
Use of water, gen.	815	795	706	459	630
Pearl mill, municipal water	150	150	150	150	150
Water for products	702	764	902	701	906
Municipal water, total	1.517	1.559	1.608	1.160	1.536
Rain water*	5.322	6.453	4.178	4.831	5.341

Table Water input (* Data provided by the meteorological office Hannover, measuring station Braunschweig-Völkenrode)

Energy and raw material – key figures

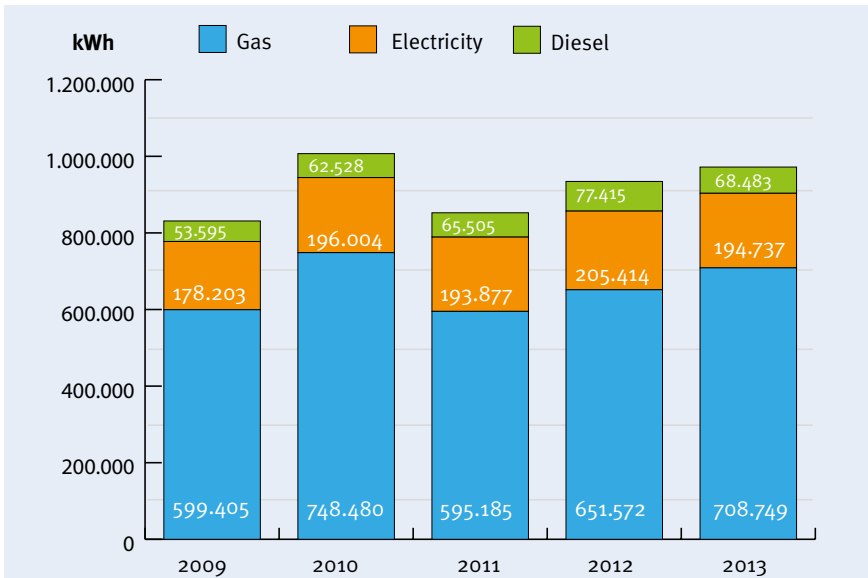
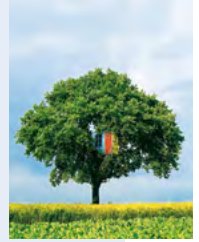


Chart Energy (1 m³ of gas corresponds to 9,6 kWh; 1 litre of petrol to 10,03 kWh)

Energy

There are two main energy sources needed for the operation procedures: Electric power is used chiefly for driving machinery, for lighting plant and for operating the electronic data processing systems; natural gas is used exclusively for the heating and process water plant and for generating steam. AURO uses green electricity mainly from Norwegian hydroelectric power stations. The additional photo-voltaic system on our company roof adds to this so we can say that AURO uses exclusively electricity from renewable sources.

A condensing gas boiler with a multi-stage fan burner feeds six heating circuits that provide static heating surfaces, air heaters and other heat consumers. Warm water for the social environments is provided by means of a heat exchanger of the solar installation. The supply temperature of the heating system is weather-controlled. Warm water pipes that were not already protected against loss of heat were insulated. 260 kW of electric power are installed in total. The agitators of the dissolvers are the biggest single consumers with a maximum consumption of 60 kW, followed by the pearl mills, air compressors and, with about 20 % of the total consumption, the complete lighting system.

In the year 2005, we installed the photo-voltaic system with a surface of 30 m². It produces about 2.500 to 3.000 kWh electricity per year that is directly fed-in to the city's power supply system. Thus AURO contributes its share to the reduction of the use of fossile energy sources.



Good prospects for sustainable energy sources

The same is true for the 21 m² solar panel installation that was also installed in 2005. Combined with the new condensing gas boiler, it provides the company with heat. The produced heat energy of the solar panels amounts to 400 kWh/m² or ca. 12.000 kWh per year and thus spares ca. 1.200 m³ of natural gas.



In 2009, the latest insights and requirements concerning energy-efficiency were observed and implemented in the conception of the new building. Corresponding to the company philosophy, only environmentally friendly building materials were used. The building conforms to the latest version of the Ordinance on Thermal Insulations. The heating was connected to the already existent solar installation and a controlled ventilation system installed that cares for a good indoor climate. In the same year, the energy footprint of the old office building was significantly improved by means of an eco-friendly complete heat protection. The AURO wintergarden, used as social environment and seminar room, received a new heat protection glazing in 2010.

