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Preface by the Management Board

Published by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

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Printed by Metzger Druck GmbH

Advisory support and production Wolfgang Barina, Kerstin Nauth, Dr Felix Sommer

Photo credits

p. 1: Thormaehlen/GIZ; p. 4: Armin Wagner/GIZ, goruma.de; p. 6 Gert Balzer/ Team Consult; p. 7: GIZ, p. 9: Rainer Kant/B.A.U.M. e.V.; p. 11: Lalit Sharma/ GIZ; p. 12: Leuphana; p. 16: Ellen Gunsilius/GIZ; p. 18: Annegret Range; p. 19: Monika Rammelt/GIZ; p. 20: Stefanie von Heinemann/GIZ, Alvaro Zurita/GIZ; p. 23: Jörn Leonhardt/GIZ, Stefan Mümpfer

Paper 100% recycled paper, EnviroTop

Preface by the Management Board

PREFACE BY THE MANAGEMENT BOARD

Dear reader,

Environmental management and sustainability management have a long tradition at GIZ – an enterprise owned by Germany's federal government – because economic and social responsibility, political participation and, of course, responsibility for the climate and the environment are cornerstones of our international cooperation services for sustainable development. They are also the standard by which we measure ourselves.

We are helped in this by our new Sustainability Office, which has been established this year. This now forms a hub for the many and varied tasks that arise in modern sustainability management. Setting up this office was a logical step, since GIZ has for many years participated voluntarily in a number of corporate sustainability networks. For example, the company has long been part of the world's largest voluntary initiative for promoting sustainability and corporate responsibility, the Global Compact. Last year it also joined the German Environmental Management Association (B.A.U.M.).

Our largest offices, Eschborn, won an award last year in the campaign run by ÖKOPROFIT Frankfurt. Involvement in ÖKOPROFIT not only enabled us to explore the economic and environmental potential of investing in sustainability – it also prepared GIZ for its planned participation in the European Union's Eco-Management and Audit Scheme (EMAS). We are further boosting our environmental performance through our green procurement policy: whether buying office supplies or inviting tenders for services, this policy means that we always seek out suppliers and manufacturers who meet the highest environmental standards. As a result, GIZ won first prize in the Office and Environment competition organised by B.A.U.M.

Climate neutrality remains an important goal, which makes energy efficiency a top priority. We use green electricity wherever possible. Within Germany, members of staff travel by train if they can and, because we participate in the Environment Plus scheme run by Deutsche Bahn (German rail), their rail travel is completely carbon neutral. We offset air travel through a biogas project in Thailand that is registered under the CDM Gold Standard. Wherever possible we use video conferencing and other forms of virtual communication to reduce the number of kilometres driven or flown. All this is part of a comprehensive and innovative mobility strategy.

The principles and goals of environmental management are being gradually taken on board by our country offices around the world. More than half of them now conduct their own environmental audit.

The United Nations have declared 2012 the Year of the Green Economy and the issue has become a key component of many of the projects we carry out on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) and other government departments. This report therefore presents a selection of projects from all over the world in which concern for the environment serves not only to maintain environmental quality but also to boost economic development.

I hope you enjoy reading GIZ's environmental report.

Tanja Gönner Chair of the Management Board



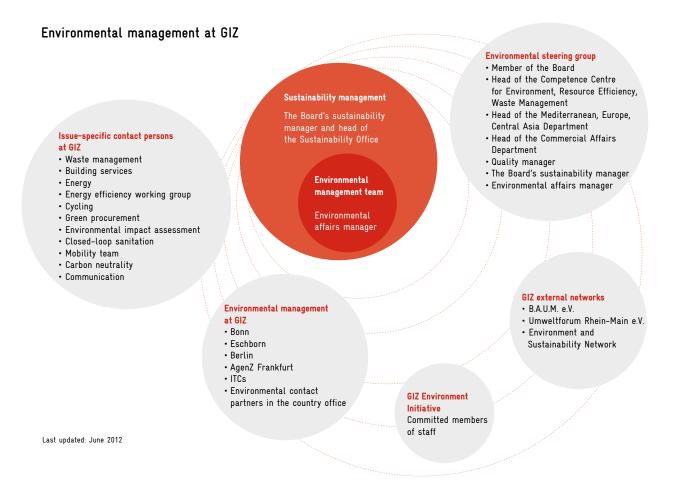
ENVIRONMENTAL MANAGEMENT AND ENVIRONMENTAL POLICY AT GIZ

Environmental management and environmental policy at GIZ

Corporate environmental management

GIZ operates a structured environmental management system. One of the key features of this system is its environmental targets, which are regularly reviewed by the environmental affairs manager using the methodology of the EFQM Business Excellence Model.¹ The environmental affairs manager is also responsible for the company's annual environmental report and for continuous refinement of its corporate environmental management strategy. In his environmental communication work he is supported by members of staff involved in the GIZ Environment Initiative. In addition, GIZ maintains continuous dialogue with other companies and institutions through the Umweltforum Rhein-Main e.V. (Rhine-Main environment forum) and the German Environmental Management Association (B.A.U.M.). The environmental programme's targets and measures are decided by the environmental steering group.² This group comprises the environmental affairs manager, the Board's sustainability manager and representatives of various departments within the company. The new Sustainability Office that was set up in 2012 will be charged with developing a sustainability management system for GIZ as a whole.

From 2013, GIZ will have its performance measured against the criteria of the European Union's Eco-Management and Audit Scheme (EMAS) at its two sites in Bonn and Eschborn and its representation in Berlin. In preparation for this the company reviewed its environmental management system in the context of ÖKOPROFIT Frankfurt's 2010/2011 programme (www.oekoprofit-frankfurt.de). This project for integrated environmental technology assesses the



1 The Business Excellence Model of the European Foundation for Quality Management (EFQM) provides a framework for obtaining an overall view of an organisation. It involves

a self-assessment based on eight fundamental concepts such as continuous learning and accountability to the public. 2 The environmental steering group is being replaced by the GIZ Sustainability Board.

ENVIRONMENTAL MANAGEMENT AND ENVIRONMENTAL POLICY AT GIZ

environmental and economic benefits of companies' environmental management schemes. As well as Eschborn, the GIZ office in Feldafing also won an ÖKOPROFIT award.

The environmental affairs manager is supported by the corporate environmental management contacts within the individual GIZ units, in all the German offices and in the GIZ country offices. GIZ maintains other tools for assessing the environmental and climate impacts of projects and programmes in the field of international cooperation for sustainable development. Project officers can if necessary consult the environmental affairs and climate assessment officers for advice on these tools.

The Global Compact

GIZ is a member of the UN Global Compact. As such, the company undertakes to adhere to the ten Global Compact principles, which cover human rights, labour and social standards, the environment and anticorruption measures (www.unglobalcompact.org).

Values such as good governance and respect for human rights are fundamental to GIZ's work as a provider of international cooperation services for sustainable development. But it is not only in its international work that the principle of sustainability is applied. It also plays a central role within the company – for example in corporate environmental management.

Das Unternehmen

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

ist seit Dezember 2011

Mitglied im Förderkreis des Bundesdeutschen Arbeitskreises für Umweltbewusstes Management (B.A.U.M.) e.V., unterstützt ideell und finanziell die vielfältigen Bemühungen von B.A.U.M. um einen vorbeugenden, ganzheitlichen Umweltschutz und hat sich verpflichtet, den von B.A.U.M. entwickelten Kodex für umweltbewusste Unternehmensführung schrittweise in die Praxis umzusetzen.



The B.A.U.M. code – committed to environmentally aware business management

Protecting the environment is one of GIZ's priority corporate objectives. It forms part of its business management principles and plays an important role at all levels of the company. GIZ regularly provides its staff and the public with detailed information on the environmental aspects of its operations; it also involves its business partners in its efforts to do more for the environment. Continuous improvement of its own environmental management system is a matter of course, as is open dialogue with a wide range of groups within society. With this in mind, GIZ joined the German Environmental Management Association (B.A.U.M.) at the end of 2011. This means that it is bound by the B.A.U.M. code on environmentally aware business management.

www.baumev.de/default.asp?Menue=124



Climate-friendly strategy for sustainable

GIZ's environmental mission statement

Sustainable development must be premised on responsible management of the environment and its resources in order to safeguard development opportunities for future generations. GIZ has drawn up its own environmental mission statement, which sets out the following responsibilities:

- to prevent or reduce the company's environmental impacts by means of systematic environmental management;
- to make sparing use of scarce resources such as energy and water and increase the deployment of eco-efficient technologies and materials;
- to implement our strategy of becoming a carbon neutral company;
- to plan and carry out all projects and programmes with minimum environmental impact;
- to engage in participatory environmental communication with our staff and raise their awareness of environmental issues;
- to continue to develop our environmental mission statement through open dialogue with fellow professionals within and beyond the company.

