



Project Examples

Factory of Tomorrow



Imprint

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Preface



Since the end of 2000 our Ministry has organized the “Factory of Tomorrow” subprogram within the scope of the Sustainable Development stimulation program. Research and development in the field of sustainable technologies, raw materials, and product concepts opens up new opportunities for the economy. This initiative contributed to enhancing the competitiveness of the Austrian economy and, at the same time, to improving the living and environmental conditions – for future generations as well.

A series of projects (fundamental studies, concepts, and technology development projects), with each project building upon the results of a previous one, contributed to the continual further development of individual thematic areas in such a way that they reached the stage of demonstration projects. Thus, the subprogram has been a driving force in the development of innovative production processes and technologies as well as in the use of renewable raw materials; it also yields a broad range of sustainable results with a great market potential. The present brochure is to present to you a selection of these trend-setting projects.

I hope that this permits as many interested people as possible to access the most topical results from research and development, thus permitting to realize further trend-setting demonstration projects in Austria.

A handwritten signature in black ink, consisting of a stylized 'E' followed by a series of loops and a long horizontal stroke.

Eduard Mainoni

State Secretary for Innovation and Technology, Austrian Federal
Ministry for Transport, Innovation and Technology

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The “Sustainable Development” Stimulation Program

Innovation through Sustainability

The economy increasingly recognizes sustainability to be an important guiding principle for enterprises, which opens up substantial opportunities for innovation. One contribution to this trend comes from the “Sustainable Development” Stimulation Program of the Federal Ministry for Transport, Innovation and Technology. This research and technology program uses targeted support for projects as well as accompanying measures to stimulate the development and implementation of economically relevant innovative approaches towards sustainability. A growing number of enterprises are participating in this research program and show that innovative strategies towards sustainability not only pay off, but also strengthen competitiveness in the long run.

Sustainability as Growth Factor

At the intersection of environment, economy, and technology development Austrian contributions to innovation in the field of sustainability are Europe-wide model examples of the transfer of research results into practice and of the development of new markets. During recent decades environmental technology in Austria has established itself as a sector, which has not only assumed a pioneering role in European environmental protection; it also constitutes an important factor in the economy of this country. According to a recent study¹ conducted by ÖGUT (Austrian Society for Environment and Technology), environmental technologies will enable Austria to penetrate promising markets in eastern neighboring countries. The Institute of Economic Research (WIFO) considers intelligent environmental technologies to be one of the pivotal factors for employment in the future². In order to maintain its pioneering position in this dynamic sector, Austria will have to step up investment in the field of research and development.

Program Design

The “Sustainable Development” stimulation program was launched in 1999. The three subprograms “Building of Tomorrow”, “Factory of Tomorrow”, and “Energy Systems of Tomorrow” address selected topics, which are further developed in a series of projects, with each project building upon the results of a previous one, until they reach the demonstration stage. Cooperation between research and the economy is, of course, very important.

Building of Tomorrow 1999 – 2007

Supports research and development projects focusing on energy efficiency, the use of renewable energy sources and of ecologically sound materials in building construction and implements research results in trend-setting demonstration projects.

Factory of Tomorrow 2000 – 2008

Supports research and development projects focusing on production processes, product-service systems, and renewable raw materials and implements research results in trend-setting demonstration projects.

Energy Systems of Tomorrow 2003 – 2009

Supports research and development projects focusing on renewable energy sources, energy efficiency, and systems and implements the results in trend-setting regional model systems.



¹ Gerhard Bayer, Alben Kisiakova, Bernadetta Szlag (Österreichische Gesellschaft für Umwelt und Technik – ÖGUT):