Energy and raw material – key figures

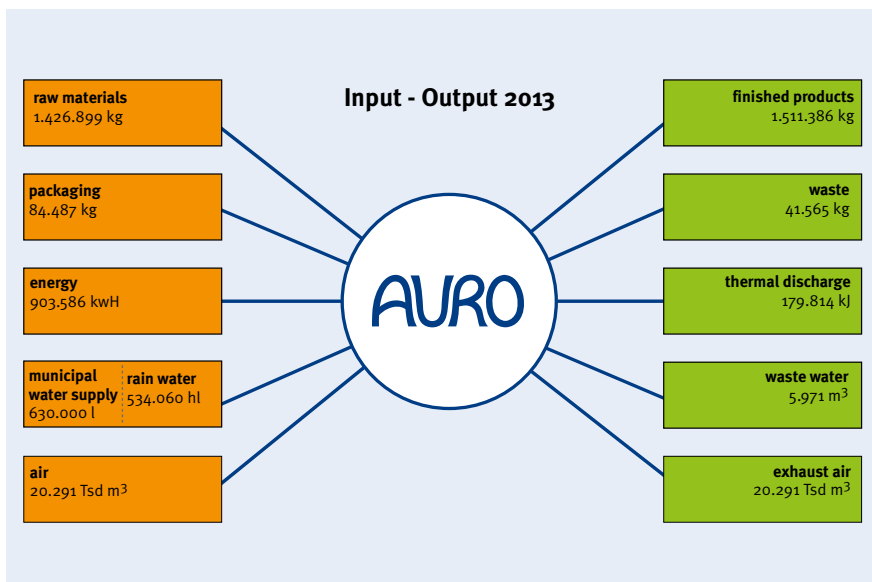


Chart Input - Output

Input - Output

At the very beginning, various questions are considered with regard to a potential new product. What is its individual and societal use, what is the impact on user, society and environment in the short, medium or long term? Product ideas can be discarded in this phase already, even though the prospects concerning turnover and profit might be promising. Since the foundation of AURO as a company, all product ingredients have been fully declared, i.e. stated and explained.

Between 1997 and 2001, we carried an elaborate research and development project through that brought about overall costs of 1,5 million € that were subsidized by the German Federal Environmental Foundation (DBU) with a sum of 500,000 €. The aim of the successfully realised project was to develop a market-ready range of natural paints of a completely new type, our 'Aqua' range. The water-thinnable and solvent-free impregnations, primers, lacquers, waxes and woodstains are produced on three production plants that were designed and purchased especially for this product range. Their elaborate technical features allow the gentle production of a fine-particle, durable binder emulsion without the addition of preservatives or biocides.

One of our constant aims is the reduction of the energy, material and water needed for the manufacture of 1 kg finished product. In recent years, the specific consumption of water and energy has been declining.



It's a long way from the first lab trial...



...to the finished product.

Innovation

In AURO's research and development department, a steady analysis and optimisation of the complete range of products takes place. A detailed consideration of AURO's achievements in the field of newly developed products and product improvements reveals numerous accomplishments. This underlines our desire to offer the market the alternative of technologically innovative products that conform to an ecologically oriented company philosophy, are accepted by the market and steadily demanded by consumers.

Energy and raw material – key figures



In the future, the recovery of recyclables will get even more important.

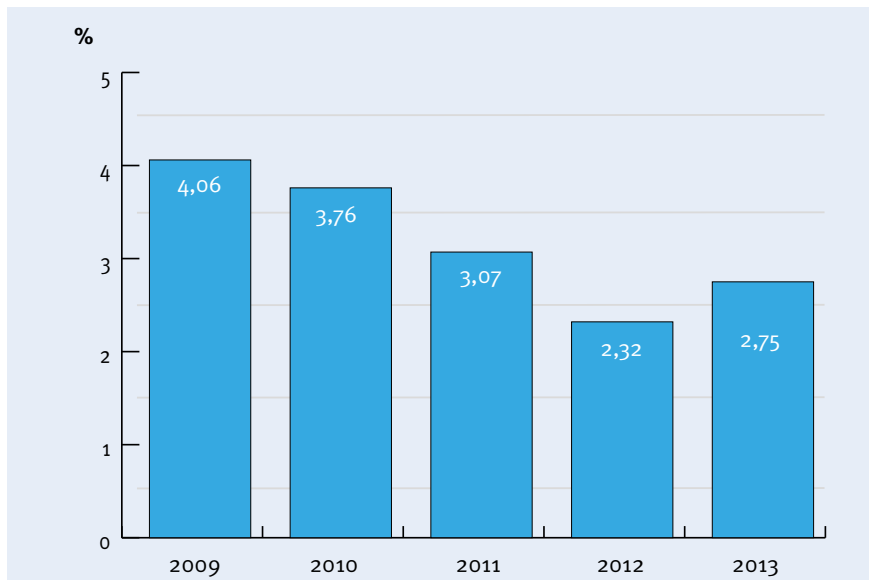


Chart Waste quotient

Waste and other output

All waste materials are collected separately and disposed of as household garbage, recycling material or as special waste. The detailed separation and documentation of the waste quantity has led to a steady rise of the overall figures whereas the production specific waste has been regressing continually. Retailers are offered the special service of returning their old, damaged or spoiled products and have them disposed of adequately. In recent years, many customers used this service which is why the quantity of 'special waste' increased. It also led to an increased amount of metals to be disposed of as recyclable material (emptied tin cans).

