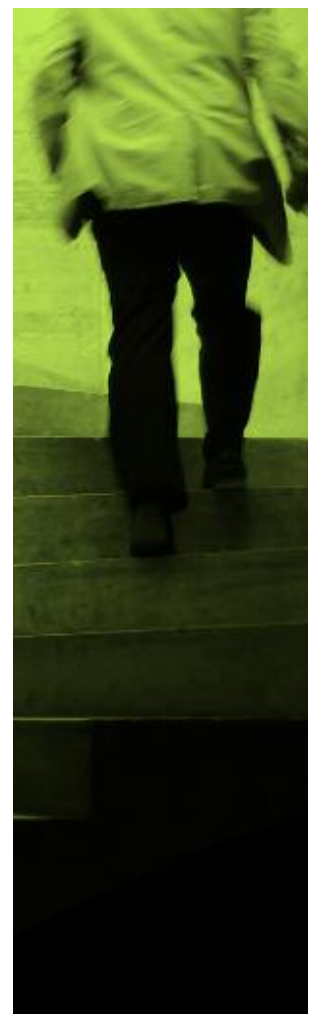


2007 in review

Milestones and products



Dates and Facts about the Institute

Staff The institute employs more than 120 staff, including 80 researchers.

Turnover Our turnover for 2007 was approximately 8.5 million euro. The Institute is financed through project work, alongside membership fees and donations.

Projects Our scientists complete a good 100 national and international projects every year.

Issues Chemicals management and technology assessment, Energy and climate, Emission and ambient pollution control, radiation protection, Agriculture and biodiversity, Sustainable solutions for consumption, mobility, resource management and companies, Nuclear engineering and facility safety, Law, policy and governance

Methods We have a broad transdisciplinary repertoire of methods. These include life-cycle assessments and cost analyses of products from cradle to grave, along with eco-efficiency analyses that integrate consideration of environmental impacts and costs. Environmental impact assessments, safety and risk analyses, studying materials flows, developing scenarios and organizing dialogue processes are also a firm component of our work.

Members The Öko-Institut is a non-profit organization with some 3000 members, including 40 municipalities.

Organization Öko-Institut is headed by an Executive Board elected on an honorary basis. The Executive Board delegates key tasks to the Director and Deputy Directors and the management team. The Advisory Board provides guidance to the Institute on scientific and societal issues.

The Institute's Divisions

The Institute's research work is organized in the following Divisions:

- Energy & Climate Protection Division
- Nuclear Engineering & Facility Safety Division
- Infrastructure & Enterprises Division
- Sustainable Products & Material Flows Division
- Environmental Law & Governance Division



Öko-Institut is a leading European research and consultancy institution working for a sustainable future. Ever since the Institute was founded in 1977, it has striven to build the foundations and forge the strategies needed to make sustainable development happen at all levels – global, national and local.

The Institute generates value-driven, research-based advice for decision-makers in politics, industry and civil society. Öko-Institut has offices in Freiburg, Darmstadt and Berlin.

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2007 in review

Milestones and products



More and more
companies
are measuring
their "ecological
footprint".

Dear reader,

2007 was a special year for the Öko-Institut: On the occasion of the institute's 30-year anniversary, the praise heaped on us from very many sides was truly overwhelming. The President of the Federal Republic of Germany declared us a "Landmark in the Land of Ideas". As in previous years, we worked successfully on more than 100 projects. One noteworthy example is the EU-funded research project titled "Rhetoric and Realities – Analysing Corporate Social Responsibility in Europe". Put very briefly, its findings are: CSR can indeed exert environmental and social effects if, for example, the product portfolio is aligned accordingly. Such decisions can scarcely be influenced by classic command-and-control law. At the same time, however, major insufficiencies remain in terms of in-company recognition of the actual impacts of CSR measures, and CSR is no substitute for the mandatory regulation of limit values.

Importantly, we received contracts for follow-on projects in key issue areas. For instance, the German Federal Environmental Foundation DBU will now fund our Eco-TopTen consumer information campaign to September 2010. And the best ideas of the Green Goal environmental action plan which we produced for the Football World Cup in Germany will now also be applied to the 2010 World Cup in South Africa.

Our efforts have been successful indeed. Yet we are far from leaning back and taking a rest. Quite on the contrary. The limits to growth are approaching fast – faced with the increasing scarcity and escalating price of mineral oil and many other key resources, questions of energy and resource efficiency will certainly be an even more important part of our work. Those questions are set to become an ongoing, major concern, increasingly negotiated at the highest political levels. The Öko-Institut is contributing here to the elaboration of environmental and social standards for recy-

cling operations in newly industrializing and developing countries, and is helping to draft international standards for the sustainable use of biomass.

A growing number of companies is viewing climate and resource issues as a key challenge and, at the same time, as a fresh opportunity. This is a welcome development. "Carbon footprinting" is currently a very dynamic field, delivering a basis for effective measures to reduce greenhouse gas potential and engage in communication with markets and consumers. The Öko-Institut is urging internationally harmonized standards.

Yet, in 2007, climate protection was not only a key concern of industry, but was also high on the agenda of policymakers and the media: Under the German EU Council Presidency, the European Union agreed emission targets for 2020. The IPCC produced its Fourth Assessment Report underscoring the urgent need to act, and was awarded the Nobel Peace Prize for its work. Even the US President made first small commitments in that year. Finally, in December, the international community agreed in Bali to negotiate a post-2012 climate regime within two years.

It is precisely because of these successes that we must now make every effort to ensure that there is no backtracking on the goals achieved last year. Binding rules must now be established and tangible measures taken at all levels. This gets difficult as soon as things get concrete, as evidenced clearly by the debate within the EU on the reduction of CO₂ emissions from cars. Policymakers – and all other stakeholders – now need to measure up to their own standards if the goals they have set are to be achieved. We at the Öko-Institut will continue to contribute to this process and trust in your continued support.