² Umwelttechnikmärkte in Mittel- und Osteuropa sowie Südosteuropa, Vienna 2005

The “Factory of Tomorrow” Subprogram

Initial Situation

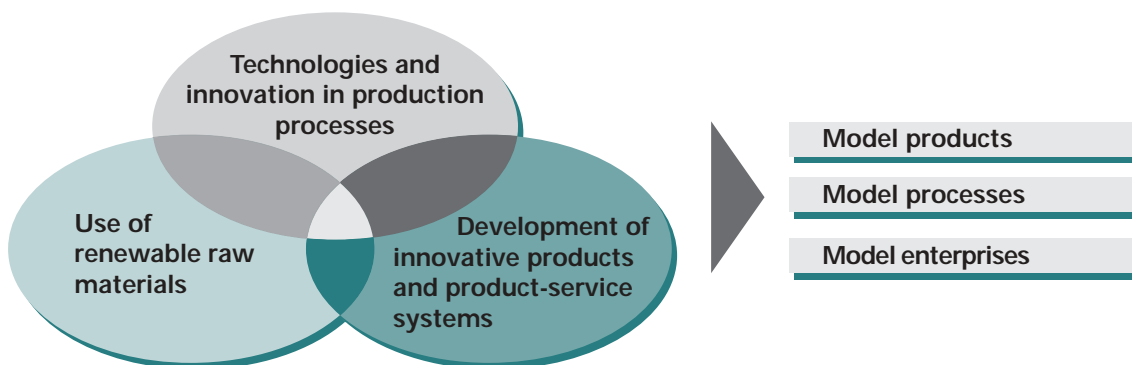
Austria has succeeded, in the past few years, to establish itself as one of the pioneering countries in the development, implementation, and application of innovative environmental technologies. In addition to waste treatment and disposal technologies (end-of-pipe technologies), strategies focusing on at-source technologies (Cleaner Production Concepts) have been established. This approach considers waste and environmental problems in enterprises to be an indicator of a fundamentally inefficient economic system; a growing number of actors in the economy began to realize that sustainable strategies and resource-efficiency are important aspects of long-term corporate policies.

It was not only on account of skyrocketing oil prices that renewables became increasingly important as future raw materials for the industry. This refers not only to classic uses of raw materials (e.g. wood for paper or cellulose production), but also to the possibility of producing various types of chemical feedstock on an industrial scale from renewable raw materials.

Goals

In line with these developments, the goals defined for the “ Factory of Tomorrow” subprogram focus on the development and demonstration of technologies and concepts.

In this context, technologies that provide for a substantial improvement of resource efficiency in production processes and permit the use of renewable raw materials in industrial processes play an important role. In the field of products, research concentrates on product-service systems that are based on life-cycle thinking and create new business models. Cross-cutting research aiming to develop management and governance strategies for the establishment of value-oriented and value-adding business approaches also play an important role.



Strategy

The “Factory of Tomorrow” subprogram aims to initiate and implement technological breakthroughs with a high market potential. Therefore, the individual calls for proposals cater particularly for projects that can be further developed and result in demonstration and model projects using exemplary production processes and products as well as in model enterprises. In the beginning, the calls for proposals cover a rather broad range of topics and then become increasingly focused, while, at the same time, the requirements concerning practical feasibility also become more demanding. This strategy is also supported through a shift from basic research to research and development projects involving participants from enterprises as well.

International Cooperation

The “Factory of Tomorrow” subprogram is firmly embedded in international networks. This permits to present successful Austrian research at an international level and enables Austrian enterprises and R&D institutions to get a foothold in European consortiums.

One example of an early successful international program cooperation consists in the ERA-Net project entitled SUSPRISE (SUStainable EnterPRISE), which Austria initiated jointly with other countries. This program network focuses on corporate production technologies and strategies towards sustainability; the “Factory of Tomorrow” subprogram is Austria’s input to this network, in which Austria participates together with program coordinators in ten other European countries (Belgium, Denmark, Germany, Finland, United Kingdom, Ireland, the Netherlands, Sweden, Switzerland, and Spain). Activities within the program cooperation include, apart from a comprehensive exchange of experience regarding promotion instruments, project evaluation, and program management, transnational calls for proposals as well.

Current state of the subprogram

Since it was launched in October 2000, the “Factory of Tomorrow” subprogram has supported 125 projects selected from four calls for proposals with funds amounting to a total of Euro15 million. Information about the current state of the calls for proposals can be accessed at www.FabrikderZukunft.at.

The results from these projects show that the targets formulated at the beginning of the program have been successfully implemented. Following the program strategy, the individual thematic areas have been continually developed on the basis of a sequence of calls for proposals and individual projects. The following pages present a selection of these thematic areas and research results.