GIZ's environmental targets

Every five years, GIZ sets itself new environmental targets for reducing its consumption of electricity, heating, potable and non-potable water and paper, and minimising the amount of waste produced. The targets set in 2011 are based on analysis of the environmental audits of all GIZ's predecessor organisations³ and provide the foundation for a standardised environmental management system.

The environmental affairs manager monitors the targets at regular intervals and suggests adjustments where necessary, thereby ensuring that the effectiveness and sustainability of the environmental management system are continuously improved.

The environmental targets apply to all German offices and in part to GIZ offices abroad. From 2012 GIZ will define new targets for the offices participating in EMAS.

ENVIRONMENTAL MANAGEMENT AND ENVIRONMENTAL POLICY AT GIZ

GIZ's environmental programme 2011 - 2015

Environmental targets for German GIZ offices	Base year 2010 ⁴	Target 2015	Measures		
Electricity Consumption (kWh per staff member ⁵) Reduction	2,586	2,327 - 10%	 Energy advice and analysis at selected locations (2011) Development of Green IT in the IT centres Installation of additional motion detectors for the lighting system in Eschborn 		
Heating energy Consumption (kWh per staff member) Reduction	3,891	3,502 - 10%	 Expansion of solar energy systems (photovoltaic) Buildings 4 and 5, Eschborn (2011/12) Thermal insulation, AgenZ Rödelheim (2011)³ Intensification of environmental communication 		
Potable water Consumption (l per staff member) Reduction	9,412	8,941 - 5%	 Installation of additional waterless urinals, Eschborn (2011) 		
Non-potable water (Eschborn only) as % of total water consumption	36%	> 50 % ⁴	 Review of additional opportunities for using non- potable water (e.g. for technical purposes, toilet flushing) 		
Waste Residual waste (kg per staff member) Reduction	57.6	51.8 - 10%	 Tightening of ecological and social criteria when inviting tenders for cleaning services Intensification of environmental communication 		
Paper Consumption (sheets per staff member) Reduction	8,232	7,820 - 5%	 Use of 100% recycled paper in the offices, use of recycled paper or FSC/PEFC certified paper for publications Reducing the number of workstation printers and improving printer management Intensification of environmental communication 		
CO_z neutrality CO _z emissions (t) Reduction	25,277	0 - 100%	 Gold Standard registration and issue of first climate certificates for GIZ's compensation project Offsetting the emissions of the entire company 		
Encouraging non-motorised and electric environmentally friendly means of trans from work and for business travel			r expansion of the cycling infrastructure		
Limiting travel resulting from the merg	19	phone	[;] alternative means of communication (video and tele- conferencing, Live Community, Skype) avel is encouraged for journeys within Germany		
Working with the German Council for Su to make our operations more environme		nt • Measu Counci	res are being identified in collaboration with the I		
Improving the Green Procurement strate abroad	gy for Germany and	(call f • Ecolog outdoo • Ecolog and la	ical and social criteria for the canteen or tenders 2011) jical criteria for planting and maintenance of the r areas (2011) jical criteria for the renting yout of additional office space ement of sustainable office materials		
Procurement of more sustainable comp	any vehicles		gy to be drawn up by the end of 2011 gy to be implemented from 2012		
Ensuring events meet sustainability crit	eria	ment • Organi	r use of the strategy for sustainable event manage- se Eschborn Dialogue 2011, leadership programme and events in partner countries in accordance with rategy		
Involving all German operations and the Brussels in the environmental managen			 All German operations and the GIZ representation in Brussels produce environmental audits⁶ 		
Environmental targets for GIZ offices in p	artner countries	Measure	s		
Carrying out an environmental audit in of the country offices	at least another 20%		es are defined by the local teams as part rork on the environmental audit		
Carrying out an environmental audit for ment in cooperation with KfW	each country depart-	- Further with KfV	development of environmental auditing tools jointly V		
Considering the use of renewable energ efficient measures in our own propertie in the context of development cooperati	s and buildings erect		es are defined by local teams		

Calculation of specific resource consumption per person does not include the international training centres. The indicators for the training centres can be found in the annex. The environmental targets apply both to office operations and the training centres.
 Consumption is calculated per member of staff.
 At present excludes smaller offices with only a few members of staff.

ENVIRONMENTAL MANAGEMENT AND ENVIRONMENTAL POLICY AT GIZ

For even more sustainability within GIZ: the Sustainability Office



Ensuring sustainability at all levels: (from left to right) Demetrio Polo-Cheva, Svenja Peony Loos, Roger Wolf (environmental affairs manager), Jana Latschan, Bernd Schleich (the Management Board's sustainability manager), Ilona Morlang

Since April 2012 the new Sustainability Office has been coordinating corporate sustainability at GIZ. In addition, the Management Board has appointed a sustain-ability manager, who reports directly to the Chair of the Board, Tanja Gönner. This underlines GIZ's aim that its claim to be perceived and recognised as the world's leading sustainability company should apply not only to its services to sustainable development in international cooperation but also to its internal strategic focus and organisation.

The work of the Sustainability Office is based on the sustainability principle that is enshrined in the company's values. The emphasis is on corporate sustainability in the four dimensions of the sustainability principle: economic efficiency, social responsibility, ecological balance and political participation, and in the interactions between them.

The Sustainability Office advises the Management Board and the various units within the organisation on development and implementation of the sustainability strategy

and helps the units introduce appropriate measures. It is responsible for sustainability reporting and represents GIZ in the Global Compact, at B.A.U.M. and in other sustainability networks.

Environmental management worldwide

GTZ has over 17,000 members of staff, of whom almost 14,000 work abroad. By 2009 more than 30% of all foreign locations were conducting environmental audits; by 2015 it is envisaged that as many as 70% will do so. GIZ is well on the way to reaching this target: almost half the offices in our partner countries are already putting their own environmental measures in place.

Since every office operates under different conditions, environmental audits must be adapted to the specific location. The GIZ environmental management scheme provides overseas staff with a guidance document available in four languages. In addition to general information on procedures, required resources and conducting environmental audits, it also contains checklists for corporate environmental management and table templates that facilitate collection of data and calculations. This guidance enables users to systematically identify savings potentials, formulate environmental targets and implement the measures needed to achieve them.

The present report contains summaries of environmental audits conducted in our partner countries Algeria, Cambodia, Egypt, Jordan, Mongolia, Niger and Paraguay. These provide a brief overview of GIZ's environmental management system at selected overseas offices.



Integrated water resource management Drinking water is in short supply in Morocco. The growing demand for water in agriculture, industry and tourism is therefore a particularly serious problem and one that is resulting in falling groundwater levels, water pollution and an increase in droughts. GIZ, on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), is helping the Moroccan government implement its national water strategy. GIZ advisors work with the Moroccan water management agencies and their partners to draw up plans for groundwater management. In addition, pilot projects will help establish the use of greywater for flushing toilets. More widespread use of greywater and rainwater for irrigation and energy generation will also help provent the water table fallion further.

Morocco

Environmental communication within GIZ

The past year has provided many opportunities to encourage environmentally aware behaviour within GIZ. For example, with the help of the environmental affairs manager, the company health promotion team used World Hypertension Day to draw employees' attention to the Bike to Work campaign, staging a cycle obstacle course and a safety training session.

On GIZ Environment Day fairtrade roses were given away by GIZ's Environment Initiative to draw attention to ecologically produced and fairly traded goods. To mark the Year of Forests, the initiative also organised a photographic exhibition at which members of staff could have their personal water footprint calculated and pick up information about the use of water resources in food production.

Useful tips for avoiding ozone-depleting substances were provided on World Ozone Day. PROKLIMA, the worldwide advisory programme which GIZ is implementing on behalf of the German Development Ministry, offered information on climate-friendly technology – along with free organic ice cream from the ozonefree energy-saving freezer.

Green procurement at GIZ

The purpose of green procurement is to reduce the environmental impacts of business activities. GIZ's green procurement policy takes into account not only traditional procurement criteria such as price, quality and fitness for purpose but also the long-term environmental impact of goods and services. The company's policy is based on German and European standards. At our overseas locations, local conditions may pose particular challenges for green procurement.

Environmental procurement criteria for goods and services include standards for electronic devices, ecolabels such as the German 'Blue Angel' and guidelines on the disposal of packaging. They form part of invitations to tender and of framework agreements concluded by GIZ with suppliers and service providers. GIZ's environmental criteria undergo continuous refinement to ensure that they remain in line with the German government's recommendations on green procurement. In future, the environmental affairs manager will be involved in all invitations to tender that are of environmental significance.

