



Naturally networked

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Society & Environment

Deutsche Post World Net: Environmental Report 2003

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You will find further information on our environmental commitment on the Internet at:

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Networking the world

Our task as a global logistics provider is to network the world. Our aim is to provide excellent service quality to our customers at attractive prices in the most environmentally-friendly way possible. Globalisation and global trade are generating more and more transport and traffic, thus affecting the environment and climate alike. The challenge for our company is therefore to reduce to the extent possible the utilisation of resources and the impact on the environment by providing the highest possible level of efficiency.

Yet globalisation also provides new opportunities – for development, equal opportunities and efficient environmental protection. Environmental protection is both a local and a global task. In order to be consistent with its global dimension, we need comprehensive strategies and must use skills and resources on a global level. Global logistics networks like Deutsche Post World Net's lay the necessary foundations. It is only with efficient networks that we can reduce environmental pollution and at the same time make the best possible use of the opportunities that globalisation presents. In this regard, nature can teach us how efficient networks operate.

That is why we have given our first environmental report this particular title.

Global tasks call for efficient networks linking economy, politics and society and require people to assume responsibility – at national and international level. We wish to shoulder our share of the responsibility – in dialogue with you. We therefore invite you to take part in the discussion.

Sincerely,



Dr Klaus Zumwinkel
Chairman of the Board of Management



A modern and global logistics group >>>

The global economy in the 21st century is marked by progressive globalisation. Political barriers and trade barriers are being abolished, modern technologies are simplifying communication paths as well as business development and operations. Manufacturers and consumers have unlimited access to goods and services available on global markets – and are increasingly taking advantage of that availability. Global networks and service providers who can cater for these markets are essential for global trade.

Deutsche Post World Net geared up to meet the requirements of globalisation early on and is today one of the largest and most efficient logistics groups in the world. With its brands Deutsche Post, DHL and Postbank, it provides its customers with the entire spectrum of communications, logistics and financial services. What used to be the state-owned company Deutsche Bundespost has become an international, listed group whose products and services reflect market trends and meet customer needs. Ever faster global delivery is one of the requirements. By acquiring participating interests in countries all over the world and by expanding its own range of services, Deutsche Post World Net has created a network that connects more than 220 countries and territories.

The Group has a global workforce of approximately 380,000 (head count as at 31 December 2002), with around 70 percent of its employees based in Germany and 20 percent in the rest of Europe. Deutsche Post World Net has over 23,000 employees in the Americas and over 14,000 employees in Asia.

Overview of services

Deutsche Post World Net generated total revenue of over EUR 39 billion and profits from operating activities of over EUR 2.4 billion in 2002. More than 40 percent of its revenue is now generated on international markets, including the Americas and important growth markets such as Asia or Eastern Europe. The Group's services are provided by four corporate divisions.

The MAIL Corporate Division handles around 21 billion items each year. These items include not just traditional letters, but also advertising mail (9 billion items/year) and publications (2.2 billion items/year). It also processes so-called hybrid mail items (0.9 billion items/year) – Deutsche Post receives the items by electronic means and they are printed out and delivered as letters. In the mid-1990s, a state-of-the-art logistics system was installed in the mail division, encompassing 83 mail centres throughout Germany which ensure that logistics standards are met. Under the Postal Universal Service Ordinance (Post-Universaldienstleistungsverordnung (PUDLV)), Deutsche Post is legally bound to meet certain standards in terms of quality (transit times) and number (postal retail outlets, letterboxes) for its mail and parcel products and services.

The Group generates around 28 percent of its revenue in the MAIL Corporate Division. A few years ago, the figure was closer to 70 percent. These figures underline how the Group has developed from solely a national letter mail and parcel service provider into an international logistics group.



The EXPRESS Corporate Division, integrating all parcel and express services, is now the Group's biggest revenue earner, accounting for almost 30 percent of total revenue. This can be attributed largely to the integration of DHL Worldwide Express. The global market leader in the international courier and express business has been a wholly-owned subsidiary of the Group since December 2002. DHL Worldwide Express transports over 160 million shipments globally each year and operates a fleet of over 250 aircraft, with over 3,400 international flights each day. Since 1 April 2003, DHL has been the Group's brand for all express and logistics activities.