Rainbow

New Fiber from Cellulose

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Task

Globally, a combination of polyester and viscose is by far the most frequently used fiber blend. Annually, the industry produces more than 500,000 tons of viscose/polyester fibers. Conventional dyeing technologies use a two-bath process, which is relatively cost and resource intensive. While single-bath dyeing processes are shorter and considerably more resource efficient, they require special finishing processes in order to ensure sufficient moisture fastness.

Innovation

"Rainbow" is a fiber material with physical and chemical properties that are comparable to those of conventional viscose fibers; the only difference lies in the dyeing properties. The ultimate implementation of this research project will result in a new generation of fibers, which require 40 to 100% less energy, water, and chemicals input in upgrading processes.

Benefits

The "Rainbow" fiber can be dyed in a single-bath process under the same conditions used for polyester, which results in considerable savings of dyeing matter and reactants as well as a considerably shorter dyeing process; this makes the natural fiber an economically attractive alternative to man-made materials.

Saving potential

Earlier phases of the project served to investigate basic issues concerning the applicability of these fibers and yielded fundamental findings about this novel and functional cellulose fiber ("Rainbow"). The properties of the new fiber permit single-bath dyeing and the use of direct-dyeing matter and of salt-free dyeing substances; this is a substantial contribution to the conservation of the environment and resources and affords considerable savings and an increase of productivity.

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Rainbow

New Fiber from Cellulose



Color&Cloth

Plant Dyes for the Textile Industry

PROJECT COORDINATION

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Schoeller Bregenz GmbH & Co KG,
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Study Program: Product and Project
Management,
Wiener Neustadt

Bischof Strickwaren KG,
Reuthe

Sonnentor Kräuterhandels GmbH,
Zwettl

Task

The project goal was to create all the prerequisites for the industrial use of plant dyes, to meet the special requirements of dyeing works and suppliers of raw materials as well as to define plant dyes as a commercial product and to create a supraregional infrastructure for the distribution of raw materials.

Innovation

Plant dyes make it possible to use renewable raw materials and selected residue material from the wood and food processing industries. The project participants tested various methods for the manufacture of plant-dyed products (wool, knitwear, panty-hoses, woolen hats). In order to establish a range of products for plant-based dyeing on an industrial scale, researchers prepared a catalog of plant-based dyeing matters.

Benefits

The goal is to create sufficient demand for plant-dyed textiles on the market and to initiate the establishment of an enterprise for the production of standardized plant dyes. This will be necessary to complete the development from an idea to concrete innovation and industrial implementation.

Results

- Prototypes of plant dyes
- Quality tested textile patterns dyed with plant dye prototypes
- Presentation of dyes in the form of a product catalog
- Description of the requisite know-how and technological requirements for enterprises that produce and standardize the prototype dyes

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Color&Cloth

Plant Dyes for the Textile Industry



Green Biorefinery

An Innovative Technology Concept for the Utilization of Excess Grassland Biomass

PROJECT SPONSORS

Schlüssel-Trenntechnologien

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Task

The big challenge in using renewable raw materials consists in developing technologies for the separation and utilization of the complex components of biomass and in designing completely new chemical processes for the utilization of these substances.

Innovation

The biorefinery projects aimed to research basic technologies for the processing and utilization of renewable raw materials using the example of grassland biomass. At the same time, the basic components extracted from this raw material are to be developed into marketable products. In analogy to petrochemistry, the Green Biorefinery is to provide the feedstock for new polymer processes using renewable raw materials.

Benefits

The basic idea of the Green Biorefinery consists in using the whole plant in a cascade of processing stages. The processes use dead leaves, grass, clover or lucerne to yield a range of various products. These renewable raw materials are currently abundant and can be converted into energy and new materials used in production processes:

Renewable energy (biogas)

Chemicals (e.g. lactic acid, amino acids)

Biogenic materials

Plant fibers

Results

The project resulted in a remarkable knowledge base in an internationally topical field of research; this will secure Austrian research and economy a head start in the development of new approaches to the utilization of renewable raw materials.