Yours



Helmfried Meinel (left) is a member and spokesperson of the Executive Board. Dr. Joachim Lohse is Director of the Institute.

Milestones in 2007

Highlights of the Institute's work

January
01

A major legal review of the statutory framework and need and opportunities for further regulation at European and national level in relation to nanotechnologies is concluded on behalf of the German Federal Environment Agency UBA. Performed by Öko-Institut scientists in cooperation with the Society for Institutional Analysis (sofia), this was the first study to examine whether the applicable body of environmental law in Germany addresses the specific issues raised by nanomaterials. The study analysed regulatory gaps and elaborated proposals for statutory changes which were then taken up in expert debate on the adaptation of European chemicals law and other acts of legislation concerned with specific environmental media – at national and European level.

March
03

In Brussels, more than 120 delegates from 25 countries take part in the **final conference** of the project funded by the European Commission on "A European Tracking System for Electricity (E-TRACK)". Coordinated by the Öko-Institut, the project had explored ways to make the origin of electricity in the European energy market more transparent and how to protect consumers against double accounting of green electricity. Experts discussed at the conference how to make electricity accounting by traders more reliable and how to better coordinate national rules on electricity disclosure.



April
04

In Rome, 50 experts from around the world meet for a Technical Consultation on **"Food Security and Biofuels"** to debate the issues surrounding sustainable biofuel production. These issues include competition with food and feed production for land and resources and nature conservation impacts. The Öko-Institut plays a prominent role with two technical presentations. Since then, the institute has continued to be involved by FAO in follow-up events. This has led to a research project on "Bioenergy Environmental Impact Analysis".

June
06

Some 300 policymakers, academics and industrialists join the Öko-Institut to celebrate its **30th anniversary**. The 2007 Annual Conference takes as its motto: "Inspiring a sustainable future!". An address by Professor Dr. Klaus Töpfer, welcoming words by Member of European Parliament Rebecca Harms, together with rounds of talks, a panel debate and an interactive forum, give much food for thought.

Working together with the Society for Reactor Safety GRS and the Physikerbüro Bremen consultancy, the Öko-Institut presents to the German Environment Ministry a systematic comparison of safety systems at the **Biblis A and Emsland nuclear power plants**. The ministry had commissioned the expertise after the RWE plant operator had applied for a transferral of part of the electricity production quota from its Emsland plant to the older Biblis A nuclear power plant.

July
07

In a new position paper, the Öko-Institut recommends weighing the opportunities and risks of **nanotechnologies** on a case-by-case basis.

August
08

The site selection procedure for a **nuclear waste repository** in Germany continues to be unresolved. What is clear, however, is that measures designed to involve stakeholders and the public will need to play a key role. Acting on behalf of the German Federal Office for Radiation Protection BfS, the Öko-Institut produces a strategy for the design of public participation in the German repository site selection procedure.

September
09

German Environment Minister Sigmar Gabriel and Dr. Thomas Bach, president of the German Olympic Sports Federation, present the **"Green Champions" guide** on how to organize major sporting events with minimum environmental impact. The Öko-Institut developed the guide in cooperation with the German Sport University in Cologne.

Following two years of negotiations, the "anti-noise package" of the **Frankfurt Airport** Regional Dialogue Forum is finalized. With mediation and scientific input provided by the Öko-Institut, the dialogue process between local residents and the aviation industry – which continues to be difficult – has led to a package of measures which, notably, shall mean that further expansion of the airport is accompanied by additional noise control measures. These are due to start taking effect in 2008.

October
10

The **EcoTopTen** consumer information campaign initiated by the Öko-Institut is now due to run for a further three years until September 2010. The German Federal Environmental Foundation DBU has provided funding for that purpose totalling EUR 220,000.

A transformer fire in the **Krümmel nuclear power plant** with a subsequent reactor scram had turned the spotlight on key aspects of safety management. Acting on behalf of the ministry of social affairs of the German Land of Schleswig-Holstein, which is the competent regulatory authority for the plant, the Öko-Institut presents a first report setting out fundamental criteria for assessment of the issues surrounding communication, organization and ergonomics in the context of the event.

The German Federal President bestows on the Öko-Institut the title of **"Landmark in the Land of Ideas"**. The institute celebrates this together with some 60 guests, friends and members, and showcases selected ideas in presentations.

November
11

How can **freight transport be designed** with less environmental impact while at the same time becoming more economically viable? Which innovations are conceivable? With funding from the German Environment Ministry, a new study by the Öko-Institut, produced together with Dortmund University's department of transport systems and logistics and the Fraunhofer Institute for Material Flow and Logistics, explores and answers these questions in depth.

A portrait of Martin Möller, a man with short hair and a slight smile, wearing a black t-shirt. He has his arms crossed and is wearing a ring on his left hand. The background is a plain, light-colored wall.

My 2007

“For me, the overriding theme in 2007 was the intense exploration of the world of all things very small. With our projects designed to assess the opportunities and risks of nanotechnologies, we help to ensure, early on during the development process, that the ever more numerous applications are safe and their potential for sustainable development are fully exploited. An unprejudiced and case-by-case approach is particularly important to us in this work.”

Martin Möller, 34, staff researcher with the institute's Sustainable Products & Material Flows Division, joined the Freiburg office of the Öko-Institut six years ago. His work concentrates on conducting assessments during technology development processes.

“CONANO” dialogue project explores nano-delivery systems

Chemicals management and technology assessment

First comparative risk-benefit analysis of degradable and non-degradable nano-delivery systems in cosmetic and medical applications

Contact:

Martin Möller
m.moeller@oeko.de

Institut's Division:

Sustainable Products
& Material Flows

Clients:

Ciba Specialty Chemicals
Novartis International

Cooperations partners:

Österreichisches Ökologie-Institut, Vienna
Stiftung Risiko-Dialog, St. Gallen

Timescale:

To December 2007

Nano-delivery systems serve in medicine and cosmetics to improve the bioavailability of active agents that are poorly soluble in water. Moreover, they can provide a targeted transport of active agents to certain cells or organs, and a controlled delivery. Some nano-delivery systems, however, pose new risks to human health and the environment.

