

# Annual Report 2006 – (abridgment)

## Preface

"This is the core competence of the Deutsche Bundesstiftung Umwelt: The foundation helps to break the ground for technological development and is a great prototype for what is needed in the years to come: The rediscovery of ideas of technological improvement. I believe, there is nothing comparable in Germany and Europe." Sigmar Gabriel used these words to appreciate the work of the foundation of the last 15 years. In front of 400 invited guests and in the presence of the 'mental founders' of the DBU, former finance minister Dr. Theo Waigel and his then State Secretary and later chairman of the Board of Advisor of the DBU Prof. Dr. Hans Tietmeyer, the TV presenter Angela Elis lead in an informative and entertaining manner through the programme. An overview of already accomplished projects as well as information of prospective challenges and work emphases were given.

Another highlight of the last year was the presentation of the German Environmental Award. It was presented by the Federal President on the 29<sup>th</sup> of October in Dresden. The Managing Director of the Max Planck Institute for Biogeochemistry in Jena, Prof. Dr. Ernst-Detlef Schulze, was awarded for his research on the reasons for global warming. The medium- sized entrepreneur Hans G. Hubert received the award for his commitment to develop high qualitative and solid technologies for water processing and waste water treatment for developing and emerging countries that he successfully distributed there.

Unfortunately, two great personages that have decisively contributed to the work of the DBU died in the year 2006. On the 1<sup>st</sup> of May the longtime vice-chairman of the DBU Board of Advisors, Prof. Dr. Wolfgang Engelhardt, died at the age of 83. He characterised the work of the German League for Nature and Environment as President for more than three decades and in total for more than 50 years. Thanks to his contribution in international boards, the German League for Nature and Environment enjoys nowadays great international esteem. For more than 12 years he contributed as vice-chairman of the Board of Advisors to the setting of directions of the DBU. We are thankful for his commitment and will bear him in rememberance.

On the 6<sup>th</sup> of October the biologist and behaviour scientist, documentary filmer, cameraman, producer and publisher Professor Heinz Sielmann passed away. He dedicated his life to show people how beautiful, perfect but nevertheless how vulnerbale nature is and tried to motivate them for nature conservation. His worldwide successful films were synchronised in 25 languages and awarded with several film awards. Heinz Sielmann was awarded the 'Deutscher Umweltpreis' in the year 2005 for his life-time achievement.

Without the voluntary committed support of more than 700 external experts- mostly professors of German research institutions- our work would not have been possible in the year 2006. They deserve the gratitude of the foundation for excellent gratuitous work.

## **Key aspects in project supporting**

### **Environmental engineering and technology**

Small and medium sized enterprises have a high potential for innovation, especially for the development of highly individually optimised solutions. The DBU intends to support them with a straightforward subsidies policy to give them the chance to realise their ideas. The promotion focuses on product- and production integrated environmental protection. In order to not only correct former failures this approach is geared to the sources of environmental pollution. This way is not alone preferred because of ecological factors but also for reasons of economy. Small- and medium-sized enterprises offer especially in this field innovative and flexible solutions by using their creativity.

Projects in the following fields were supported: Exhaust air treatment, architecture, building physics, building material, emission reduction, energetic restoration, energy efficiency, power production, photovoltaics, building services engineering, water pollution control, industrial water management, integral planning, refrigeration technology, disaster control, plastics technology, coating, noise reduction, light engineering, ventilation engineering, membrane technology, metalworking, surface treatment, paper industry, solar energy, solar heating, textile technology, greenhouse gases, drinking water, insulation and heat recovery.

This shows the wide spectrum of supported projects in the industry and the priorities of the DBU in the scope of integrated environmental protection.