Characteristics of the Green Biorefinery include:

- Zero-waste and zero-emission extraction of valuable substances from grass (all residue material is used in a biogas plant)
- Energetically self-sufficient operation of the plant
- Active contribution to the preservation of meadows (extensification of agriculture)

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Green Biorefinery

An Innovative Technology Concept for the Utilization of Excess Grassland Biomass



Nawaro Cascading Pilot

From Crazy Idea to Marketable Product – alchemia-nova discovers cascading use of fruit stones for the food and non-food sectors

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Riegersburg

Steirische Beerenobstgenossenschaft

Task

Using the whole plant is an essential step towards an efficient and economically viable exploitation of renewable raw materials. This calls for the development of strategies and technologies for the cascading use of the various structural, chemical, and fine chemical components and materials. One example are fruit stones: In the food processing industry they are considered undesirable waste; sometimes they are dried and then burned, in most cases though, they are tipped some place and left to rot down.

Innovation

The Nawaro-Cascading project aims to use system solutions to find new uses for fruit stones and to develop key principles and technologies for the cascading use of plants, which may be used for demonstration purposes.

Benefits

Fruit stones and their components are low-cost bio-resources, which – owing to the newly discovered advantages of a cascading utilization – may contribute to sustainable development in the economy: as high-tech blasting medium, gourmet specialties, high-quality oils or wellness novelties.

Results

- The hard outer shells can be used as blasting medium in particularly delicate applications in the automotive industry and in aircraft and space technology or as filler for polymers.
- The soft kernels can be skinned and made into marzipan varieties such as persipan, cherrypan, prunipan, peachopan or sweet brittle in chocolate production.
- Native oils freshly pressed from kernels are excellently suited for a more refined cuisine and in restaurants.
- These oils, but also the mill cake are valuable components in the manufacture of high-quality natural cosmetics and wellness products.



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Nawaro Cascading Pilot

From Crazy Idea to Marketable Product – alchemia-nova discovers cascading use of fruit stones for the food and non-food sectors

Wood Plastic Composites

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Task

The extrusion of plastics with a high content of wood fibers has been known for quite some time. The maximum wood fraction in wood plastic composites usually is 70% (typically less than 50%). The process technologies and tools used so far are not suitable for composites with a very high wood fraction as the resulting quality of the profiles is insufficient and the low output is economically inefficient.

Innovation

The present project aimed to increase the wood fraction to more than 90%. In addition, researchers developed a new process and tool technology, which ensures a high quality of the profiles and, at the same time, permits an economically efficient production of profiles. In order to further improve economic efficiency, researchers designed a device that permits to process wood fibers or chips together with several other components (additives, pigments, starch) in the extruder and without any additional process stage.

Benefits

The main component of this newly developed composite is wood fiber, which means that a large part of plastic material can be replaced by a renewable raw material. Using wood fibers or chips in a high-quality composite material will considerably increase the value-added of wood fibers and chips which otherwise can only be used as by-products (e.g. pellets, chip and fiber boards).

Results

- optimized formulations for new wood composites
- systematic property matrices of the new materials
- new technology to control the wood fraction fed into the extruder
- adapted and optimized processing and tool technology
- clearly improved profile quality through newly developed tools
- improved economic efficiency of the production process

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Wood Plastic Composites

Bioplastics

Marketable Plastics and Foamed Materials from Renewable Raw Materials

PROJECT COORDINATION

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Traiskirchen

Fasalex GmbH,
Kopling

Task

Biodegradable materials from renewables are increasingly becoming a focus in research. They are to replace problematic synthetic materials, mitigate waste-related problems and meet specific new requirements. However, the new technologies have not yet been used on a large scale.

Innovation

One goal of the research projects consisted in the development of marketable products from biopolymers. Product development concepts that can be realized within a short term were in the foreground. The focus was on market segments in which natural polymers outperform petroleum-derived plastics concerning the desired specifications. Another focus was on the development of an environmentally sound alternative to foamed plastics from fossil raw materials. Suitable biogenic raw materials were analyzed with a view to essential criteria such as appropriate particle size distribution, moisture and protein content. Researchers also investigated adequate processing methods and various additives.

Benefits

The advantages of biogenic plastics consist, on the one hand, in the sustainability of renewable raw materials and, on the other hand, in their biodegradability. The products made from biogenic plastics are designed in such a way that they generate added value (e.g. no disposal costs).