In order to perform an integrated assessment of the opportunities and risks presented by degradable and non-degradable nano-delivery systems, the Öko-Institut subjected these to a comprehensive analysis in cooperation with a group of partners. Throughout the various stages of their life cycles, the products were reviewed as to exposures and potential hazards, utility aspects were gauged using life-cycle assessment techniques, and external risk perceptions studied. The project partners came to the unanimous conclusion that cosmetic and medical applications should at present abstain from using non-degradable nano-transporters such as

fullerenes and carbon nanotubes – this is a major outcome of the research and dialogue project. This agreement was reached in light of the substantial knowledge gaps relating to the behaviour of nano-transporters in terms of both human toxicology and ecotoxicology. Ciba and Novartis are now concentrating instead on degradable nano-delivery systems which, in the cases under review, are rated as presenting no concern. Above and beyond the substantive outcomes, all project participants found the great openness and atmosphere of trust in the dialogue group particularly rewarding. CONANO has thus developed a pathbreaking approach towards stakeholder involvement for the case-specific and in-process opportunity-risk analysis of nanotechnological developments.

Download:

<http://www.oeko.de/oekodoc/673/2007-181-de.pdf>



Degradable nano-carrier with active agent.

Öko-Institut calls for improved monitoring of CDM projects

Energy und climate

Is the CDM fulfilling its environmental and sustainable development objectives? An evaluation of the CDM and options for improvement

Contact:

Lambert Schneider
l.schneider@oeko.de

Institut's Division:

Energy & Climate Protection

Client:

WWF

Timescale:

June to November 2007

The Clean Development Mechanism (CDM) allows companies and states to sponsor climate protection projects in developing and newly industrializing countries and thereby to offset their emissions at home. Projects sponsored in this way must meet two key criteria. Firstly, they must really achieve greenhouse gas emissions reductions that would not have been realized without the CDM, and, secondly, the projects must make a contribution to sustainable development. The sustainability criteria are defined by the host country in question, and then checked by certification companies.

A study performed by the Öko-Institut for the WWF has now revealed that these checks are often flawed. Scientists at the Öko-Institut have confirmed that a whole array of the internationally agreed criteria applicable to CDM projects are not met. This is due above all to the certification institutes, who do not take their checks seriously enough. Moreover, some projects con-

tribute little to sustainable development, despite unequivocal project approval criteria.

In order to preclude these insufficiencies in the future, the study makes a raft of proposals for CDM reform. The certification institutes must have clear criteria governing their checks, and must be subject to sanctions if their work does not meet the standards. Furthermore, in order to assure their independence, they should be paid by the UN and not by their clients. A further key element is to introduce objective criteria against which to assess whether the projects are carried out because of the CDM incentives and would not have been implemented in any case.


Download:

<http://www.oeko.de/oekodoc/622/2007-162-en.pdf>



A solar cooker project helps to safeguard people's livelihoods in Madagascar and to preserve the country's unique biodiversity.

“Bioenergy is an opportunity for rural regions to underpin and boost their economies. This, however, only works if all stakeholders act in concert. Rejection often results from a lack of information and transparency, and from a failure to contact stakeholders. Communication and participation are therefore key to removing barriers and creating acceptance.”

A portrait of Katja Hünecke, a woman with dark hair tied back, wearing a bright red blazer over a white top. She is looking slightly to the right of the camera with a gentle smile. The background is a plain, light grey.

Katja Hünecke, 32, is a staff researcher with the institute's Energy & Climate Protection Division at the Darmstadt office. Her work concentrates on bioenergy, at both regional and international level, especially the economic and social issues.

Environmental impact assessments in Jülich

Chemicals management and technology assessment

Three EIAs and Habitats Directive assessments for three permitting procedures

Contact:

Christian Küppers
c.kueppers@oeko.de

Institute's Division:

Nuclear Engineering & Facility Safety

Clients:

Ministerium für Wirtschaft,
Mittelstand und Energie des Landes
Nordrhein-Westfalen
Bezirksregierung Köln

Timescale:

July 2005 to June 2008
July 2006 to December 2008
February 2008 to December 2008

At the Jülich research centre – formerly the Jülich nuclear research facility – all experimental and pilot reactors have by now been shut down. The state authorities have commissioned the Öko-Institut to conduct the assessment of impacts in relation to the European Union Habitats Directive and a regular environmental impact assessment (EIA) in the context of three ongoing permitting procedures.

Previously, in mid-2005, the North-Rhine/Westphalian ministry for SMEs, industry and energy had commissioned the Öko-Institut to produce a study on the decommissioning of the AVR pilot reactor at the site. The AVR, a pebble-bed reactor with 15 MW electric capacity, operated from 1967 to 1988. Due to leakages, the soil is radioactively contaminated and must be removed in part before a "green field" site can emerge. The study formulated criteria for noise protection, for the abatement of airborne pollutant emissions, and for the storage of excavated soil material.

Because of damage to the pebble fuel elements of the AVR, the nuclear fuel cannot be removed completely from the reactor vessel. This will be filled with concrete and lifted completely – with a mass of then some 2000 tonnes – from the reactor building, loaded onto a freight vehicle, and brought to an interim repository to be built nearby, in order that the radioactivity can decay for several decades prior to dismantling. The Öko-Institut has been conducting an EIA and an assessment of Habitats Directive impacts on behalf of the Cologne district commissioner since July 2006. Work is expected to conclude in 2008.

The DIDO experimental reactor, operated from 1963 to 2006 with a thermal capacity of 23 MW, is the last reactor decommissioning project in Jülich. Here, too, the Öko-Institut has been working as a consultant for the ministry since early 2008.



The AVR pilot reactor with the "material sluice" attached to the reactor building, where the reactor vessel is to be lifted out, tipped and loaded onto a freight vehicle.