## **Environmental research and nature protection**

### **ChemBioTec- Sponsorship of new bio processes**

One of the new priorities of the DBU is the project ChemBioTec. It aims at the sustainable productive catalysis and the integrated biological process development in collaboration of industry and research institutions. The most important aspects are the chemical industrial production processes for animal feeds, groceries, pharmaceutic or agrochemical intermediates and polymers. With biotechnological innovations, for example the conversion of renewable resources, their process limitation as well as their restricted resources shall be overcome. Within the scope of ChemBioTec basic barriers for innovation in the area of technical bio catalysis are identified and new biological processes with industrial standards are developed or improved. Moreover, innovative, for the chemical synthesis not

accessible, products and polymers are produced in Germany. In the context of this productive work a durable competence cluster is attempted to build.

## **Nature protection in the Danube region**

The focus of projects in foreign countries in the range of nature protection lies in the Danube area. In the year 2006 two projects were funded that deal with an area development in accordance with nature protection in the southern Carpathian regions of Romania in Transylvania.

The aim of the project by the office GbR Schumacher + Hermann for garden art and landscape architecture is to find out what kind of activities already exist in context of nature and environmental protection in the region of Transylvania. On the basis of that survey they want to develop approaches for the conservation of the unique cultural landscape. The historic cultural landscape is endangered by the agrarian structure changes that are accompanied by the accession to the EU. Sustainable strategies of enduring regional development should subtend those circumstances. Several key projects were identified that range from organic farming to sustained tourism right up to extensive concepts for sewerage and peripheral energy supply.

The projects are concretely realised by a close cooperation between the Romanian village Sinca Noua and the village Wulkow, respectively the Ökospeicher e.V Wulkow in Brandenburg. In the year 1994 this incorporated society was awarded the "Deutscher Umweltpreis" for its exemplary, sustainable development based on civil commitment. The purpose of this joint project is the construction and realisation of a concept for a sustainable development that meets also nature protection aspects of the village Sinca Noua. While the Romanian partners in Wulkow focused on the extensive technologies and sustainable landuse and nature protection concepts, the partners from Brandenburg were sensitised to the dominating environmental and nature protection problems in Romania. With success: In 2005 Sinca Noua was awarded 'European Village' (SAT European) by the EU.

Both projects were able to set standards for the inner European dialogue. Important and new approaches for a sustainable development in Transylvania were identified that have an elementary contribution to the conservation of the historic cultural landscapes as well as to the conservation of the biodiversity in Southeast Europe.

## **Environmental Communication**

During the last years the European Union has been expanded by several states. This motivated the DBU - after a summer academy 2005 with the topic 'Environmental cooperation in the EU' - to revise their guidelines for international support.

## **International fields of support**

The DBU will further concentrate on the EU-accession countries from Central and Eastern Europe. Within these countries it sets priorities in regions that are characterised by reliability and commitment. These 'Isles of success' will have geographically and time limited priorities.

Contentwise it is a special concern of the DBU to back projects that strengthen the construction of a civil society. A main component in the international support programme of the DBU is the connection of the international promotion with the international scholarship programme.

The main basis for the international work are the DBU guidelines. The priority programmes like environmental engineering and research, nature protection and environmental communication, with nine different fields of support, define the scope and formulate the criteria for support.

To improve the strategies of funding for Central and Eastern Europe the DBU will proceed regular evaluations of its support programme. In order to contact reference persons from abroad more easily the public relations of the foundation will increasingly publish material in the English language. Moreover the basic guidelines for international activities are published in the internet in the most important national languages. More information is available on [www.dbu.de](http://www.dbu.de) in the domain 'International'.

## **Environmental education and nature experience**

The acceptance of nature protection within the population is of significant importance for the successful realisation of protective activities. Therefore the identity of humans in relation to nature and the different perceptions of nature have to be borne in mind during the development of communication concepts.

We are living at a time when the population in total has a rather low environmental awareness and the youth is characterised by a high degree of nature alienation. To achieve the acceptance for nature protection activities it is important to deal with questions of how to increase environmental awareness and how to introduce children and adolescents to nature. Environmental education and education for sustainable development has a great impact.