Since 1996, the paint and varnish sludge from the waste water conditioning facility is brought to a composting plant in nearby Salzwedel where it is mixed with other compost and thus returned into the natural cycle. The waste quotient describes the relation between the output of finished products and the ensuing waste.

Waste water

As early as 1989, a flocculation and sedimentation facility was installed for the pretreatment of the rinse water needed for cleaning containers. Otherwise it would have to be disposed of as 'special waste'.

Because of the caustic potash used, the untreated waste water is alkaline, with a pH value between 8 and 13. It has a high degree of lipophilic parts and hydrocarbons and, in comparison with the municipal waste water, a much lower ratio of BOD₅ (5 day biochemical oxygen) to COD (chemical oxygen demand). Per month, 2,5 – 3,5 m³ of pretreated rinse water are passed into the communal sewer system. Primarily, the municipality of Braunschweig monitors the content of heavy metals and hydrocarbons in the waste water.

Waste water

Due to the long-term experience with the waste water pretreatment facility and the use of a different flocculation agent, the threshold values have not been exceeded since 1992. The discharge parameters prescribed in the corresponding administrative orders of the municipality of Braunschweig could be substantially reduced. The comparably high amount of waste water in the year 2010 results from the abundant rainfalls accounting for 89 % of the total figures. Another input on the energy and material balance is the rain water filling station that has been saving expenses since it was put into operation.



Excellent ratings and awards in product tests of leading German DIY journals.



AURO's Woodstain no. 160-84 is awarded "test winner" in a product test in May 2006 by Germany's biggest consumer organisation.



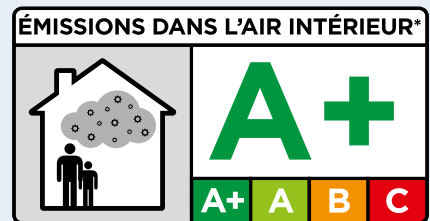
AURO offers products from every application range that are tested according to the AgBB evaluation scheme and therefore especially recommended for living areas.



Certifications from the ILF (Institute for Paints and Lacquers) on compliance with VOC limits for wall paints, stains, lacquers etc.



Successful certification according to DIN norm 53160 (sweat and saliva resistance) and the new version of the EN norm 71-3 for coatings (toy safety norm).

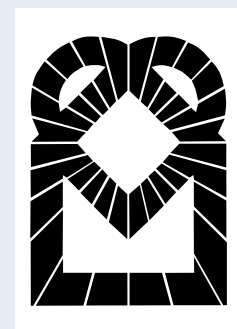


Our complete product range fulfills the requirements of the French VOC regulation, getting the top grades A or A+. More than three quarters of the relevant products are rated A+.

Certificates and proofs

Paints and other products bearing the AURO label are often recognised as exemplary products for ecological building and living. The simple reason is that we make no secret of the composition of our products. AURO's ecological products meet even highest technical requirements which is confirmed in numerous product tests and certifications.

For more information on these and other certifications and awards, please see www.auro.com.



„Medically recommended for lodgings“ – Certificate awarded by the journal „Wohnmedizin“ for AURO Wallpaint no. 321.

Final consideration

Prospects

“One should not want to foresee the future but make it possible.” This quote mentioned at the outset of this report seems to be made for AURO and the successful concept that served us as guideline and precept from day one.

For more than 30 years, we have been manufacturing products for ecological building, living and renovation that are not only good for users but spare the planet’s natural resources at the same time. AURO products, as well as resulting product residues, can be composted and therefore return to the natural cycle of matters. They leave no waste and become available again as organic resource.

This concept also has to be followed when future challenges have to be accepted. Sceptics have to be pointed to the impulses, achievements and the successes resulting from our practical company culture that integrates ecology, sustainability, innovation and transparency. Every single one of these values does not constitute a guarantee for success. Only the right combination of these factors enables us to satisfy the market’s requirements in a convincing and sustained way and, at the same time, give fresh impulses for future developments in order to keep up the pioneering spirit that once guided Dr. Hermann Fischer.

Pursuing his product and company philosophy „from the cradle to the grave“, AURO is and will stay an out-and-out green enterprise.

Sustainable coatings





AURO Pflanzenchemie AG

AURO is the pioneering enterprise in the field of consistently ecological paints and related products. AURO's paints, stains, oils, waxes, cleaning and care products show that products manufactured from natural raw materials are highly efficient and more sustainable than nearly all conventional products on the market.

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AURO AG | As of 07/2014 (04-2019 Logo)

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AURO



Passion for natural paints