Bioenergy needs acceptance

Energy and Climate

Optimizing the sustainable development of biogas production and use in Germany

in cooperation with IFEU Heidelberg, IE Leipzig and two other partners

Cultural influences on Renewable Energy Acceptance and Tools for the development of communication strategies to promote ACCEPTANCE among key actor groups (Create Acceptance)

in cooperation with ECN and nine other partners

Contact:

Dr. Bettina Brohmann
b.brohmann@oeko.de

Institute's Division:
Energy & Climate Protection

Clients:

European Commission
German Environment Ministry
Naturschutz und Reaktorsicherheit

Timescale:

2006 to 2008

The further spread of renewable energies – and specifically the use of biomass – needs, in addition to political resolve and the technological-infrastructural setting, also the willingness of investors, operators, local residents and the wider public to participate in such an expansion process.

The Öko-Institut is researching, in two social-science studies at national and European level, how such participation can proceed and which barriers it must overcome.

The EU-funded "Create Acceptance" project carried out with a number of other partners is developing a management tool for the timely involvement of stakeholders in investment projects relating to renewables. The tool is being tested in practice together with partners in six pilot regions in Europe and South Africa, and will be available free of charge from 2008. For Germany, the "Jühnde bioenergy village" took part in the pilot development process.

Jühnde shows – and here there is a link to the national programme of the German Environment Ministry – which framework conditions can promote a successful implementation of biogas technology: Beside dependable costing and appropriate technology, important aspects are that the local residents are themselves energy entrepreneurs through their membership in a cooperative and that they identify with their own sustainable biogas installation. Technical know-how, personal commitment of those responsible and an information policy on the part of intermediaries characterized by an atmosphere of trust are the keys to a high level of regional and suprarregional acceptance.

Download:

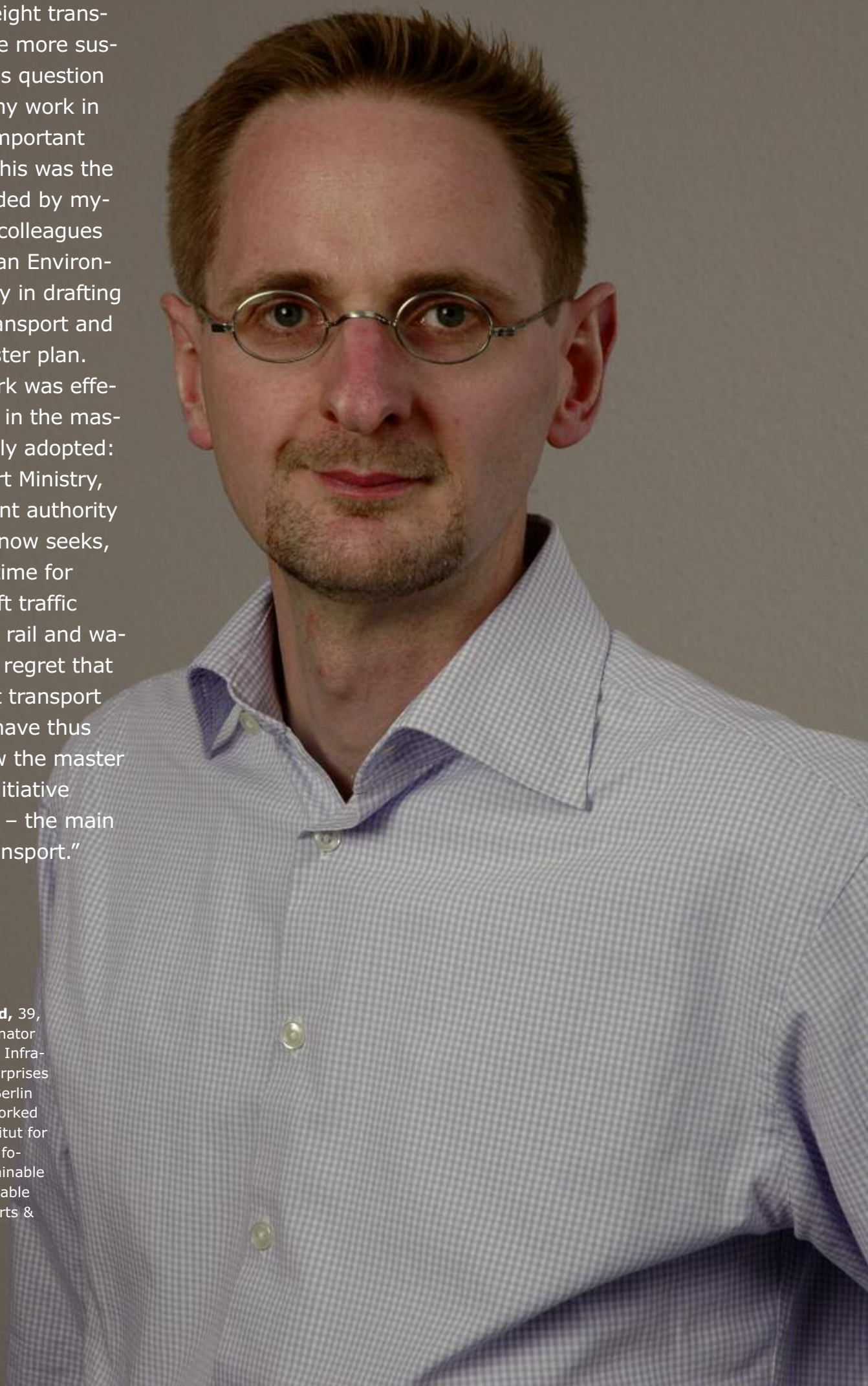
<http://www.createacceptance.net>
<http://www.esteem-tool.eu>
<http://www.ifeu.org>



Jühnde, the bioenergy village – an exemplar of bioenergy development

“How can freight transport be made more sustainable? This question dominated my work in 2007. One important example of this was the advice provided by myself and my colleagues to the German Environment Ministry in drafting its freight transport and logistics master plan. That this work was effective is clear in the master plan finally adopted: The Transport Ministry, the competent authority in this field, now seeks, for the first time for years, to shift traffic from road to rail and waterways. We regret that many freight transport federations have thus come to view the master plan as an initiative against road – the main means of transport.”