Near-natural spaces in reserves or public places have an important function. They can be key possibilities for groups from schools and societies to experience nature. First hand ecological knowledge and biodiversity can be imparted to the students. The value of nature cannot be imparted in a better classroom than in nature itself. Children and adolescents do not only learn about the usefulness of nature but also about the necessity to protect this nature for her own sake. Not least, fascinating nature experiences can cause positive emotional bonds.

The DBU will support projects that develop innovative projects concerned with antagonising nature alienation. Especially children and adolescents with a socially weak background are the ones to be addressed.

## Project Examples

### Environmental technology

[Partition wall – Flexible and ecological](#)  
[Keep cool – with solar energy](#)

### Environmental research and nature conservation

[The DBU scholarship programme for doctorates](#)  
[InnovationsCentrum Biokatalyse – a network for biocatalysis](#)  
[BiocatCollection makes enzyme diversity available](#)  
[Screening under production conditions](#)  
[Ecological synthesis of new chiral building blocks for antibiotics](#)  
[Ecological cleaners for the offset printing](#)  
[Ionic liquids – smart solutions for the future](#)  
[Sustainable elements from re-growing raw materials](#)  
[Reducing Verticillium Wilt on strawberries](#)  
[Education for sustainable regional development in Poland](#)  
[Local recreation area »Sudety« – a place for environmental education](#)

### Environmental communication and cultural assets

[Forming alliances – protecting natural heritage](#)  
[Environmental marketing in the trade](#)  
[MIMONA – Motivation for sustainability](#)  
[Making sheltered workshops competitive](#)  
[Scientifically experimenting in a nursery school](#)  
[Ecologically oriented student companies](#)  
[Learn to love the own environment again](#)  
[Africa in the primary school](#)  
[Good-Practice-Agency »Sustainability at work«](#)  
[Innovative procedures protecting World Heritage](#)  
[»denkmal aktiv« – Cultural heritage catches on](#)  
[Memorial in mind](#)

## The German Environmental Award 2006

The German Environmental Award is the most important national award of its kind and of overall international esteem. The DBU receives about 100 proposals on possible candidates from empowered organisations. The recommendations cover a wide spectrum that range from the disciplines of nature protection to environmental technology and communication right to the protection of cultural goods.

With the German Environmental Award commitments and achievements that contribute to the protection of the environment are awarded and brought close to a wide public. As with the DBU support programmes, especially small and medium sized enterprises are welcome as candidates. Central criteria that characterise the idea of the award are innovation, model character and environment relief.

The Managing Director of the Max Planck Institute for Biogeochemistry in Jena, Prof. Dr. Ernst-Detlef Schulze, was awarded for his research on the reasons for global warming. The results of his fundamental research are the basis for international political discussions on climate. The Max Planck Institute for Biogeochemistry is among the worldwide leading institutes in this field.

The medium- sized entrepreneur Hans G. Hubert was awarded for his commitment to develop high qualitative and solid technologies for water processing and waste water treatment for developing and emerging countries that he successfully distributed there. As a visionary entrepreneur Hans G. Hubert searches for technical solutions to the urgent worldwide water problems. In that process, sewage is considered as potential resource for recycling and as valuable item.

## **International activities**

The 'Deutsche Bundesstiftung Umwelt' is considered to be to worldwide largest environmental foundation. In this prominent role the foundation is a demanded partner for information exchange and know-how transfer on an international level. The Deutsche Bundesstiftung Umwelt receives requests for projects, information and imparting of experiences and advice from allover the world. Next to those from European states, particularly from Middle- and East Europe, a number of requests from non-European countries, like Africa, the Middle East, Middle and South America and Asia reach the DBU.

Next to connections of several international foundations the enduring cooperation with different global active foundations were intensified. For example the cooperation with UNESCO, the World Conservation Union (IUCN) or, in Germany, with the 'Kreditanstalt für Wiederaufbau' (KfW banking group).