Environmental audit

The annual environmental audit forms the basis for systematic review of GIZ's environmental key performance indicators, thereby enabling resources such as water, paper and energy to be used even more efficiently. This not only reduces environmental impacts to a minimum but also cuts costs. In addition, the environmental team can use the figures to adapt targets and measures in the light of changed conditions.

The figures relating to the company's premises in Germany have been combined into a joint environmental audit. The audit distinguishes between GIZ offices in Germany and the international training centres (ITCs) belonging to GIZ, since at the training centres the consumption attributable to seminar participants (of whom there are some 48,000 each year) must be taken into account.⁷ The environmental key performance indicators of the GIZ offices at Berlin Reichpietschufer, Bonn Friedrich-Ebert-Allee and Eschborn Dag-Hammarskjöld-Weg are listed again separately at the end of the joint environmental audit. This is part of preparation for the validation process needed for EMAS registration (the European Union's

Eco-Management and Audit Scheme), which is due to start next year.

As a result of the merger of InWEnt, DED and GTZ to form the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) on 1 January 2011, some offices in Germany have been closed and workforces combined. This has increased the number of staff at other sites, with corresponding impacts on their environmental key performance indicators.

Paper

By 2015 GIZ plans to reduce paper consumption by 5% - that is, to no more than 7,820 sheets per person. Measures to help the company achieve this target include procuring modern duplex printers, sending faxes by email and using a standardised filing system for electronic documents. GIZ offices already use only recycled paper for printing. Brochures and other publications are printed on FSC- or PEFC-certified paper, if recycled paper cannot be used.

Change (%)

Target 2015 (%)

0	
	AL .
	Solid waste



Paper consumption, total for Germany (sheets)	24,990,981	24,479,680	- 2.0	
Paper consumption, German offices (sheets)	21,577,781	22,619,430	4.8	
Paper consumption, ITCs ⁸ (sheets)	3,413,200	1,860,250	- 45.5	
Paper consumption, German offices (sheets per staff member)	8,232	8,164	- 0.8	- 5.0
Umweltpapierquote (%)	100	100		
	2010	2011	Change (%)	Target 2015 (%)
			ondinge (10)	
Solid waste, total for Germany ⁹ (t)	569.0	564.2	-0.8	
Solid waste, German offices ¹⁰ (t)	443.4	427.2	-3.7	
Solid waste, ITC (t)	125.6	137.0	9.1	
Waste to recovery, total for Germany (t)	359.4	347.0	-3.4	
Paper waste (t)	187.3	198.5	- 3. 4 6.0	
Other waste to recovery (t)	172.1	148.5	-13.7	
We she to other treatment with de total for	200.6	017.0	2.6	
Waste to other treatment methods, total for Germany (t)	209.6	217.2	3.6	
Residual waste (t)	209.2	216.9	3.7	
Hazardous waste ¹¹ (t)	0.4	0.3	-25.0	
Solid waste, German offices (kg per staff member)		175.3	-1.3	
Waste to recovery (kg per staff member)	120.0 57.6	117.1 58.2	-2.4 1.0	- 10.0
Waste to other treatment methods (kg per staff member)	J / .D	38.Z	1.0	10.0
Recovery rate (as % of total)	63.2	61.5		
,				

2010

2011

Because seminar participants are only temporary visitors to GIZ's international training centres, their consumption is quoted in the form of 7 'participant days'. A two-day seminar with 100 participants thus counts as 200 participant days. The specific figures for all locations a given in the list of indicators.

Data not collected (n.c.) for Bad Honnef. N.c. for AgenZ Rödelheim, Bonn Dahlmannstraße and Berlin Potsdamer Platz.

10 11 N.c. for Berlin Potsdamer Platz and AgenZ Rödelheim

Eschborn only

How green is GIZ?

GIZ is at work all over the world, encouraging sustainability and fostering environmental quality in many countries. Yet it remains important to look inwards. How green is GIZ itself? Does GIZ observe the primacy of sustainable activity in every aspect of its operations? How carefully does GIZ use resources?

The issues to be considered include environmentally friendly procurement of goods and services for GIZ's own use. In the field of office supplies GIZ is already setting a good example: its receipt of an award in the Office and Environment competition is evidence of this. But is recycled paper bearing an ecolabel really used throughout the company, and is photocopying and printing invariably double-sided? Is recyclable and non-recyclable waste carefully separated and collected and then recycled or disposed of properly? Are the lights on only where needed and only for as long as is absolutely essential? It is good that the GIZ environmental management team is keeping a watchful eye on all of this.

It is easy to lose sight of the environmental impacts of travel – not a simple issue for GIZ, because its work inevitably involves travel all over the world. Some flights can be avoided by using video conferencing. Essential flights can be taken on energy-efficient planes and the emissions can be offset. For moderate distances rail travel may be an option. People who have to drive will hopefully have attended a fuel-saving course. And, when it comes to it, how green is the company car? The daily commute can be entirely climate neutral with a bike, or if needs be with an electric bike – which makes light work of a ten-kilometre journey in just half an hour.

Can you see that there is still room for improvement? The GIZ environmental management team isn't going to run out of work that quickly. I wish it continuing success!



Dieter Brübach

Member of the board of B.A.U.M. e.V. www.BAUMeV.de

In 2011 annual paper consumption at GIZ was 8,164 sheets per capita – excluding publications, notepads, envelopes and business cards. At the German sites, including the training centres, total consumption amounted to around 24.5 million sheets of paper. Although absolute consumption at the German offices rose by around 5% as a result of higher staff numbers, consumption per person fell by 1% at these sites. If paper savings at the training centres are taken into account, the fall in consumption is in fact 2%.

Solid waste

Solid waste at GIZ arises mainly in the form of paper and waste with a make-up similar to domestic refuse. Between 2011 and 2015 GIZ plans to reduce the quantity of waste not sent for recycling by 10% to 52 kilos per person per year. It is envisaged that this target will be reached primarily through rigorous separation of waste.

Collection bins at workstations and in the kitchenettes ensure that recyclable waste is not disposed of with non-recyclable items. In Bonn electrical and electronic waste is collected by certified disposal companies and in the Eschborn canteen waste is used to generate electricity in a biogas unit. The environmental and social criteria applied when inviting tenders for cleaning services are to be revised by 2015. In addition, internal education campaigns and communication measures will help raise staff awareness of ways of preventing waste.

In 2011 the solid waste generated in the German offices amounted to around 175 kilos per person. This represented a reduction of 1.3% by comparison with the previous year. However, there was 1% more waste to be disposed of; this was also reflected in a reduced recycling rate, which sank by just under two percentage points to 61.5%.

Water

In 2010 members of staff used 9,400 litres of potable water per person. GIZ plans to reduce this by 500 litres by 2015 by using water-saving measures and

innovative technologies. At the Eschborn site the airconditioning and sanitation systems and the watering system for the outdoor areas already use groundwater only. Because this groundwater enters one of the underground car parks, it must in any case be pumped out and so is available as non-potable water. At other sites, such as Bonn, water consumption has been cut by reducing the water pressure in the pipes. The environmental management team is seeking to identify additional opportunities for saving water.

Total water consumption at GIZ has been reduced by more than a quarter by comparison with the previous year. Potable water consumption at the German sites also fell: at just under 7,600 litres per person it was about 19% lower than in 2010. This means that the savings achieved already exceed the targets set by GIZ's environmental programme.

Change (%)

Target 2015 (%)

2011

	Na	







			j- (···,	
Water consumption, total for Germany (m³)	54,244	40,140	-26.0	
Potable water consumption, German offices ¹² (m³)	24,877	19,498	-21.6	
Potable water consumption, ITCs ¹³ (m ³)	18,730	12,064	-35.6	
Non-potable water consumption (m ³)	10,637	8,579	-19.3	
Potable water consumption, total for Germany (m³)	43,607	31,407	-28.0	
Potable water consumption, German offices (l per staff member)	9,412	7,592	-19.3	- 5.0
Potable water consumption, German offices (l per staff member/day)	38	30	-19.3	

2010

	2010	2011	Change (%)	Target 2015 (%)
Energy consumption, total for Germany (kWh)	22,580,382	19,252,435	-14.7	
Energy consumption, German offices (kWh)	17,428,676	15,350,054	-11.9	
Energy consumption, ITCs ¹⁴ (kWh)	5,151,706	3,902,381	-24.3	
Electricity consumption, total (kWh)	8,383,060	8,009,516	-4.5	
Heating energy consumption, total (kWh)	14,197,322	11,242,919	-20.8	
Electricity consumption, German offices (kWh per staff member)	2,586	2,566	-0.8	- 10.0
Heating energy consumption, German offices (kWh per staff member)	3,891	3,356	-13.8	- 10.0

12 N.c. for AgenZ Rödelheim.

N.c. for Berlin Stresemannstraße.
 Heating energy n.c. for Berlin Stresemannstraße.