Martin Schmied, 39, is deputy coordinator of the institute's Infrastructure & Enterprises Division at the Berlin office. He has worked for the Öko-Institut for nine years now, focussing on sustainable mobility, sustainable tourism and sports & environment.



EcoTopTen consumer information campaign to continue

Nachhaltiger Konsum

EcoTopTen

Contact:

Dr. Dietlinde Quack
d.quack@oeko.de

Institute's Division:

Sustainable Products & Material Flows

Client:

Deutsche Bundesstiftung Umwelt

Cooperation partners:

DNR, BUND, B.A.U.M., DUH

Timescale:

2007 to September 2010

The EcoTopTen consumer information campaign initiated by the Öko-Institut will now run for a further three years. The German Federal Environmental Foundation DBU is contributing funding for EcoTopTen within the context of the integrated project "Energy efficiency – now! For households and companies". Until September 2010, the Öko-Institut's experts will produce 20 market surveys of recommendable products at regular intervals. The selected products are not only good for the environment, but also have high quality and give good value for money.

Dr. Dietlinde Quack, new EcoTopTen project head, underscores the excellent uptake by consumers and the growing interest on the part of manufacturers. The EcoTopTen campaign has been running since March 2005, since when it has published recommendations in ten product fields. These range from household appli-

ances over cars, bicycles and green electricity to sustainable investments and prefabricated houses.

The latest edition to the TV & Co. section is an interactive online decision support tool. An energy and cost calculator provided there is designed to help consumers get a clear picture of the energy consumption of a TV set before they buy it, as these often prove to be veritable power guzzlers. Further new features include an up-to-the-minute survey of the growing compact fluorescent lamp market, and revised facts and figures on wood pellet heating systems and condensing gas boilers. The information on green electricity providers was also recently overhauled.

Download:

<http://www.ecopten.de>

Electric appliances such as TV sets often prove to be veritable power guzzlers. EcoTopTen gives helpful tips for the purchase of energy-efficient equipment.



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Seven starting points for sustainable growth in the logistics sector

Sustainable mobility

Sustainable mobility through innovations in freight transport

Contact:

Martin Schmied
m.schmied@oeko.de

Institute's Division:

Infrastructure & Enterprises

Client:

Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit

Cooperation partners:

Lehrstuhl für Verkehrssysteme und -logistik der Technischen Universität Dortmund

Fraunhofer-Institut für Materialfluss und Logistik

Timescale:

September 2006 to November 2007

With an annual turnover of over 180 billion euro and 2.5 million employees, the logistics branch has the clout to play a major role in greening industrial policy in Germany. For this to happen, though, the sector will need to face the challenges of environmental performance and climate protection. The contribution of freight transport to Germany's overall greenhouse gas emissions may appear small at just 6%. Yet while other sectors have cut their emissions in the past, those of transport, and particularly of freight transport, have continued to rise.

With funding from the German Environment Ministry, a new study by the Öko-Institut, produced together with Dortmund University's department of transport systems and logistics and the Fraunhofer Institute for Material Flow and Logistics, has revealed the contributions freight transport can make in future to cleaner logistics and climate protection. Currently, some 70% of all tonne-kilometres in Germany are

hauled by truck. This presents a clear need for action: Truck transport needs to become more efficient and clean, unnecessary truck transports must be avoided wherever possible, and rail and waterways must participate above-proportionately in future growth.

Moreover, the study identified seven priority fields of action: Improving the environmental performance of the various modes of transport; Making infrastructure fit for sustainable freight transport; Making more efficient use of existing infrastructure; Removing the barriers that impede access to environmentally sound means of transport; Intensifying cooperation; Factoring external costs (externalities) into freight prices; Engaging in pro-active planning.

Download:

<http://www.oeko.de/oekodoc/372/2007-021-de.pdf>

The mid-term goal is to shift freight transport to rail and water.



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"A priority of my work in 2007 was the safety review of nuclear power plants. A number of plant operators have applied to the Environment Ministry for a transferral of their power output quotas from more modern to older plants. On behalf of the ministry, we are working with several partners to produce a safety systems comparison in order to compare and assess the available safety reserves. In addition to developing a suitable methodology, this calls for in-depth analysis of the technical details of the plants."

Dr. Christoph Pistner, 39, is a staff researcher with the institute's Nuclear Engineering & Facility Safety Division at the Darmstadt office. He has been with the institute for three years, working on facility safety and systems analysis, event evaluation, nuclear non-proliferation and terrorism, and the further development of nuclear guidelines and standards.

Sustainable resource management

Contact:

Dr. Matthias Buchert
m.buchert@oeko.de

Institute's Division:

Infrastructure & Enterprises

Cooperation partner:

Umicore Precious Metals Refining

Cell phones take a new turn

Sales of electric and electronic equipment (EEE) – such as cellular phones, MP3 players or flat-panel screens – in ever new configurations are continuing to boom worldwide. This is presenting problems in the extraction of precious metals, and also at the end of the products' lives in recycling. The double-digit annual growth rates, permanent innovation and new equipment types, and major volumes of exports of end-of-life units to newly industrializing and developing countries without suitable recycling structures there present great challenges, but also opportunities for sustainable resource efficiency.

The facts in brief:

- A cellular phone is composed of up to 60 different chemical elements.
- Of the some 400 million cell phones taken out of service worldwide in 2006, only about 10 million were consigned to high-grade metals recovery.
- Worldwide annual sales of cell phones already crossed the one billion mark in 2007.

- The EEE sector consumed in 2007 12% of the world mining output of gold, 14% of the palladium, 30% of the silver and copper, 33% of the tin, 50% of the antimony and, in the case of indium, even accounted for 79%.