A project that was finished in Central and East Europe is the 'Building of an information centre for ecological- and cultural tourism for the development of rural a region in Lower Silesia' in Poland. Other projects finished for Poland are the 'Local Agenda 21 in the Voivodships in Lower Silesia and Podlaski' by the European Nature Heritage Fund as well as a Polish-German qualification programme for the integration of nature protection and the preservation of cultural landscapes by the 'Stiftung Fürst-Pückler-Park Bad Muskau'.

In the Czech Republic two environmental projects were finished with success. One of them was the 'German-Czech net of ecoschools' by the Christlich-Sozialen Bildungswerk Sachsen e.V. that combines the realisation of local environmental protection activities with scholastic curricula. The other project was called 'Urban children- environment and nature' initiated by the nature protection centre 'Oberlausitzer Bergland e.V.'. This project was about imparting sustainable knowledge about environment and nature protection to children in Prague of pre- and school age that had no connection to this topic before.

In the Baltic States several projects were as well successfully finished in the year 2006. Amongst others these were the construction of a competence centre for renewable energy and climate protection Lithuania by gertec GmbH, a distance learning course for environmental protection and sustainable area development in Latvia for new administration employees in environmental offices supported by the University of Lüneburg or the development of an environment exhibition in the nationalpark Lahemaa in Estonia by the europarc consulting GmbH. In the Kaliningrad region several different international symposia about environment were held. Moreover concrete realisations of projects like the building of constructed wetlands in the Kaliningrad region were developed, supported

by the 'Baucompanie GmbH & Co. KG'. This project will have positive consequences on the whole of Russia when proceeding successfully.

The incorporation of South East European states in the international support programme of the DBU is reflected in the completion of projects like the development of an information centre in the nationalpark Kornati in Croatia with the help of the 'Biologische Station Ravensberg e.V.' or the development of a concept for the reconstruction of damaged churches in Transylvania/Romania by the ProDenkmal GmbH.

A number of projects were collaborations in several Central and Eastern European states. For example the construction of the transnational 'International Dialogue Centre Environment and Development' in Lithuania, Romania, Bulgaria, Poland and Slovakia by the Environmental Institute IWU e.V..

In addition to Europe, three projects were finished in Mali, Japan and Turkey.

## **Bellagio Forum**

Since 1996 the Deutsche Bundesstiftung Umwelt has been active in the Bellagio Forum for Sustainable Development. This is an international network of 25 foundations and organizations from Europe, Latin America and the USA. The aim of the Bellagio Forum is to support the activities of member organizations by the exchange of know-how and to compile concrete projects in the range of sustainable development, to ensure their financing and to coordinate the realisation by the cooperation of several support institutions. The Forum draws its members from foundations, businesses, scientific research institutes as well as non-governmental organizations and the United Nations. These partners include prestigious international organizations like the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Business Council for Sustainable Development or the World Bank. The current office of the Bellagio Forum can be found on the premises of the DBU.

Membership is open to promoting organizations that are committed to nature protection. These partners already include: the Deutsche Bank foundation, Frankfurt; the Pasteur Institute, Paris; the Foundation Luso-Americana, Lisbon; the World Conservation Union (IUCN), Gland; the Avina Foundation, London; the Regional Environmental Center for Central and Eastern Europe, Budapest; or Calvert Investments, Washington.

One of the outstanding projects supported by the DBU is the 'plant oil stove' created for developing countries. This lowtech product is strongly demanded and will be distributed by the Bosch und Siemens Hausgeräte GmbH. Another project is the Primer for Responsible Investment Management of Endowments (PRIME), a guide for sustainable investments of foundations. Both projects made great progress in the reporting year.

## **DBU - Founding and task**

In July 1990, the German Bundestag passed a law stipulating to use the proceeds from privatising the state-owned steel group Salzgitter AG to establish a German environmental foundation named Deutsche Bundesstiftung Umwelt DBU. The amount of € 1,288,007,300 served as foundation capital, its annual interest yield is used for the supporting activities.