Advice on environmental management

Growing industrialisation and consumption, especially in the urban conurbations, is adding to India's environmental problems. On behalf of BMZ and the Indian Ministry of Environment and Forests, GIZ is advising small and medium-sized businesses on the efficient use of energy and resources in production. The aim is to ensure that business activity consistently adopts a forwardlooking environmental approach. GIZ achieves this through development partnerships between Indian and German companies. The example of an Indian tyre manufacturer demonstrates that environmentally oriented structural change and economic growth are not incompatible goals: saving 12 million litres of water and morr than 300,000 kWh of electricity annually is not only good for the environment but has also made the company more competitive.





India

Energy

By 2015 the company aims to reduce consumption of electricity and heating energy by 10% from 2010 baselines. In per-capita terms this would mean that each member of staff could use about 2,300 KWh of electricity and 3,500 KWh of heating energy per year. To achieve this target, current energy consumption at all German sites is to be analysed and a comprehensive consultation on energy will take place.

In the GIZ IT centres, servers are gradually being replaced by virtual machines and storage systems are switching to more efficient disk drives. In Eschborn, GIZ is planning to extend the existing photovoltaic and solar thermal systems and automate the lighting in the toilets by installing motion detectors. At the Friedrich-Ebert-Allee site in Bonn, energy-efficient LED lamps have halved power consumption in the underground car park. The aim is for all German sites to use electricity only from renewable sources. A similar approach is being adopted for the heating systems: environmentally damaging heating oil is to be replaced by natural gas.

Total energy consumption at the German sites was reduced by almost 15% by comparison with the previous year. In the German offices, staff used 1% less electricity. The fall in heating energy use was particularly marked: here the target of minus 10% set for 2015 has already been exceeded. 12



Prof. Stefan Schaltegger

Director, Centre for Sustainability Management (CSM) www.leuphana.de/csm

Seizing opportunities and acting as a role model

Without sustainable corporate development there cannot be a sustainable economy. Likewise, without the sustainable development of government institutions there can be no sustainable country and no sustainable development of society. In government organisations the potential for improvement and the opportunities to play a pioneering role are often largely ignored – but they are of immense economic and social importance.

GIZ operates at the interface of business and politics. It promotes a large number of development and environmental projects all over the world. Among other things, it helps both governments and the private sector to introduce resource management and climate change mitigation schemes and to develop renewable energies. It is also active in environmental technology cooperation and environmental education, in the development of sustainability indicators for diverse sectors of partner countries' economies and in many other important initiatives.

GIZ is therefore one of the key organisations in Germany acting as international ambassadors for sustainability. This work also involves rigorous utilisation of all the available opportunities for sustainable operation 'at home' and at the numerous locations where the company operates, as well as continuous exploration of new possibilities for improvement. With some 17,000 employees and a large number of offices distributed all over the world, this is no easy task – especially considering the fact that GIZ evolved from the merger of three predecessor organisations in 2011.

I therefore hope that GIZ will continue to lead the way with enthusiasm and commitment and to function with great success as an international model for sustainable development and policy.

Mobility and CO₂ emissions

Within GIZ, business travel makes by far the largest contribution to CO_2 emissions, accounting for 87%. The company therefore encourages staff to use environmentally friendly means of transport. For example, staff at the offices in Berlin, Bonn and Eschborn can apply for a 'Jobticket', a season ticket paid for by the employer under an arrangement with the local public transport provider. As an incentive for staff to switch to rail travel, GIZ reimburses the cost of rail journeys within Germany up to the price of a second-class ticket. Above a distance of 300 kilometres, business journeys by car are authorised only in justifiable exceptional cases. Participation in the Environment Plus scheme operated by Deutsche Bahn means that staff rail travel is entirely carbon-neutral. GIZ ensures a good infrastructure for cyclists by providing cycle parking facilities and showers.

The majority of the emissions generated by GIZ are attributable to business trips by air. To reduce air travel to a minimum, video conferencing will replace flying wherever possible. The Clever Mobility, Information and Communication Technology (MIC) project that was launched in 2012 is drawing up a strategy for this. Unavoidable emissions will be compensated for by purchasing CO_2 credits. A special offsetting project in Thailand that is already registered under the CDM¹⁵ Gold Standard will provide the necessary credits.

¹⁵ The Clean Development Mechanism (CDM) is a mechanism for the reduction of greenhouse gas emissions worldwide. It allows industrialised and developing countries to implement climate projects jointly in developing countries. The reductions are then credited to the industrialised countries, enabling them to meet their reduction commitments; alternatively, they can be sold via emissions trading schemes. Through the Clean Development Mechanism, the developing countries gain access to climate-smart technologies and additional sources of finance.

Although GIZ used less energy in 2011, the CO_2 emissions attributable to the company's activities rose by 7.5% to a total of 27,162 tonnes. This is mainly because an additional ten million kilometres were travelled as a result of the project-related increase in business journeys abroad. By contrast, emissions

attributable to energy consumption fell by 17%. Travel within Germany also fell slightly, by 2%. Around three quarters of the distance travelled by staff within Germany in 2011 was covered by train, followed by plane and car.

emissions
1

Environmental and climate impact assessment

Does a training scheme in the partner country impact adversely on the environment? Does a business development measure have the unintended consequence of increasing greenhouse gas emissions – or can it actually help to reduce emissions? Are the objectives of an energy programme put at risk by climate change?

Environmental and climate issues are extremely important in development cooperation – although the connections are not always immediately obvious. Since 1 January 2011 the Federal Ministry for Economic Cooperation and Development (BMZ) has therefore required German development cooperation organisations to carry out environmental and climate impact assessments.

GIZ has developed its own assessment method, which is compulsory both for new technical cooperation projects and for the follow-on phases of existing projects. A helpdesk and contact partners in the technical and regional departments support the process by providing guidelines, training and technical advice on conducting assessments. Evaluation at the end of the first year shows that, when correctly used, the environmental and climate impact assessment is effective and adds value.

Operations in Bonn

Since the merger of DED, InWEnt and GTZ, the former BMZ premises at Friedrich-Ebert-Allee 40 have been GIZ's main office in Bonn. This building, constructed in 1994, has an internal area of 20,615 m², of which 1,158 m² is taken up by the archive and circulation and ancillary areas. The 425 members of staff have at their disposal a canteen, two video conferencing rooms, five meeting rooms, 407 parking spaces in an underground car park and 60 cycle parking places.

Paper

Paper consumption per person at the Bonn office increased by nearly 30% in 2011.¹⁶ To enable consumption to be reduced by 5% between 2010 and 2015, workstation printers will be replaced by centrally located printers on each floor of the building. Setting the machines to print by default on both sides of the paper will ensure that single-sided printing becomes the exception rather than the norm.

	2010	2011	Change (%)	Target 2015 (%)	Unit
Paper consumption (excl. documentation and publications)	3,375,000	4,505,000	33		A4 sheets
Paper consumption per staff member	8,201	10,600	29	-5	A4 sheets
Recycled paper (as % of total)	100	100			%
Total waste arisings	64	71	11		t
Total waste arisings per staff member	154	167	8		kg
Waste to recovery	31	38	23		t
Waste to recovery per staff member	75	90	20		kg
Waste to final disposal	33	33	0		t
Waste to final disposal per staff member	79	77	-3	-10	kg
Recovery rate (as % of total)	49	54			%
Total water consumption (100% potable water)	15,580	10,627	-32		M3
Water consumption per staff member	37,860	25,000	-34	-5	l
Water consumption per staff member/day	151.4	100.0	-34		l
Electricity consumption	1,550,660	1,489,480	-4		kWh
Electricity consumption per staff member	3,768	3,505	-7	-10	kWh
Electricity consumption per unit of net internal area	81.5	78.0	-4		kWh/m²
Heating energy consumption	2,290,230	2,026,320	-12		kWh
Heating energy consumption per staff member	5,565	4,768	-4	-10	kWh
Heating energy consumption per unit of net internal area	120	107	-11		kWh/m²

16 Until the end of 2011, paper consumption in Bonn was measured by the quantity purchased. The figures therefore do not reflect the amount actually used.

A model of environmental awareness

With its environmental report for 2011 GIZ continues its noteworthy reporting of past years and provides an insight into both the successes in environmental management that have already been achieved and the challenges that remain.

One of the successes is green procurement. This system not only enables GIZ to ensure that only environmentally friendly products are used in its offices; because of the order volumes involved, its purchasing can also have a positive impact on producers. It is to be hoped that the European Court's latest decisions on labels will not turn out to be an obstacle to green procurement.