This is why the Öko-Institut is urging massive qualitative and quantitative development of the global recycling sector: This means establishing and promoting professional structures in developing and newly industrializing countries, creating appropriate statutory structures and framework conditions, and moving away from environmentally harmful and inefficient backyard recycling, such as in India or China. More efficient recycling of secondary resources in the EEE sector promises major positive environmental effects, technological innovation, macroeconomic benefits and many additional jobs.

Download:

<http://www.oeko.de/oekodoc/600/2007-146-de.pdf>



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Of the some 400 million cell phones taken out of service worldwide in 2006, only about 10 million were consigned to high-grade metals recovery.

Nuclear terrorist threats and radiation protection responses

Nuclear engineering and facility safety

Public communication and measures in relation to irregular (not related to nuclear facilities) nuclear accident management for new forms of threat: precautionary information and response in the event of nuclear terrorism

Contacts:

Dr. Christoph Pistner
c.pistner@oeko.de
Christian Küppers
c.kueppers@oeko.de

Institute's Division:

Nuclear Engineering & Facility Safety

Client:

Bundesamt für Strahlenschutz

Timescale:

August 2005 to September 2007

A consistent and internationally coordinated protection strategy has been developed in the past for nuclear accident management in the vicinity of nuclear facilities. The debate on events with a terrorist purpose, in contrast, only got underway recently. The research project addressed such events with a terrorist purpose that have not yet been covered by past studies, plans and exercises: threats or attacks involving radioactive substances, nuclear material or nuclear weapons.

Working together with the disaster research unit of Kiel University, the institute analysed scenarios of terrorist threat and produced guidance for preventive measures and for rapid, appropriate and comprehensive information within the context of state crisis management. For nuclear accident management to address new forms of threat, it is essential that the radiation protection officer at the

emergency response centre has access to suitable tools. The research project developed, for the nuclear terrorist scenarios examined, material for a guideline for dose estimation and for evaluation of the radiological situation prior to or after a terrorist attack.

Nuclear terrorist attacks present all involved with problems of perception, assessment and psychosocial responses. There is a need to bridge the gap between the actually possible maximum potential for damage and the potential for public fear and concern – the latter is most probably far in excess of the former. This can only be achieved by forms of risk and crisis communication that are launched well in advance, and are precautionary in nature.



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What happens after an attack with radioactive substances? The research project has developed the radiation protection criteria.

My 2007

"For me, 2007 was dominated by the greatest reform of environmental law of the last decades: the German Environmental Code. Our Environmental Code Conference in October 2007 was a milestone in that process. The 200 representatives of NGOs, public administration, industry, policy and academia and high-level speakers delivered important substantive impulses for the code. Throughout the process, we have driven the debate on a progressive Environmental Code forward with our position papers and presentations."

A portrait of Miriam Dross, a woman with dark hair and glasses, wearing a black V-neck top, standing with her arms crossed against a plain grey background.

Miriam Dross, 40, staff researcher at the Environmental Law & Governance Division, Berlin office, has been with the Öko-Institut for six years. Her work concentrates on European and international environmental law.

Carbon footprinting

Sustainable companies

**Product Carbon Footprint
German pilot project**

Contact:

Christian Hochfeld
c.hochfeld@oeko.de

Institute`s Division:
Infrastruktur & Unternehmen

Client:

Unternehmenspartner des Pilotprojekts

Cooperation partners:

WWF, Potsdam Institut für Klimafolgenforschung (PIK), THEMA 1

Timescale:

April 2008 to beginning of 2009

Worldwide climate change is making action to reduce greenhouse gas emissions ever more urgent. Private-sector companies, too, are increasingly engaging in active climate protection. In order to recognize where CO₂ emissions occur and reduce them in a targeted manner, it is important to have uniform international inventory methods and standards. The Öko-Institut is addressing the issues in several projects.

Identifying and labelling low-emission products is essential to facilitate climate-friendly consumption. The Öko-Institut is working on a Product Carbon Footprint (PCF) pilot project together with several partners from industry: DSM, dm Drogeriemarkt, FRoSTA, Henkel, REWE Group, Tchibo, Tengelmann, T-Home and Tetra Pak. The project is identifying the specific CO₂ emissions along the entire value chain for a range of selected prod-

ucts, from resource extraction for manufacture through to final disposal. This delivers product-specific greenhouse gas inventories. The PCF project is furthermore producing guidance on ways to employ methodologies and standards and on how to further develop them and harmonize them internationally.

About 40% of the greenhouse gas emissions of the average German citizen are attributable to food and household consumption. Consumers, however, have hardly any way of recognizing low-emission products as yet. The project outcomes will help consumers take decisions that have a small carbon footprint. First outcomes are anticipated for the end of 2008.



To make purchases with a small carbon footprint it is essential to identify and mark low-emission products.

Öko-Institut sets new Environmental Code on track

Law, policy and governance

Challenging standards, modern law – for a progressive German Environmental Code

Clients:

Miriam Dross
m.dross@oeko.de

Regine Barth
r.barth@oeko.de

Institute`s Division:
Environmental Law & Governance

Clients:

Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit

Cooperation partners:

Deutsche Umwelthilfe
Unabhängiges Institut für Umweltfragen

Timescale:

June 2006 to May 2009

It is an old aim: a uniform German Environmental Code to regulate all environmentally relevant issues. For until now environmental law has been considered fragmented and confusing. This is because it has embraced ever new issues in a purely additive process. The purpose of the German Environmental Code (Umweltgesetzbuch, UGB) will be to consolidate, collate and simplify – without rollback. Attempts to draft such a code have foundered repeatedly. Now, however, the UGB is to be realized within the current legislative period.