The DBU is a foundation with legal capacity according to civil law. The statutes defines structure, tasks of the different functional areas, procedure and capital management. Board of the foundation is the committee. The secretary-general is responsible for the implementation of the foundation's tasks.

With the committee's constituting session in December 1990, the foundation took up the legal task to promote projects for the protection of the environment under particular consideration of small- and medium sized enterprises. These promotional activities are beyond state programmes but can supplement these. The foundation can take donations.

## **Fields of support**

The DBU guidelines are divided into the following nine fields of support:

### **I. Environmental Technology**

#### **Field of support 1: Ecological and health-friendly procedures and products**

1. Ecological and health-friendly products
2. Ecological and health-friendly procedures

#### **Field of support 2: Climate protection and energy**

1. Climate protection
2. Energy efficiency and renewable energies

#### **Field of support 3: Architecture and building and construction**

1. Integral planning and land protection
2. Resource-saving building methods and products

### **II. Environmental research and nature conservation**

#### **Field of support 4: Applied environmental research**

1. Scholarship programme
2. Sustainable chemistry - procedures and products
3. Biotechnological procedures and products

#### **Field of support 5: Ecological land use**

1. Agricultural procedures and produce
2. Sustainable forest use
3. Re-growing raw materials

#### **Field of support 6: Nature conservation**

1. Nature conservation in cultivated landscapes
2. Regeneration of degraded habitats
3. Nature conservation in populated areas
4. Nature conservation in natural landscapes and protectorates

### **III. Environmental communication and protection of cultural assets**

#### **Field of support 7: Communication of environmental information**

1. Methods and instruments
2. Testing and use of new media formats
3. Electronic media
4. Eco-management systems for small and medium-sized enterprises

#### **Field of support 8: Environmental education**

1. Interdisciplinary exchange and communication of knowledge about environment and nature
2. Education for sustainability
3. Professional environmental education and environmental consulting

#### **Field of support 9: Environment and cultural assets**

1. Protection of cultural assets under environmental aspects
2. Protection of historic cultural landscapes and nationally important gardens
3. Co-operation in protection of cultural assets and nature conservation

#### **Application and procedures**

Natural persons and legal entities are legitimated to apply for financial backing which is made in form of a purpose-specific non-repayable subsidy. The applicant has to produce his own project share. Due to project and applicant the subsidy can be granted in different heights. In well-founded exceptions, the support can be granted as purpose-specific loan or security.

The formless application must contain the following details:

- Recipient of financial backing
- Subject and objective of the project
- State of knowledge/technology
- Anticipated costs of the project
- Type of financing
- Financial plan
- Type and scope of implementation
- Beginning and term of the project
- Continuation of the project
- Identical or partially identical applications submitted to other institutions

A short project outline is necessary to allow an initial assessment. If it meets the criteria of support, the DBU recommends to submit a detailed application.

The following criteria are of central importance:

➤ **Innovation**

The project must clearly exceed the present state-of-art in research and technology.

➤ **Model character**

The innovation should be interesting for a wide range of applications and should be able to be implemented under market economy conditions within a brief timescale.

➤ **Environmental relief**

With the innovation, new, complementary environmental relief potentials should be opened up.

The DBU departments examine the project outlines and applications. Keeping regular contact with the applicants, they ask for necessary complementary statements and for comments of third parties and expert's reports.

The office summarises application, assessment results and an own statement in form of a presentation on which the committee or the secretary-general decide.

## **THE COMMITTEE**

Head of the DBU is a committee, whose 14 members are appointed by the Federal Government. You find the committee's current members on [www.dbu.de](http://www.dbu.de).

## **THE SECRETARY-GENERAL AND THE OFFICE**

In its current business, the committee is represented by the secretary-general, who is responsible for the implementation of the foundation's tasks. He runs the DBU office in Osnabrück.