Another success is GIZ's mobility strategy in areas such as the Bike and Business scheme for commuters or the switch to rail for travel within Germany. Managing mobility is of course a particular challenge for an internationally active organisation. It would be worth making greater use of video conferencing, although the low-bandwidth internet connections that still prevail in many countries can make this difficult. There is probably scope for further reduction of the extensive use of paper: the mobile methods of working used by many staff should be a factor in making increased use of electronic data storage.

It is to be hoped that the successful work of recent years will be continued. After all, as a result of its large number of projects and staff, GIZ is extremely well placed to work as a multiplier and to 'export' environmentally sound practices.

Dr Thomas Schauer

Director of the European Support Centre of the Club of Rome

Solid waste

On a per-person basis, the quantity of waste for final disposal was 3% less than in the previous year. Total waste arisings rose by 11%, but this increase was attributable mainly to paper waste associated with the move of the former predecessor organisations to the new office building. In future, a waste manager will be responsible for improving the separation and disposal of waste at the Bonn office. Batteries and CDs are already collected separately.

Water

The target of reducing potable water consumption by 5% by 2015 has already been exceeded in just one

year. Each member of staff used on average 35% less water. This was achieved by reducing the water pressure in the pipes by four bars. The environmental team plans to investigate whether water use can be reduced still more by installing water-saving fittings.

Energy

The target of reducing each person's electricity consumption by 10% by 2015 is already close to being achieved: in the past year consumption fell by around 7%. This is largely due to new LED lights in the underground car park, where electricity consumption has been cut by more than half to around 51,500 kWh. The long-life LEDs will thus pay for themselves in just one and a half years. The installation of more



Waste management by local authorities In an attempt to reduce environmental pollution from waste dumps, the Philippine government is introducing a law on environmental waste management. Under this legislation, towns and villages must recycle waste wherever possible. The aim is also to curb the loss of recoverable materials. On behalf of BMZ, GIZ is advising the Philippine government and selected local authorities on establishing the necessary technical and institutional conditions for professional waste management. The separate collection and recycling or composting of waste has meant that some landfills have already been closed. In addition, pilot projects provide a model for countrywide expansion of environmental waste management. For example, in a project supported by GIZ in lloilo City a regional cement manufacturer is using plastic waste as fuel. New jobs are also being created: in lloilo City alone 150 waste collectors have found new employment.

Philippines

efficient heating pumps delivered 30% electricity savings for that application.

Consumption of heating energy was reduced by around 4% per person by comparison with the previous year. This was achieved by reducing the overall flow temperature and turning off the heating pumps earlier. The mild winter was also a contributing factor, but it can nevertheless be assumed that the target of reducing the consumption of heating energy by 10% by 2015 will be met.

Operations in Eschborn

The four office buildings on Dag-Hammarskjöld-Weg contain 1,379 offices with a total floor area of around 65,000 m². In 2011 an additional 166 offices with a net internal area of 5,877 m² were rented in another building on Ludwig-Erhard-Straße. These head office buildings include nine video conferencing systems, three IT centres, two IT training rooms and 45 meeting rooms; 835 parking spaces and 323 cycle parking places are available for members of staff. In addition, charging stations can cope with two electric cars and up to nine e-bikes at any one time.

The on-site kindergarten was demolished in 2011. It will be replaced by a new building containing offices and a new company kindergarten that is due to be completed by the end of 2013. This building will be equipped with geothermal heating and cooling technology and will comply with the silver standard of the German Sustainable Building Council (DGNB).

A total of 1,961 people¹⁷ are employed in Eschborn. Measurement of the environmental key performance indicators includes some consumption attributable to 55 external personnel in the canteen, the security service and the in-house travel agency. It was not possible to include the rented premises in Ludwig-Erhard-Straße, because GIZ has not yet obtained a statement of consumption for these offices.

17 Equals 1,831 full-time-equivalent posts. Part-time posts and other employment arrangements have been combined into full-time equivalents.

	2010	2011	Change (%)	Target 2015 (%)	Unit
Paper consumption (excl. documentation and publications)	15,141,876	15,920,878	5		A4 sheets
Paper consumption per staff member	8,693	8,439	-3	-5	A4 sheets
Recycled paper (as % of total)	100	100			%
Total waste arisings	346.0	323.6	-7		t
Total waste arisings per staff member	193.2	189.4	-2		kg
Waste to recovery	242.9	222.5	-5		t
Waste to recovery per staff member	135.6	130.0	-4		kg
Waste to final disposal	103.1	101.1	-2		t
Waste to final disposal per staff member	57.6	59.2	3	-10	kg
Recovery rate (as % of total)	70.2	68.8			%
Total water consumption	16,057	13,531	-16		m³
Total water consumption per staff member	8,966	7,922	-12		l
Total water consumption per staff member/ day	35.9	31.7	-12		ι
Potable water consumption	5,420	4,952	-9		M 3
Potable water consumption per staff member	3,032	2,899	-4	-5	l
Potable water consumption per staff member/ day	12.1	11.6	-4		ι
Non-potable water consumption	10,637	8,579	-19		M 3
Contribution of non-potable water to total water consumption	66.3	63.4		> 50	%
Total energy consumption	11,089,115	9,636,088	-13		kWh
Photovoltaic 1	28,853	30,118	4		kWh
Photovoltaic 2	3,740	3,740	0		kWh
Electricity consumption	4,566,722	4,444,464	-3		kWh
Electricity consumption per staff member	2,494	2,602	4	-10	kWh
Electricity consumption per unit of net internal area	86	84	-3		kWh/m²
Heating energy consumption	6,622,583	5,191,624	-22		kWh
Heating energy consumption per staff member	2,550	2,602	2	-10	kWh
Heating energy consumption per unit of net internal area	125	98	-22		kWh/m²

Operations in Eschborn

ENVIRONMENTAL AUDIT



Simon Karrer

Environmental officer at the Federal Environment Agency (Umweltbundesamt, UBA) www.uba.de

Environmental management with a big impact

GIZ's environmental audit is impressive in its scope and professionalism. For me as environmental officer at the Federal Environment Agency it demonstrates that we have strong partners – partners who are striving to improve their own environmental performance, and also to be credible models in the field of federal institutions.

Systematic environmental management – preferably EMAS compliant – ensures that all areas of activity are considered and evaluated and that environmental impacts are gradually reduced. Regular checking by management prevents a business becoming blinkered by self-congratulation and lack of awareness of its own deficiencies. I know from my own experience that improving environmental performance gets harder as the years go by, simply because so much has already been achieved and put in place. But continued effort is not fruitless, because opportunities, constraints and benchmarks also evolve, creating new potential that can be tapped.

With this field of influence, with international partners in a global framework, GIZ is in a position to show other organisations the pathways that can reduce consumption of natural resources. And it demonstrates through its own actions that these pathways are not just there to be pointed out, but also to be travelled. In the long term one of the greatest challenges is likely to be the fact that it has so many different locations all over the world with very different infrastructure and legal conditions.

I particularly enjoy the lively communication that I have with GIZ's environmental affairs manager, Roger Wolf; our discussions are a frequent source of ideas for environmental management at the Federal Environment Agency. From the bottom of my heart I wish him and GIZ continuing success in protecting the environment.

Paper

Paper consumption in the Eschborn office was cut by 3% per person in 2011. This is mainly attributable to the pre-set duplex printing function on the printers. The environmental management team in Eschborn is therefore well on the way to achieving the 5% target set for 2015.

Solid waste

While 2011 saw a noticeable reduction in total waste arisings, which fell by 7% from 347 to 323.6 tonnes, the quantity of waste not sent for recycling, calculated on a per-capita basis, rose slightly by 3%. For each member of staff there was 1.7 kilos of additional refuse to be disposed of last year. It is hoped that improved waste management and greater provision of information to staff will enable the quantity of waste not sent for recycling to be reduced by 10% per person by 2015 as planned.









Uganda's energy supply is inadequate. Only 5% of the rural population is connected to the public electricity grid. The widespread practice of cooking over wood or charcoal in enclosed spaces harms people's health, while the inefficient use of fossil fuels means that Uganda's energy balance is poor. On behalf of BMZ, GIZ is advising the Ugandan Ministry of Energy and Mineral Development on establishing a sustainable energy policy and a decentralised energy supply. The programme focuses on providing electricity to rural regions through hydropower and solar energy units. The distribution of more than 250,000 cooking stoves to households has already reduced firewood consumption significantly. In order to achieve maximum sustainability, the programme works with government and non-government bodies at both national and municipal level. For the same reason, the media and educational institutions are also involved, with the aim of promoting broad acceptance and raising awareness among the population.