Growth in the EXPRESS division is also reflected in market share. In Germany, Deutsche Post World Net was the number one provider of courier, express and parcel services (CEP) in 2001, with a market share of 23 percent in a growing market. In the European CEP market, Deutsche Post was also the biggest provider in 2001, with a market share of 16 percent. In the global cross-border mail market that also forms part of EXPRESS, Deutsche Post World Net had a market share of 14 percent in 2001, which made it the second largest provider.

The LOGISTICS Corporate Division previously comprised the Danzas group that has been part of Deutsche Post World Net since 1999. The Corporate Division now operates under the DHL umbrella brand. Full logistics services are provided in three business departments:

- Danzas Solutions (in future DHL Solutions) develops and implements full logistics solutions along the entire supply chain, in particular for the automotive, electronics, fashion, FMCG (fast-moving consumer goods), pharmaceutical and telecommunications market segments.
- Danzas AEI Intercontinental (in future DHL Danzas Air & Ocean) is the world's number one service provider for air freight, the number two provider for ocean freight and provides its customers with a project forwarding service.
- Danzas Eurocargo (in future DHL Express and DHL Freight) has the densest transport network for less-than-truckload shipments in Europe and provides special services such as customs services, trade fair services and food transportation services.

»»» with new tasks and increasing responsibility



Postbank, together with Deutsche Post's retail outlets and the Pension Service, makes up the FINANCIAL SERVICES Corporate Division. With 10 million customers, it is one of the largest retail banks in Germany. Its products and services are sold mainly via Deutsche Post's more than 12,000 retail outlets.

Particularly since its merger with DSL Bank in 2000, Postbank has increasingly been targeting business customers as well. It provides all the main banking products from payment transactions and loans and investments right through to online brokerage. Its portfolio also includes home saving and insurance products. In 2001, Postbank took over BHF (USA) Holdings Inc. in New York, which operates mainly in the area of corporate finance and commercial real estate loans. Deutsche Post World Net has thus created a strategic platform for the development of global logistics finance that facilitates synergies with other divisions, in particular the EXPRESS and LOGISTICS Corporate Divisions.

Requirements the Group has to meet

By providing a comprehensive range of communications, logistics and financial services, Deutsche Post World Net covers the entire supply chain for its customers from a single source. This development is not an end in itself, it meets the demand for comprehensive and swift service among customers who are global players. Global networks are to be further expanded, particularly in the direction of Asia and America. The integration of the three major brands DHL Worldwide Express, Deutsche Post Euro Express and Danzas under the DHL brand makes leveraging synergies and enhancing the efficiency of networks an economic and environmental necessity.

The fuel consumption of our fleet of vehicles and the energy required both to heat our real estate properties and to operate our sorting processes are two areas in which major cost factors are associated with environmental effects – the utilisation of resources and emis-

sions. The systematic evaluation and control of such factors for Deutsche Post World Net is a major component of a sustainable corporate policy that includes environmental protection as well as social and humanitarian commitment.