Results

The first concepts for products from biopolymers include bio-dowels for the furniture industry, pyrotechnical components, clamps for infusion hoses, golf tees, and plastic cards. Environmentally sound plastics can replace fossil-derived products in applications such as packaging, thermal insulation, in the automotive industry (e.g. car interiors), and in the extrusion of profiles.



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Bioplastics

Marketable Plastics and Foamed Materials from Renewable Raw Materials

Promise

Producing with Solar Energy

PROJECT COORDINATION

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Task

While the industry is the sector with the highest energy consumption and a large proportion of this energy demand is low-temperature heat (20°C to approx. 250°C), the application of solar thermal systems has so far concentrated on single- and multi-family homes. The industrial sector has not yet been sufficiently investigated or opened up for these applications. A major proportion of the required process heat lies in the upper part of this range (100°C to 200°C) At present, there are no suitable solar collectors to make use of this potential.

Innovation

The use of solar energy for industrial production processes has for the first time been approached and systematically investigated in case studies and estimates of the existing potential. In order to facilitate the use of solar thermal systems in the industries and trades the project aimed to establish a relevant basis for decision making in the enterprises. In a second project researchers developed and optimized a small, low-cost concentrating collector using the parabolic trough design.

Benefits

The use of solar collectors for the generation of process heat would result in production processes that contribute considerably to resource-conservation and cause less emission. Estimates for the heat demand that can be covered by solar energy have shown that, in a medium term, there is a large saving potential of fossil energy sources.

Results

The study lists, in addition to major existing potentials, the most important industrial sectors suitable for solar thermal energy supply for industrial processes and gives an overview of available solar technology. The technical and economic feasibility of solar energy systems for the generation of process heat has been demonstrated by means of case studies and the successful implementation of a demonstration installation.

The development and optimization of a parabolic trough collector system – which can easily be installed on factory roofs – constitutes a novelty in solar technology, which makes it possible to use the considerable potentials existing in higher process temperature ranges.

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Promise

Producing with Solar Energy



ZERO EMISSIONS

Waste and Emission-free Production Processes

PROJECT COORDINATION

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Eybl International AG, Krems

Rotreat Abwasserreinigung GmbH & Co
KG, Graz

Alufinish GmbH & Co KG, Andernach

MINERWA Umwelttechnik GmbH,
Gmunden

Inafin, Spielberg

Task

One of the main prerequisites for a sustainable economy consists in industries that do not generate waste or emissions. This requires so-called "zero-emission" processes, which permit complete recycling or re-use of all raw materials and energy flows that are not contained in the final product.

Innovation

The various projects aimed, on the one hand, to elaborate the fundamentals of waste and emission-free processes and technologies. Also, the researchers closely cooperated with Austrian industrial enterprises to demonstrate potential practical applications. Further research projects developed a method for the optimization of existing galvanizing plants. This permits to modify processes in such a way that:

- effluents are reduced to the fullest extent possible
- pollutant concentration is as low as possible
- as many substances as possible can be recycled in the plant
- unavoidable waste can be recycled as a byproduct in other companies

Benefits

The benefits and the saving potential of emission and waste-free processes and technologies becomes clearly visible if one considers the "true costs" caused by emissions and waste. The waste produced has to be purchased in the form of raw materials and causes the same proportional costs in production (e.g. personnel, operating costs) as the product itself; in addition, there are the costs for disposal.

Results

The research projects presented a checklist which permits to choose suitable methods adapted to the actual situation in the enterprise. Researchers also developed a tool permitting to identify the potentials for the implementation of emission and waste-free production processes in a given enterprise. For the optimization of existing galvanizing plants researchers developed a method consisting of a methodological approach, a computer program, checklists for options and databases with appropriate technologies.

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ZERO EMISSIONS



Factory of Tomorrow

Zero Emissions

Waste and Emission-free Production Processes



Innovative Coolant Lubricant Systems in Metal Cutting

PROJECT COORDINATION

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Voest-Alpine Mechatronik GmbH, Linz

Protan
Produktionstechnik GmbH & Co KG, Traun

Task

According to estimates, some 7,000 tons of oils and emulsion concentrates per year are being used as cooling lubricants in metal cutting in Austria. Renewable raw materials are hardly used in these processes. A considerable proportion of these coolant lubricants is sprayed (misted) in these applications or evaporates and is thus discharged in the workplace atmosphere and into the environment.