Uganda

Water

Around 13,500 m³ of water were used in Eschborn in 2011. This is 16% less than in 2010. About twothirds of the water is groundwater, which is used to flush the toilets and for the cooling and heating systems. The target of meeting more than half of the site's water requirements from non-potable water has therefore already been met.

In all buildings, water-saving fittings and perlators on the taps are provided as standard. In addition,

waterless urinals have been installed in one of the buildings. This has reduced the use of potable water by 4% per person, which means that the 5% target is already close to being achieved in Eschborn.

Energy

Total energy consumption fell by 13% in 2011. The largest contribution to the cut was made by heating energy, which fell by 22% as a result of the mild winter. Electricity consumption was also reduced by around 3%. This has been achieved mainly by



Proklima: Refrigerator recycling

In Brazil, more than 50 million refrigerators are in use for chilling drinks and food. Most of them use more electricity than necessary and also contain ozone-depleting CFCs. In the favelas, 'catadores' or waste pickers earn a living by dismantling old appliances. To ensure that this is done in an environmentally appropriate way in future, GIZ – on behalf of BMU – is advising the Brazilian government on setting up a return and recycling system for used refrigerators. Modern technical standards will ensure that the materials recovered from the refrigerators become sought-after resources for local industry. And the measures not only help to protect the environment. They also create new jobs – especially for all the untrained waste pickers who previously dismantled refrigerators and who will now be trained to work in a future-oriented sector.

Brazil



improving the running times of the air-conditioning systems in Buildings 1 and 2, with the result that they now use 15% less energy. Since 2010 hot water has been provided partly by a solar thermal system. Installation of new air-conditioning systems in Building 2 has enabled 80% of heating and cooling energy to be recovered. The use of evaporative cooling (adiabatic cooling) is also making a significant contribution to energy saving. In future, exhaust air from the IT centres will be used to generate heat.

Despite modern technology and a fall in total energy consumption, consumption per person rose by 4% for electricity and by 2% for heating energy, mainly as a result of the smaller number of staff working in the head office buildings. The buildings require a basic amount of electricity and heating and this affects the ratio between the number of employees and energy consumption per person.

Operations in Berlin

GIZ-Haus on Reichpietschufer represents GIZ's presence in the capital. This listed building close to many government ministries was acquired by GIZ in 2000; its conversion into a modern office and conference centre was carried out in full compliance with the rules governing the preservation of historic buildings. In 2009 the attic storey was converted into an event room. The current environmental building regulations were observed throughout the conversion work. GIZ has recently started renting additional offices at Potsdamer Platz 8; the environmental key performance indicators of this building are not included in the audit.

GIZ-Haus has a net internal area of 1,995 m². In addition to 45 offices, the building contains two video conferencing rooms and 11 rooms for events and meetings. Around 100 cycle parking spaces and an underground garage with 22 parking spaces are available for the 84 members of staff.

Paper

A 2% increase in paper consumption in the past year is attributable mainly to the increase in events at GIZ-Haus and the materials printed for them. Between 2010 and 2011 the number of visitors and event participants rose by more than 5% to 19,100. As part of the introduction of an environmental management system at the Berlin office, the Berlin environmental team will explore the potential for paper-saving measures.

Solid waste

By comparison with the previous year, the percentage of waste that was recycled rose by one percentage point to 64.4%. This has been helped by the fact that in the past year staff have been diligent about using the collection bins in the offices and kitchens and the central collection points for CDs and rechargeable and non-rechargeable batteries.

Water

Water consumption in 2011 was about 8% higher than in the previous year. As with the increased paper consumption, this is due to the higher visitor numbers at GIZ-Haus. Furthermore, additional floors have been provided with drinking water dispensers. The mains water needed for these has a better environmental footprint than bought-in mineral water.

Energy

In 2011 members of staff at GIZ-Haus Berlin used nearly 11% less energy than in the previous year. On account of the increase in events there was a slight rise of 2% in electricity consumption. However, this was accompanied by a fall in the consumption of heating energy amounting to around 18% per person. The fact that the 10% target has already been exceeded here is not solely due to the mild winter. The facility managers instruct new members of staff in the proper use of the heating and cooling systems and monitor this use continually, which has been another major factor in the fall.

GIZ Environment Initiative: Mobile phone recycling and Sustainable Food Week

In Eschborn the GIZ Environment Initiative organises a wide range of campaigns to encourage environmentally responsible behaviour and sustainable consumption in the workplace and at home. It is underpinned by the active participation of GIZ employees, and provides an excellent opportunity for staff members to contribute to GIZ's corporate environmental management activities.

In 2011 the Initiative worked with the Environment and Climate Change Department, the facility management team and the canteen to organise a second Sustainable Food Week in which organic, local and seasonal food was on offer. An accompanying information campaign highlighted the impact of individuals' consumption habits on the climate and the environment.

Greater awareness of environmental issues was also promoted through regular recycling campaigns for empty printer cartridges and private mobile phones, the introduction of reusable cups for the coffee machines at the Eschborn headquarters, and the GIZ company bicycle scheme. In collaboration with other units, the Environment Initiative also developed the Virtual Water Footprint, which shows how much water is used in the production of food, appliances and other products.

	ENVIR	ONMENTAL	AUDIT
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	2010	2011	Change (%)	Target 2015 (%)	Unit
Paper consumption (excl. documentation and publications)	425,822	435,000	2		A4 sheets
Paper consumption per staff member	5,069	5,179	2	-5	A4 sheets
Recycled paper (as % of total)	100	100			%
Solid waste					
Total waste arisings	11.3	11.6	3		t
Total waste arisings per staff member	134	138	3		kg
Waste to recovery	7.1	7.5	4		t
Waste to recovery per staff member	84.9	88.7	4		kg
Waste to final disposal	4.1	4.1	0		t
Waste to final disposal per staff member	49.0	49.0	0	-10	kg
Recovery rate (as % of total)	63.4	64.4			%
Total water consumption (100% potable water)	1,494	1,615	8		M³
Water consumption per staff member	17,786	19,226	8	-5	l
Water consumption per staff member/day	71.1	76.9	8		l
Energy					
Total energy consumption	803,301	715,428	-11		kWh
Total energy consumption per staff member	9,563	8,517	-11		kWh
Electricity consumption	274,388	281,268	3		kWh
Electricity consumption per staff member	3,267	3,348	2	-10	kWh
Electricity consumption per unit of net internal area	138	141	2		kWh/m²
Heating energy consumption	528,913	434,160	-18		kWh
Heating energy consumption per staff member	6,297	5,169	-18	-10	kWh
Heating energy consumption per unit of net internal area	265	218	-18		kWh/m²

ENVIRONMENTAL AUDIT

Environmental performance is a question of credibility

Environmental management in a company with international operations such as GIZ is an exciting undertaking. The task is always to pursue specific goals without losing sight of the big picture. GIZ advises within the framework of international environmental agreements, and on behalf of the German government and other clients it helps partner countries achieve their climate change mitigation targets. However, GIZ can only do this credibly if it also implements these strategies and the associated environmental measures in-house. Energy efficiency, using green electricity and renewables, green IT, climate-friendly refrigerants, the 'Jobticket' (season ticket paid for by the employer under an arrangement with the public transport provider), electric mobility – all of these are measures used by GIZ's environmental management team at the company's various locations in pursuit of the global objective of climate change mitigation. Behind each measure lie the creativity and professionalism of many committed colleagues. I would like to take this opportunity to thank them most sincerely for their dedication.



Roger Wolf

Environmental affairs manager at GIZ www.giz.de

Awards



First prize in the B.A.U.M. Office & Environment competition

GIZ won two prizes in last year's Office & Environment competition organised by the German Environmental Management Association (B.A.U.M.). Its offices in Bonn and Eschborn both received awards for their resource-efficient office management. The Eschborn office won first prize in the 'large company' category. The judges particularly commended GIZ's green procurement strategy.

100 companies for climate protection

'Active Hesse: 100 companies for climate protection' – through this campaign the state of Hesse aims to get companies in the region involved in protecting the climate. GIZ is among those who have signed the charter, pledging to help protect the climate by pursuing energy-saving and efficiency measures and using renewable energies and climate-friendly means of transport.





Feldafing and Eschborn receive ÖKOPROFIT award

Each year ÖKOPROFIT, the Ecological Project for Integrated Environmental Technology, presents awards to businesses that go beyond the statutory requirements in their corporate environmental management. Last year the GIZ offices in Eschborn and Feldafing both received awards from ÖKOPROFIT.

Cycle-friendly employer

At its Mannheim office GIZ makes it easy for staff to switch to two wheels: company bicycles, a lockable cycle shed and showers are all provided. In recognition of its efforts, B.A.U.M. has awarded GIZ a prize in its 'most cycle-friendly employers' competition. The GIZ office in Berlin also won a prize.