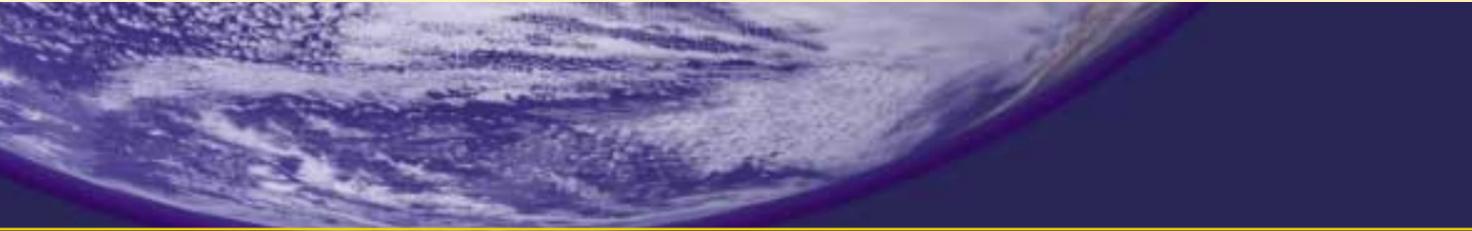
Coordinating environmental activities

The establishment of the Policy and Environment Corporate Department in 2001, which reports directly to the Chairman of the Board of Management, Dr Klaus Zumwinkel, was an important step in the right direction. Under the management of Dr Monika Wulf-Mathies, Deutsche Post World Net's many activities in the environmental area are coordinated throughout the Group. The tasks include providing specialised advice to the various Board and Business Departments on environmental issues. A Group-wide committee for environmental protection provides a forum for the exchange of experience and facilitates the coordination process. A reporting system is

to be introduced that will cover the different board departments, including divisions that operate at international level. A long-term task will be to provide quantitative data on Deutsche Post World Net's impact on the environment as part of Group-wide environmental controlling.

In addition to outlining our activities, we are publishing our environmental performance in this report. They cover the year 2001 and mainly focus on Deutsche Post AG's activities in Germany.

Our responsibility



Deutsche Post World Net, a world wide leading logistics service provider, offers mail, logistics, express and financial services through its global infrastructure network. In Germany, we guarantee comprehensive postal service that connects people and is backed by an extensive transport network. Through our products and services, we help surmount geographical and temporal barriers, promote human communication and foster common trade.

In the course of our worldwide operations, we are continually confronted with far-reaching global problems that government, trade, industry and society must take on: Environmental protection in general and climate protection in particular are global tasks. It is vital that people worldwide find their way to a responsible and equitable use of our planet's resources. At the same time, the poor countries of this world must be given the opportunity for economic development and access to greater prosperity. The future of coming generations must be safeguarded.

Only when everyone is willing to assume global responsibility for these challenges will it be possible to master these tasks. It is our belief at Deutsche Post World Net that our products and services in the mail, logistics, communications and financial services fields represent an important contribution to this.