In the view of the Öko-Institut, however, this major effort will only make sense if, in addition to the purely juristic work of packaging many individual acts in one code, it also addresses the pressing environmental problems of our times. These include not only climate protection, but also, for example, biodiversity conservation and the minimization of land consumption. A project designed to support the UGB process, headed by the Öko-In-

stitut, has played an important role in guiding expert debate from the outset. As early as February 2007, the project partners – including a non-profit foundation (Deutsche Umwelthilfe) and a further independent institute (Unabhängiges Institut für Umweltfragen) – produced a position paper setting out fundamental criteria for the code. The experts in environmental law analysed the need for reform in key fields such as climate change mitigation, nature conservation and facility permitting law. They presented detailed proposals for a more far-reaching, progressive design of the body of German environmental law, and drafted wording for individual passages. The outcomes of an UGB conference convened in October 2007 delivered valuable input to the legislative process.

In future, a uniform German Environmental Code is to regulate all environmentally relevant issues.



Download:

<http://www.umweltgesetzbuch.org>

Management team

Dr. Joachim Lohse



Michael Sailer



Dr. Matthias Buchert



Carl-Otto Gensch



Dr. Rainer Griebshammer



Christian Hochfeld



Christof Timpe



Boris Hüttmann

Management team

Who to contact at the Öko-Institut

Dr. Joachim Lohse,
Director,
j.lohse@oeko.de,
Phone + 49-761-452 95-14.

Michael Sailer,
Deputy Director (Darmstadt)
and Division Coordinator
Nuclear Engineering
& Plant Safety,
m.sailer@oeko.de,
Phone +49-6151-81 91-20.

Dr. Rainer Griesshammer,
Deputy Director (Freiburg),
r.griesshammer@oeko.de,
Phone +49-761-452 95-50.

Christian Hochfeld,
Deputy Director (Berlin),
c.hochfeld@oeko.de,
Phone +49-30-28 04 86-85.

Dr. Matthias Buchert,
Deputy Director (Darmstadt)
and Division Coordinator
Infrastructure & Enterprises,
m.buchert@oeko.de,
Phone +49-6151-81 91-47.

Christof Timpe,
Division Coordinator
Energy & Climate Protection,
c.timpe@oeko.de,
Phone +49-761-452 95-33.

Carl-Otto Gensch,
Division Coordinator
Sustainable Products
& Material Flows,
c.gensch@oeko.de,
Phone +49-761-452 95-41.

Regine Barth,
Division Coordinator
Environmental Law
& Governance,
r.barth@oeko.de,
Phone +49-6151-81 91-30.

Boris Hüttmann,
Head IT-Management,
b.huettmann@oeko.de,
Phone +49-6151-81 91-26.

Christiane Rathmann,
Head Public Relations
& Communication,
c.rathmann@oeko.de,
Phone +49-761-452 95-22.

Thomas Manz,
Head Finance,
t.manz@oeko.de,
Phone +49-761-452 95-34.



Thomas Manz



Kristiane Rathmann

Executive Board members in 2007

Helmfried Meinel First Spokesperson

is member of the centre's management team and head of the construction, energy, health, environment, care and housing activity areas at the consumer advocacy centre of the German region of North-Rhine/Westphalia.

Anja Köhne Second Spokesperson

works as a freelance policy consultant and is preparing her doctoral thesis on the EU constitution and environment/sustainability issues.

Dr. Wolfgang Brühl

worked as a freelance consultant focusing on business and environmental policy until his retirement and had previously been Chief Economist at Hoechst AG.

Regine Barth

is on the Executive Board of the institute since 2007 as a representative of the coordination team. The lawyer has been Coordinator of the Environmental Law & Governance Division since 2001.

Dr. Joachim Lohse

was appointed Director of Öko-Institut in 2003. He had previously co-founded in 1989 Ökopool, Institute for Environmental Strategies, in Hamburg.

Dorothea Michaelsen-Friedlieb

works as a business consultant for non-profit organizations.

Nicola Moczek

is executive director of the youth wing (BUNDjugend) of Friends of the Earth Germany (Bund für Umwelt und Naturschutz Deutschland, BUND), and works as a freelance environmental psychologist.

Dr. Christoph Pistner

is on the Executive Board as a representative of the Darmstadt staff. He is a researcher in the Nuclear engineering & Facility Safety Division.

Jakob Graichen

is on the Executive Board as a representative of the Berlin staff and works as a researcher in the Energy & Climate Protection Division.

Hanne Tügel

works as an editor at the GEO journal in Hamburg. She had previously held an editorial post with the "Woche" and worked as freelance author for Natur + Kosmos, Greenpeace-Magazin, Stern and GEO.

Franz Untersteller

was elected a member of the Parliament of Baden-Württemberg in March 2006. He had previously been a consultant for environmental and energy policy issues to the Alliance 90/The Greens (Bündnis 90/Die Grünen) parliamentary group in the Parliament of the German regional state of Baden-Württemberg for many years.

Kirsten Wiegmann

is on the Executive Board as a representative of the Darmstadt staff. She works as a researcher in the Energy & Climate Protection Division.

Ralph Harthan

works as a researcher in the Energy & Climate Protection Division and is on the Executive Board as a representative of the Berlin staff.

Advisory Board

Prof. Dr. Armin Bechmann
 Dr. Erhard Eppler
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 Prof. Dr. Peter C. Mayer-Tasch
 Prof. Dr. Eckard Rehbinder
 Dr. Hans-Erich Schött
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References

Selected References

Politics

Austrian Federal Environment Agency, Vienna

Bavarian State Ministry for Regional Development and Environmental Issues

Berlin State Administration for Health, Environment and Consumer Protection

Brandenburg Environment Agency

Brandenburg Ministry of Rural Development, the Environment and Consumer Protection

Bundesanstalt für Landwirtschaft und Ernährung (BLE)

Cologne District Commissioner

Consumer Protection (BMELV)

Deutsche Gesellschaft für technische Zusammenarbeit (German Technical Cooperation – GTZ)

European Commission; Directorate-General for Energy and Transport

European Commission; Directorate-General for Environment

European Commission; Directorate-General for Research

European Commission; Eurostat

European Commission; Joint Research Centre, Sevilla

European Environment Agency (EEA)