Environmental performance worldwide

ENVIRONMENTAL PERFORMANCE WORLDWIDE

Egypt

The environmental report produced by the GIZ office in Cairo shows that environmental measures can also have a beneficial impact on the work environment. For example, replacing desktop computers with laptops has not only reduced electricity consumption but also increased staff mobility. Central printers and scanners and an electronic document filing system likewise reduce resource consumption.

Algeria

Under its environmental action plan, GIZ in Algeria is taking steps to reduce consumption of paper, electricity and water. In addition, video and telephone conferencing will render flying unnecessary. The sustainable event management strategy developed by GIZ is used for events.



Paraguay

In the GIZ office in Paraguay environmental awareness-raising and the use of energy-saving lamps and energy-efficient appliances throughout the building are paying dividends: electricity consumption has fallen by nearly 10% since 2007 and paper consumption has been cut by more than 30%.

Niger

In its environmental report the GIZ office in Niamey reviews its environmental data for the first time. Staff are to be told how they can reduce their use of electricity and water. Cost savings achieved will benefit the staff.

 GIZ country offices with their own environmental audit

ENVIRONMENTAL PERFORMANCE WORLDWIDE

Mongolia

With the help of an environmental action plan the GIZ office in Ulan Bator intends to significantly reduce consumption of water and energy. In future, the environmental key performance indicators will be measured every two years; an on-site environmental affairs manager will keep them under continuous review.

Jordan

As a consequence of its first environmental audit, the GIZ office in Amman adopted a raft of environmental measures. For example, a solar water heating system and insulation of the heating pipes have saved large quantities of CO₂. Calculations show that separating waste would reduce the waste not sent for recycling by around two-thirds.

Cambodia

The GIZ office in Phnom Penh conducted its second environmental audit in 2011. Consumption of water, paper and energy has been reduced. In addition, rechargeable batteries are now used instead of nonrechargeables, toner cartridges are refilled and old computers are donated to non-governmental organisations or secondhand shops.

Environmental performance in numbers

Operations in Bonn Friedrich-Ebert-Allee 2011 list of indicators

Indicator	Quantity 2011	Reference/boundary
Members of staff Weighted number of staff	425	Full-time equivalents
Facilities Net internal area Net internal area per staff member	19,019 m² 45 m²	
Consumables Total paper consumption Paper consumption per staff member Recycled paper as % of total	4,505,000 sheets 10,600 sheets 100%	Printing and copying paper Printing and copying paper Proportion of recycled paper in overall consumption
Energy Total energy consumption Total energy consumption per staff member Electricity consumption per staff member Electricity consumption per unit net internal area Heating energy consumption Heating energy consumption per staff member Heating energy consumption per unit net internal area	3,515,800 kWh 8,272 kWh 1,489,480 kWh 3,505 kWh 78 kWh/m ² 2,026,320 kWh 4,768 kWh 107 kWh/m ²	
Water and wastewater Potable water consumption Potable water consumption per staff member Potable water consumption per staff member/day	10,627 m³ 25,005 l 100 l	Assuming 250 working days
Solid waste Total waste arisings Total waste arisings per staff member Paper waste Paper waste per staff member Residual waste Residual waste per staff member Recovery rate	71.0 t 167.0 kg 38.4 t 90.4 kg 32.6 t 76.7 kg 54.1%	Proportion of total waste arisings
Transport Proportion of commuters using local public transport Proportion of commuters using local public transport Jobticket Business trips within Germany Air km within Germany Rail km within Germany Company car km within Germany Business trips abroad	50% 66% 246 470,722 km 382,352 km N.c. 88,370 km 7,701,766 km	According to 2010 mobility survey, as a proportion of staff members According to 2010 mobility survey, as a proportion of km Excl. rail journeys Proportion of business trips within Germany Collected as total for all sites Only flights booked by staff at Friedrich-Ebert-Allee
Emissions CO ₂ emissions, total CO ₂ emissions, electricity CO ₂ emissions, heating energy CO ₂ emissions, commuting CO ₂ emissions, business trips	3,596 t 240 t 294 t 447 t 2,615 t	Emission factors according to supplier Emission factors according to supplier Emission factors according to UBA (2004) Flights and company car journeys only, emission factors according to Atmosfair and UBA (2004)

Operations in Eschborn 2011 list of indicators

Indicator	Quantity 2011	Reference/boundary
Members of staff Weighted number of staff Weighted number of staff	1,708 178	Full-time equivalents, Buildings 1-4 Full-time equivalents, office centre
Facilities Net internal area Net internal area per staff member	52,939 m² 31.0 m²	Buildings 1-4 Buildings 1-4
Consumables Total paper consumption Paper consumption per staff member Recycled paper as % of total	15,920,878 sheets 8,439 sheets 100%	Printing and copying paper Excl. external personnel, excl. documentation and publications Proportion of recycled paper in overall consumption
Energy Total energy consumption Electricity consumption per staff member Photovoltaic 1 Photovoltaic 2 Electricity consumption Electricity consumption per staff member Electricity consumption per unit net internal area Heating energy consumption Gas consumption Solar thermal system Heating energy consumption per staff member Heating energy consumption per unit net internal area	9,636,088 kWh 5,642 kWh 30,118 kWh 3,740 kWh 4,444,464 kWh 2,602 kWh 84 kWh/m ² 5,191,624 kWh 5,137,842 kWh 53,782 kWh 2,602 kWh 98.1 kWh/m ²	Electricity and natural gas Electricity and natural gas, excl. office centre Fed into the electricity grid Used on-site Incl. photovoltaic All staff at the site incl. external personnel and interns Incl. energy from the solar thermal system Hot water heating All staff at the site incl. external personnel and interns
Water and wastewater Total water consumption Total water consumption per staff member Total water consumption per staff member/day Potable water consumption per staff member Potable water consumption per staff member/ day Non-potable water consumption Non-potable water as % of total water consumption	13,531 m³ 7,922 l 31.7 l 4,952 m³ 2,899 l 11.6 l 8,579 m³ 63.4 %	Buildings 1-4 All staff at the site incl. external personnel and interns Assuming 250 working days Buildings 1-4 All staff at the site incl. external personnel and interns Assuming 250 working days From well water installation
Solid waste Total waste arisings Total waste arisings per staff member Paper waste Paper waste per staff member Other waste to recovery Residual waste Residual waste Residual waste per staff member Other waste to disposal Recovery rate Transport	323.6 t 189.4 kg 81.0 t 47.4 kg 141.5 t 100.8 t 59.0 kg 0.3 t 68.8 %	All staff at the site incl. external personnel and interns All staff at the site incl. external personnel and interns Electronic waste, canteen waste, bulky waste, fat separator Excl. hazardous waste All staff at the site incl. external personnel and interns Infectious waste Proportion of total waste arisings
Proportion of commuters using local public transport Jobticket Business trips within Germany Air km within Germany Rail km within Germany Company car km within Germany Business trips abroad	27% 1,332 2,295,860 km 2,179,625 km N.c. 116,235 km 41,936,527 km	According to 2005 mobility survey, corrected in 2008 Number of Jobtickets issued Excl. rail journeys Collected as total for all sites Only flights booked by staff at Eschborn
Emissions CO ₂ emissions, total CO ₂ emissions, energy CO ₂ emissions, commuting CO ₂ emissions, weekly commuters CO ₂ emissions, business trips	17,787 t 1,327 t 1,960 t 516 t 13,983 t	Emission factors according to UBA (2004) Emission factors according to UBA (2004) Emission factors according to UBA (2004) Flights and company car journeys only, emission factors according to Atmosfair and UBA (2004)

Operations in Berlin Reichpietschufer 2011 list of indicators

Indicator	Quantity 2011	Reference/boundary
Members of staff Weighted number of staff	84	Full-time equivalents
Facilities Net internal area Net internal area per staff member	1,994.8 m² 23.7 m²	
Consumables Total paper consumption Paper consumption per staff member Recycled paper as % of total	435,000 sheets 5,179 sheets 100%	Printing and copying paper Printing and copying paper Proportion of recycled paper in overall consumption
Energy Total energy consumption Total energy consumption per staff member Electricity consumption Electricity consumption per staff member Electricity consumption per unit net internal area Heating energy consumption Heating energy consumption per staff member Heating energy consumption per unit net internal area	715,428 kWh 8,517 kWh 281,268 kWh 3,348 kWh 141 kWh/m ² 434,160 kWh 5,169 kWh 218 kWh/m ²	Electricity, gas All staff at the site Electricity All staff at the site Gas All staff at the site
Water and wastewater Potable water consumption Potable water consumption per staff member Potable water consumption per staff member/day	1,615 m³ 19,226 l 76.9 l	Town mains water and sprinkler system All staff at the site Assuming 250 working days
Solid waste Total waste arisings Total waste arisings per staff member Paper and bulky waste Paper and bulky waste per staff member Glass waste Glass waste per staff member Packaging waste Packaging waste per staff member Residual waste Residual waste per staff member Recovery rate	11.6 t 137.8 kg 6.9 t 82.4 kg 0.2 t 1.9 kg 0.4 t 4.5 kg 4.1 t 49.0 kg 64.4 %	Recorded jointly because collected by one contractor Proportion of total waste arisings
Transport Proportion of commuters using local public transport	54.2 %	According to staff survey
Air km within Germany Air km abroad	180,512 km 7,948,950 km	Only flights booked by staff at Berlin Only flights booked by staff at Berlin
Emissions CO ₂ emissions, total CO ₂ emissions, energy	2,558 t 106 t	Only gas (electricity is CO2-free because green electricity is used), calculated according to UBA
CO ₂ emissions, commuting CO ₂ emissions, business trips	26.4 t 2,426 t	According to staff survey Flights only, emission factors according to Atmosfair