Innovation

A new and sustainable approach uses minimum cooling lubrication. A first research project developed a systematic approach to the design and optimization of high-speed machining processes. Personnel from production, environmental and occupational safety were directly involved in development. The resulting strategies yielded satisfactory outcomes both, concerning production technology and occupational and environmental safety. A new minimum lubrication system was developed in a follow-up project. It uses an oil-in-water emulsion made from renewable raw materials.

Benefits

Compared to conventional flood lubrication, minimum lubrication reduces the level of cooling lubricant to such an extent that it is virtually consumed in the process. The special design and optimization of the high-speed cutting process also improves the working conditions for employees. The use of renewable raw materials for the cooling lubricant emulsion makes it possible to replace the petroleum-derived fractions used until now.

Results

Laboratory tests yielded appropriate combinations of tool coatings and cooling lubricant systems with minimum coolant application rates. The project participants also defined and implemented a reference workplace.

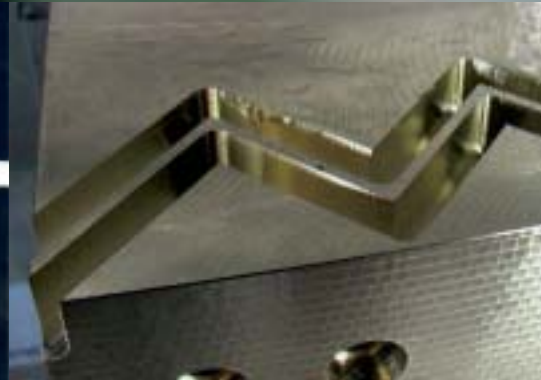
The development of the new minimum cooling lubrication system based on renewable raw materials yielded the following results:

- a renewables-based, low-additive cooling lubricant emulsion
- a study of suitable domestic raw materials and their availability
- an adapted dispensing system

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Photo: W. Bledl/SunSquare Kautzky



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Innovative Coolant Lubricant Systems in Metal Cutting

Eco-Friendly Impregnation of Electrical Machines

PROJECT COORDINATION

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PROJECT PARTNERS

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Institute of Electrical Machines and Drives,
Graz

Task

At present, the VPI process (vacuum-pressure-impregnation) is the standard process for resin impregnation in the electrical industry. In this process the components are "soaked" in a vacuum chamber. Then, the resin is cured in a forced-air oven. Especially with large components it takes more than two hours for the resin to reach the gel point temperature. During this time, part of the resin may drain off the windings and is thus lost.