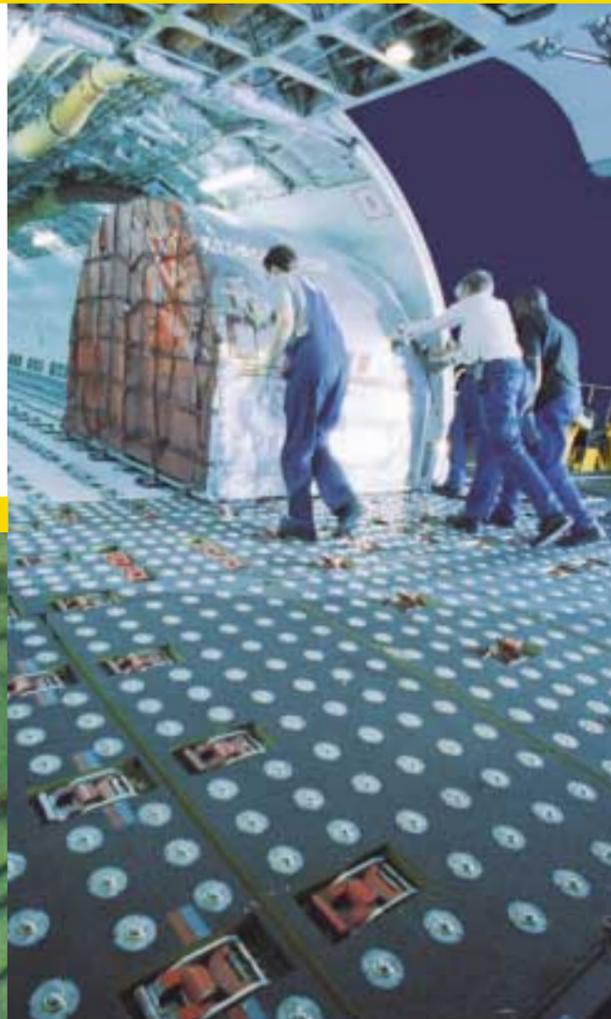
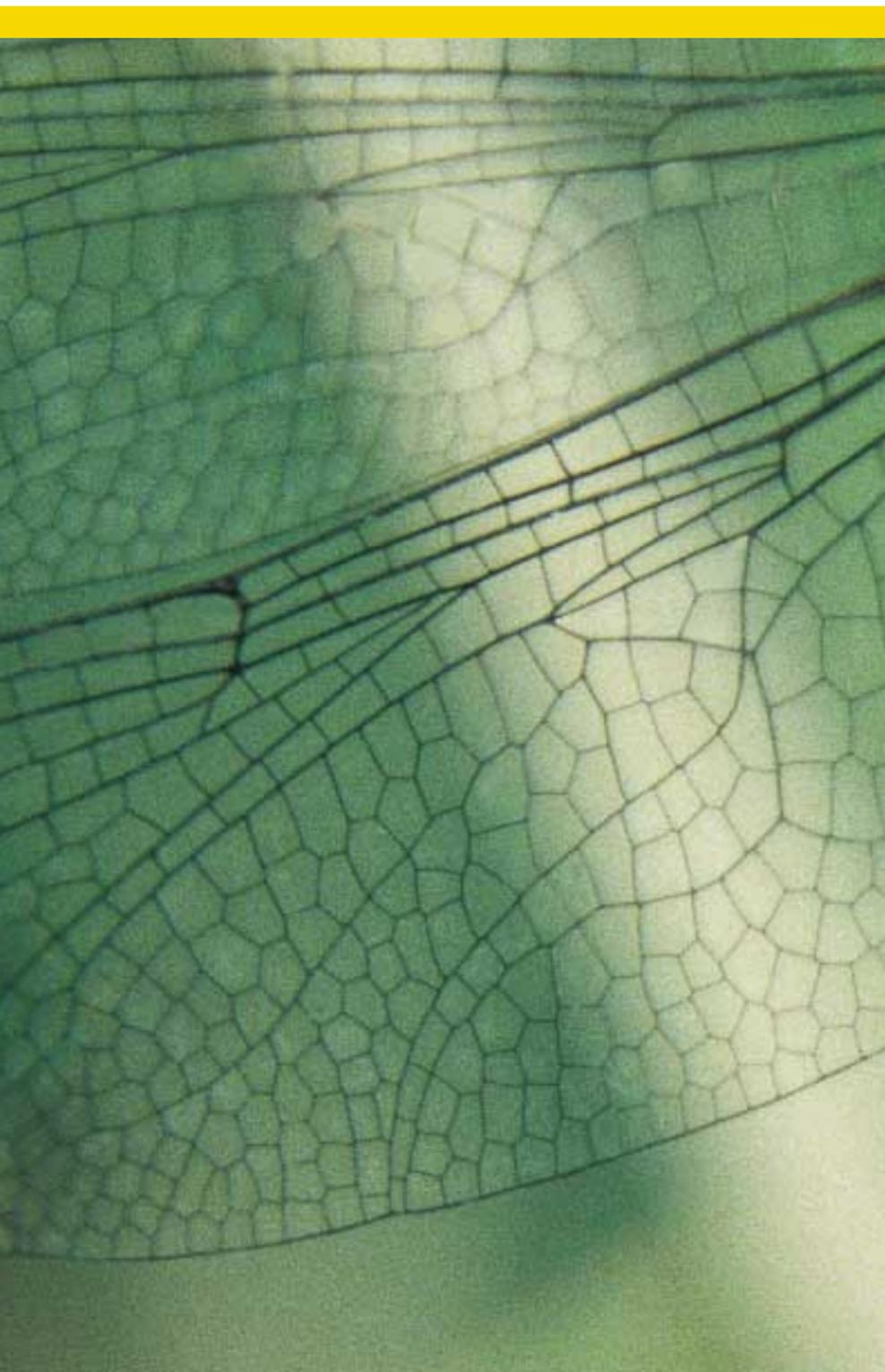
While doing so, our activities both in general and also at detail level must be consistent with these objectives. They must guarantee a high level of environmental sustainability and social acceptance. In the end however, the environmental importance of logistics services can be judged only within the overall context. Logistics services are not an end in themselves. They are an indispensable part of functioning economic structures, the international division of labor and strategies for global solutions - and thus constitute our share of responsibility.