ENVIRONMENTAL PERFORMANCE IN NUMBERS

Operations in Berlin Potsdamer Platz 2011 list of indicators

Indicator	Quantity 2011	Reference/boundary
Members of staff Weighted number of staff	131	Full-time equivalents
Facilities Net internal area Net internal area per staff member	4,682 m² 35.7 m²	
Consumables Total paper consumption Paper consumption per staff member Recycled paper as % of total	774,705 sheets 5,914 sheets 100%	Printing and copying paper Printing and copying paper Proportion of recycled paper in overall consumption
Energy Total energy consumption Electricity consumption per staff member Electricity consumption per staff member Electricity consumption per unit net internal area Heating energy consumption Heating energy consumption per staff member Heating energy consumption per unit net internal area Consumption of air-conditioning system per staff member Consumption of air-conditioning system per staff member Consumption of air-conditioning system per unit net internal area	490,159 kWh 3,742 kWh 93,972 kWh 717 kWh 20 kWh/m² 190,937 kWh 1,458 kWh 41 kWh/m² 205,250 kWh 1,567 kWh 44 kWh/m²	
Water and wastewater Potable water consumption Potable water consumption per staff member Potable water consumption per staff member/day	921 m³ 7,031 l 28.1 l	Same as wastewater quantity Assuming 250 working days
Solid waste	N.c.	
Transport Proportion of commuters using local public transport	54 %	Staff survey
Emissions CO ₂ emissions, total CO ₂ emissions, energy CO ₂ emissions, commuting CO ₂ emissions, business trips	88 t 47 t 41 t N.c.	Emission factors according to UBA (2004) Emission factors according to UBA (2004) Calculated by Head Office

Operations in Bonn Tulpenfeld 2011 list of indicators

Indicator	Quantity 2011	Reference/boundary
Members of staff Weighted number of staff	220	Full-time equivalents
Facilities	N.c.	
Consumables Total paper consumption Paper consumption per staff member Recycled paper as % of total	820,000 sheets 3,727 sheets 100%	Printing and copying paper Printing and copying paper Proportion of recycled paper in overall consumption
Energy Total energy consumption Total energy consumption per staff member Electricity consumption (conventional supply) Electricity consumption (green electricity) Electricity consumption per staff member Heating energy consumption Heating energy consumption per staff member	998,255 kWh 4,538 kWh 100,067 kWh 219,659 kWh 1,453 kWh 678,529 kWh 3,084 kWh	Electricity, district heat and natural gas Electricity, district heat and natural gas 2010 value, for rented office space and outside spaces Greenpeace Energy 2010 value
Water and wastewater Potable water consumption Potable water consumption per staff member Potable water consumption per staff member/day	1,383 m³ 6,584 l 26.3 l	2010 value Assuming 250 working days
Solid waste Total waste arisings Total waste arisings per staff member Paper waste Paper waste per staff member Mixed recyclables Mixed recyclables per staff member Residual waste Residual waste per staff member Recovery rate	21.6 t 98.3 kg 15.6 t 70.7 kg 1.5 t 6.6 kg 4.6 t 21.0 kg 78.7 %	Proportion of total waste arisings
Transport Proportion of commuters using local public transport Proportion of commuters using local public transport Jobticket Business trips within Germany Air km within Germany Rail km within Germany Company car km within Germany Business trips abroad	38% 49% 84,593 km 25,781 km N.c. 58,812 km 2,563,000 km	According to 2010 mobility survey, as a proportion of staff members According to 2010 mobility survey, as a proportion of km Excl. rail journeys Proportion of business trips within Germany Collected as total for all sites Only flights booked by staff at Friedrich-Ebert-Allee
Emissions CO ₂ emissions, total CO ₂ emissions, energy CO ₂ emissions, commuting CO ₂ emissions, business trips	1,282 t 187 t 260 t 835 t	Emission factors according to supplier Emission factors according to UBA (2004) Flights and company car journeys only, emission factors according to Atmosfair and UBA (2004)

ENVIRONMENTAL PERFORMANCE IN NUMBERS

Operations in AgenZ Rödelheim 2011 list of indicators

Indicator	Quantity 2011	Reference/boundary
Members of staff Weighted number of staff	24.25	Full-time equivalents
Facilities Net internal area Net internal area per staff member	1.097 m² 45.3 m²	Incl. all access areas
Consumables Total paper consumption Paper consumption per staff member Recycled paper as % of total	163,847 sheets 6,757 sheets 100%	Printing and copying paper Printing and copying paper Proportion of recycled paper in overall consumption
Energy Total energy consumption Electricity consumption per staff member Electricity consumption Electricity consumption per staff member Electricity consumption per unit net internal area	199,574 kWh 8,229 kWh 22,209 kWh 1,386 kWh 182 kWh/m²	Statement of utility costs from 2008
Heating energy consumption Heating energy consumption per staff member Heating energy consumption per unit net internal area	177,365 kWh 9,335 kWh 229 kWh/m²	Data from 2007, as no up-to-date statement of utility costs available
Water and wastewater	N.c.	
Solid waste	N.c.	Building owner responsible for disposal
Transport Proportion of commuters using local public transport Car Cyclists/pedestrians	46 % 35 % 19 %	Staff survey
Emissions CO ₂ emissions, total CO ₂ emissions, energy CO ₂ emissions, commuting CO ₂ emissions, business trips	94.1 t 74.8 t 19.3 t N.c.	Emission factors according to UBA (2004) Emission factors according to UBA (2004) Calculated by Head Office

International Training Centres (ITCs) Bad Honnef, Berlin Stresemannstraße, Berlin Lützowufer, Feldafing, Mannheim, Leipzig-Zschortau 2011 list of indicators

Indicator	Quantity 2011	Reference/boundary
Members of staff Weighted number of staff Participant days (PD)	247 47,826 PD	Attendances by participants
Consumables Paper consumption, total Paper consumption/PD Recycled paper as % of total	1,860,250 sheets 51 sheets 100%	N.c. for Bad Honnef Excl. Bad Honnef N.c. for Bad Honnef
Energy Total energy consumption Electricity consumption Electricity consumption/PD Heating energy consumption Heating energy consumption/PD	3,902,381 kWh 1,358,397 kWh 28 kWh 2,543,984 kWh 53 kWh	Heating energy n.c. for Berlin Stresemannstraße N.c. for Berlin Stresemannstraße Excl. Berlin Stresemannstraße
Water and wastewater Total water consumption Potable water consumption Potable water consumption/PD Non-potable water consumption	12,064 m³ 11,910 m³ 256 l 154 m³	N.c. for Berlin Stresemannstraße N.c. for Berlin Stresemannstraße Excl. PD Berlin Stresemannstraße Berlin Lützowufer only
Solid waste Total waste arisings Total waste arisings/PD Wastes to recovery Paper waste Other waste to recovery Wastes to recovery/PD Residual waste Residual waste/PD Recovery rate as % of total	137.0 t 2.9 kg 61.7 t 56.6 t 5.1 t 1.3 kg 75.3 t 1.6 kg 45%	
Emissions CO ₂ emissions, total CO ₂ emissions, electricity CO ₂ emissions, heating energy	1,403 t 756 t 647 t	Emissions factors according to suppliers Emissions factors according to suppliers

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Facts and figures

GIZ operates throughout Germany and in more than 130 countries worldwide. Our registered offices are in Bonn and Eschborn. We have more than 17,000 staff members around the globe, some 70% of whom are employed locally as national personnel. GIZ's business volume was about EUR 2 billion as at 31 December 2011.

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2012 is the Year of the Green Economy. GIZ – acting principally on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) – is advising its partners in numerous projects on ways of greening economic development.

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