Innovation

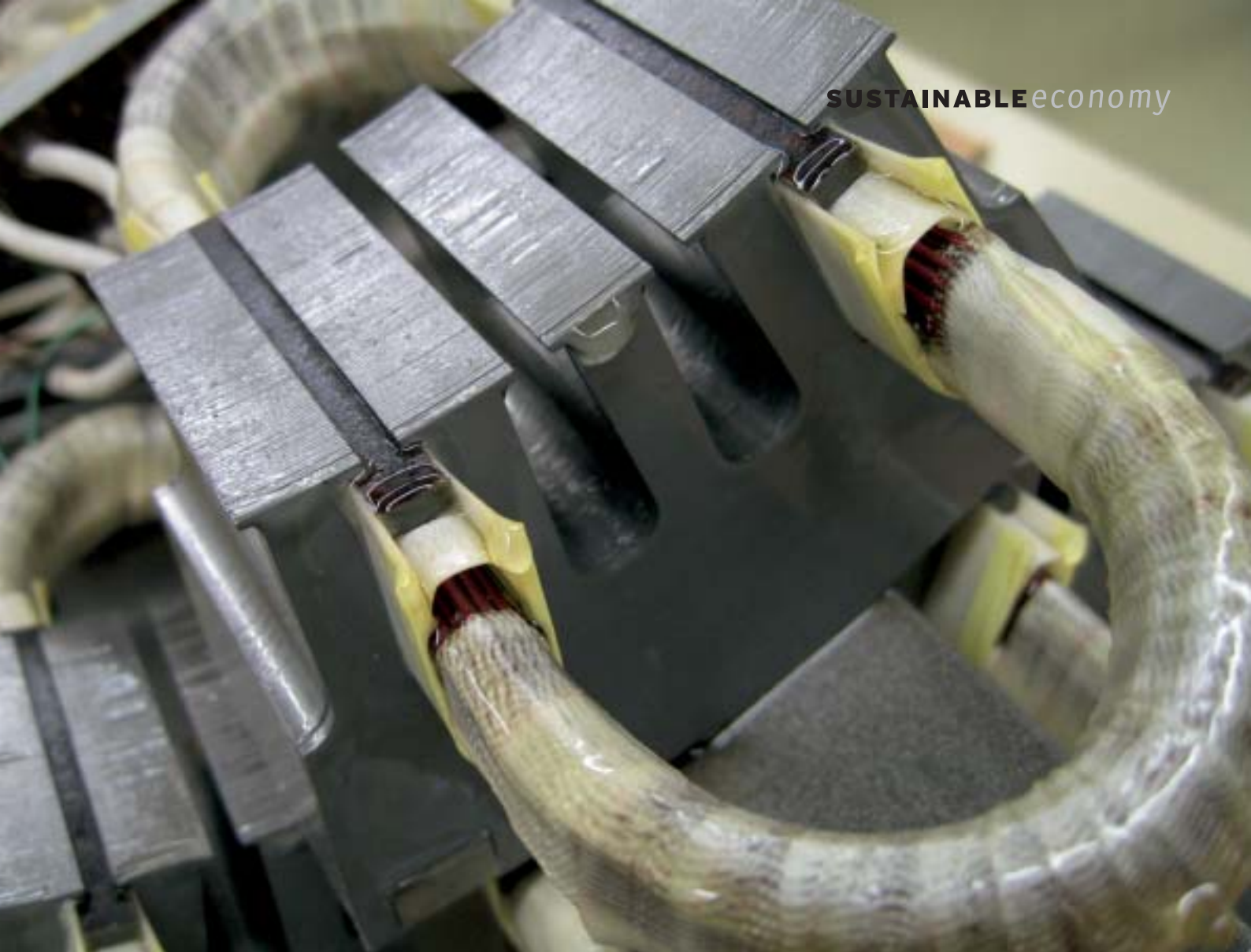
Contrary to the conventional method, the present project developed and tested a method of resin impregnation using the Joule effect (heat from electric current) and ultraviolet light for curing. Heating of the stator in this approach is realized by feeding electric current to the windings. The windings thus reach adequate temperatures more quickly so that the gel point occurs earlier and virtually no uncured resin runs off.

Benefits

Resin impregnation using the Joule effect and ultraviolet light for curing reaches gel point temperatures more quickly and can reduce emissions by up to 70 %. Additionally this method requires considerably less time and energy input. Also, the electric current-UV technology permits to use a wider range of isolating resins.

Results

In addition to analyzing the strengths and weaknesses of the electric current-UV impregnation method the research project also investigated what isolation systems can be impregnated using this technology and how existing isolation systems have to be adapted in order to be suitable for the electric current-UV curing technology. In addition to conducting comprehensive investigations, researchers also tested the impregnation of a form wound type wind power generator in a testing facility designed by Gottlob Thumm GmbH for this purpose.



Factory of Tomorrow

Eco-Friendly Impregnation
of Electrical Machines

i³ SustainableFoodManagement

A Model for the Management of Corporate Sustainability at Schirnhofen Company – integrated in 3 Dimensions

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Task

While environmental management systems may be considered state of the art in many fields of the economy, it is a fact that they provide only part of the information relevant for sustainability issues in an enterprise. Practical implementation of sustainable corporate development often raises the question of the availability of appropriate data or of a basis for decision-making, which often cannot be provided by tools already used or available on the market.

Innovation

The project goal consisted in the implementation of a model for sustainable management in an enterprise of the meat processing industry. The model evaluates all relevant sustainability aspects in the enterprise as well as in its environment. The innovation as compared to the conventional approach consists in providing information about the value-added chain and the region within the scope of a single integrated management model.

Benefits

The central tool in the project relies on an EDP-based representation of the enterprise and its production processes in the form of goods, material and energy flows and the representation of the upstream and downstream stages of the value-added chain and of cooperation partners involved in production.