Federal Ministry for Food, Agriculture and

Federal Ministry for Health (BMG)

Federal Ministry for the Environment, Nature Conservation and

Federal Ministry of Economics and Technology (BMWi)

Federal Ministry of Education and Research (BMBF)

Federal Office for Radiation Protection (BfS)

German Federal Environment Agency, Berlin

German Federal Environmental Foundation (DBU)

German Federal Railway Authority (EBA)

Hamburg city authority

Hessen Agentur GmbH

Hessian Ministry of the Environment, Rural Development and Consumer Protection

Hessian State Chancellery

Munich city authority

Münster (Westf.) District Commissioner

North-Rhine/Westphalian Ministry of Economics, SMEs and Energy

North-Rhine/Westphalian Ministry of the Environment, Nature Conservation, Agriculture and Consumer Protection

Nuclear Safety (BMU)

Nuremberg city authority

Office of Technology Assessment of the German Parliament (TAB)

Industry

BASF AG

BSH Bosch und Siemens Hausgeräte GmbH

Ciba AG

Daimler AG

Deutsche Telekom AG

dm-drogerie markt

DSM

Electrolux

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Tetra Pak

T-Mobile

T-Home

Triumph International AG

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Unternehmensgruppe Tengelmann

Volkswagen AG

Würth Elektronik GmbH & Co. KG

Wismut GmbH

Society

BUND (Friends of the Earth Germany)

Greenpeace Germany, Switzerland, International

Heinrich Böll Foundation

Legacy for the Future Foundation (Stiftung Zukunftserbe)

Stiftung Warentest consumer protection agency board of trustees

Swiss Federal Institute of Technology Zurich (ETH)

World Wide Fund for Nature (WWF) Germany, Europe

Contact:

Markus Werz

Webmaster
Phone +49-761-452 95-29
m.werz@oeko.de

Contacts:

Christiane Rathmann

Editor in Charge
Phone +49-761-452 95-22
c.rathmann@oeko.de

Katja Kukatz

Editor in Charge
Phone (Tuesday to Thursday)
+49-761-452 95-16
k.kukatz@oeko.de

Contacts:

Prof. Dr. Gerhard Roller
roller@fh-bingen.de

Sylvia Hölz

IESAR FH Bingen
Berlinstrasse 109,
55411 Bingen, Germany
shoelz@fh-bingen.de

Contact at the Öko-Institut:

Miriam Dross

m.dross@oeko.de

Internet

www.oeko.de

Our www.oeko.de site keeps you informed about the latest issues and studies, technical papers and public outreach material. Good navigation and clear page structure make it easy for users to find their way around our extensive offerings. A database allows free download of studies from our individual divisions. In addition, the homepage gives many quicklinks to hot topics.

eco@work

The Öko-Institut uses its eco@work e-zine to keep friends, partners and the interested public abreast of the latest state of environmental research at its three offices in Freiburg, Darmstadt and Berlin. Published quarterly, eco@work reports on selected projects and outcomes from the institute's research divisions.

Members of the Öko-Institut receive a printed version as an exclusive service, but can of course switch to the electronic version if they so wish.



Technical periodicals

ELNI Law Review

www.elni.org

ELNI Review is an international journal for environmental law. This journal is a joint publication by the Society for Institutional Analysis (sofia; hosted by the University of Applied Sciences in Darmstadt), the Institute for Environmental Studies and Applied Research (IESAR; hosted by the Bingen University of Applied Sciences), and Öko-Institut. The review is published in English twice a year.

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For 30 years the Öko-Institut has been a non-profit organization. It is true that our work is financed primarily through project-related contracts and funding from public and private clients. But we still need you as a member. For our members ensure that the institute retains its strong links with society at large; they enable us to continue our crucial sustainability research and to remain financially independent in the long term.

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Questions?

Romy Klupsch will be pleased to help. Phone her: +49-761-45295-24 or e-mail: mitglieder@oeko.de.



Already made your mind up?

A contact form and further information is at

www.oeko.de/mitmachen.

Media watch 2007

The Institute's researchers in the media –
Selected clippings:

Süddeutsche Zeitung,
13. February 2007

"What makes climate protection so difficult is that it forces industry to change tack."

Dr. Felix Ch. Matthes

Der Spiegel,
26. February 2007

"My prediction is that in 15 years there will not be one single nuclear power plant worldwide in addition to the number today."

Michael Sailer

Die Tageszeitung,
14. March 2007

"Consumers are still giving too little thought to energy consumption issues, concentrating on convenience instead."

Dr. Dietlinde Quack

**Frankfurter Allgemeine
Sonntagszeitung,**
10. June 2007

"More and more people are coming to us and are asking which products have the smallest carbon footprint.""

Dr. Rainer Griebhammer

Deutschlandfunk,
29. October 2007

"A good many aspects are very well crafted – and we must remember that it is a great thing that the German Environmental Code is now being drafted at all."

Regine Barth

ARD, Tagesthemen,
29. October 2007

"The Web has in the meantime outstripped global aviation as a contributor to climate change."

Dr. Joachim Lohse

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Institute for applied
Ecology

Edited by:
Christiane Rathmann
(Editor-in-Chief),
Friederike Stoller,
Julia Thiele
Phone:
+49-761-452 95-22,
E-Mail:
redaktion@oeko.de

Layout:
Hannes Osterrieder

Photos:
Öko-Institut e.V.,
Fotolia.com,
Photocase.com

Freiburg Head Office

P.O. Box 50 02 40
D-79028 Freiburg
Merzhauser Strasse 173
D-79100 Freiburg
Phone: +49-761-452 95-0
Fax: +49-761-452 95-88

Darmstadt Office

Rheinstrasse 95
D-64295 Darmstadt
Phone: +49-6151-81 91-0
Fax: +49-6151-81 91-33

Berlin Office

Novalisstrasse 10
D-10115 Berlin
Phone: +49-30-28 04 86-80
Fax: +49-30-28 04 86-88

info@oeko.de
www.oeko.de