Results

In a first phase, the model was implemented for the core processes of the enterprise and extended, in a second phase, to include the entire value-added chain of the enterprise.



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i³ SustainableFoodManagement

A Model for the Management of Corporate Sustainability at Schirnhöfer Company –
integrated in 3 Dimensions

PROJECT COORDINATION

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Brau Union AG, Brauerei Puntigam, Graz

Ennskraftwerke AG, Steyr

Fischer Ski + Tennis, Ried

Heuberger Eloxieranstalt GmbH, Graz

Österr. Elektrizitätswirtschaft AG, Vienna

Austrian National Bank, Vienna

Roto Frank, Kalsdorf bei Graz

SCA Laakirchen AG, Laakirchen

Raiffeisen Holding NÖ, Vienna

SW Umwelttechnik Stoiser & Wolschner
AG, Vienna

Problem

In most enterprises it is not easy to calculate the profitability of environmental and sustainability measures. Lacking adequate information systems, companies are not able to link waste and material flows with costs. Therefore, a well-founded calculation of costs and investment appraisal is not possible and appropriate investment projects are not realized.

Innovation

The researchers developed new approaches and methods for Environmental Management Accounting at company level, in particular with a view to ascertaining annual environmental costs and expenditures. These methods permit to determine the costs accruing to a company on account of waste and environmental problems and, subsequently, to calculate the profitability of investments aiming to improve resource efficiency and protection of the environment.

Benefits

In the field of "Environmental Management Accounting" (EMA) there is a close exchange of information with the United Nations Council on Sustainable Development (UNCSD), mainly at the level of an expert working group. The results of an initial project dealing with this topic were distributed in a strategy paper by the UNCSD in more than 15 languages and applied in pilot projects all over the world. The International Federation of Accountants (IFAC) used the results to develop a new global standard in Environmental Management Accounting, which was published in 2005.

Results

The EMA strategy paper comprises definitions, methodological issues, checklists, and guidelines for the collection of data. In a follow-up, 12 Austrian enterprises performed pilot projects, which were documented as case studies in a guide with training examples.

SUSTAINABLE *economy*

2656	987852784746	55229000283883	4484794	3529878045	554098	88	830247
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Factory of Tomorrow

EMA

Environmental Management Accounting



Sustainability Reporting

Guide for Sustainability Reporting Based on the Reporting Procedures of VA Technologie AG and Österreichische Bundesforste AG

PROJECT COORDINATION

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Purkersdorf

Task

While – owing to the UN “Global Reporting Initiative” – internationally harmonized proposals for the preparation of sustainability reports are available, the sustainability reports of some enterprises still give the impression of promotion brochures without any concrete content and connection to practice. In many cases data and facts are missing, as are links to the visions and strategies of the enterprise.

Innovation

The “Sustainability Reporting” project developed general procedures for the preparation of sustainability reports, which incorporate all activities of the enterprise in a development towards sustainability.

The approach clearly goes beyond conventional sustainability reporting as it also addresses aspects such as corporate strategy and integration of economy, ecology as well as social topics. For the first time, the project also prepared a combined business and sustainability report in Austria (project partner: Österreichische Bundesforste AG).

Benefits

- Defining quality standards for sustainability reporting by establishing requirements and benchmarks
- Development of practical guidelines and methodological tools, which will be published in the guide “Reporting about Sustainability”
- Holistic representation of all corporate activities
- Long-term perspective and integration of enterprise strategy

Results

- Sustainability reports of two pilot enterprises, which may serve as benchmarks for other companies
- Guide “Reporting about Sustainability”, which summarizes the experience from the development processes and provides practice-oriented guidelines for the preparation of a sustainability report

Reporting about Sustainability

IN 7 SCHRITTEN ZUM NACHHALTIGKEITSBERICHT



VA TECH.



SUSTAINABLE
SOLUTIONS.



FOR A BETTER
LIFE.



Factory of Tomorrow Sustainability Reporting

Guide for Sustainability Reporting Based on the Reporting Procedures
of VA Technologie AG and Österreichische Bundesforste AG

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*A Cooperation of the Austrian Federal Ministry for
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with the Austrian Research Promotion Agency*



FFG