Our guidelines

As a world wide leading logistics group, Deutsche Post World Net acknowledges its global responsibility to protect the environment and ensure sustainable development. With our services, we are helping to meet the tasks facing the world today. Our guidelines are directed at gearing our activities ever more to the principles of sustainable development:

- Environmental protection is an integral part of our corporate strategy which is aimed at long-term value creation. It is an important factor in the evaluation of all our activities.
- We measure our processes and services against the highest quality standards. Compliance with national and international environmental regulations constitutes the minimum standard for us. It is also the starting point for supplementary measures aimed at continually improving our environmental performance.
- As a corporate group, we advocate and support the dissemination of environmentally and socially exacting standards throughout the world.
- We consider our employees' commitment and active involvement to be an important platform for our efforts and a significant source of innovation. We want to foster this through specific training and motivation.
- We study our typical transport and logistics processes and work to improve them. To achieve this, we rely on modern technology and efficient logistics structures throughout the world.
- We evaluate our logistics products and services against a macroeconomic backdrop or within the context of entire value-added chains and their environmental relevance. In close cooperation with our customers and business partners, we want to optimize them in environmental terms as well.
- We assess and evaluate our environmental performance on a regular and transparent basis. In the case of a conflict of interests these results are carefully considered in order to balance economic, social and environmental objectives.
- We detail our performance in regular, transparent environmental reports. In this context, we seek a dialogue with the public and an exchange of information on experience with other – both national and international – bodies.

Efficient networking



Nature uses intricate networks in order to create links and make life possible. Man uses a network of roads, railways and air and sea routes to link places with each other. Nature provides us with the perfect example of how life can be efficiently networked. And how life can make sustainable use of the environment. Our potential – both economically and ecologically – lies in the way we shape our logistics networks. It is up to us to continue to enhance their efficiency by applying our logistics know-how.

for economic reasons



How can goods be transported from A to B? By direct routes? Using half-empty vehicles? Transport logistics is no trivial matter. Runs with empty or half-empty vehicles create unnecessary costs and environmental pollution, just as uncoordinated routes do.

Networking prevents inefficient transport runs and at the same time safeguards quality. Logistics know-how is the backbone of mail and parcel services and of the freight-forwarding industry. In Germany, Deutsche Post has managed to achieve a network density that is unparalleled: every household and every street has been opened up and is catered for each working day. The expense of additionally transporting a single letter or parcel on this network is minimal. No additional trips have to be made. However, this only applies as long as intensive use is being made of the network and the network handles a large volume of shipments. High capacity utilisation is not just the prerequisite for energy efficiency, but is also an economic requirement.

Building global networks

A rule that applies to national networks in Germany or in other countries also applies to global logistics networks: they have to achieve a certain density and a large volume to become

viable. That is one of the reasons why Deutsche Post World Net invests so much time and money in developing a global logistics network. This is the only way that global shipments that customers require today can be transported in an efficient, environmentally-friendly and cost-effective manner.

The integration of previously independently operating companies from all over the world defines the Group's task of pooling networks in order to make more productive use of them. Merely providing parallel networks – possibly in the same regions for comparable or identical products – is very rarely efficient, also and especially from the environmental point of view, since the capacity of the means of transport is not utilised to the full.

A great deal of thought is given to the area of network optimisation at Deutsche Post World Net. In the GeoRoute project, for instance, the optimum routes within delivery districts in Germany are determined using a computer-based route optimisation system.

So-called combined delivery, common in rural districts, also needs to be considered from the point of view of network efficiency. In some cases, it may, for instance, make sense to switch from bicycle delivery to vehicle

delivery in city outskirts or in small towns if this means that parcels can be delivered in the district and, at the same time, special parcel delivery trips with delivery vans can be saved. The environmental performance must be seen in the overall context in this regard.

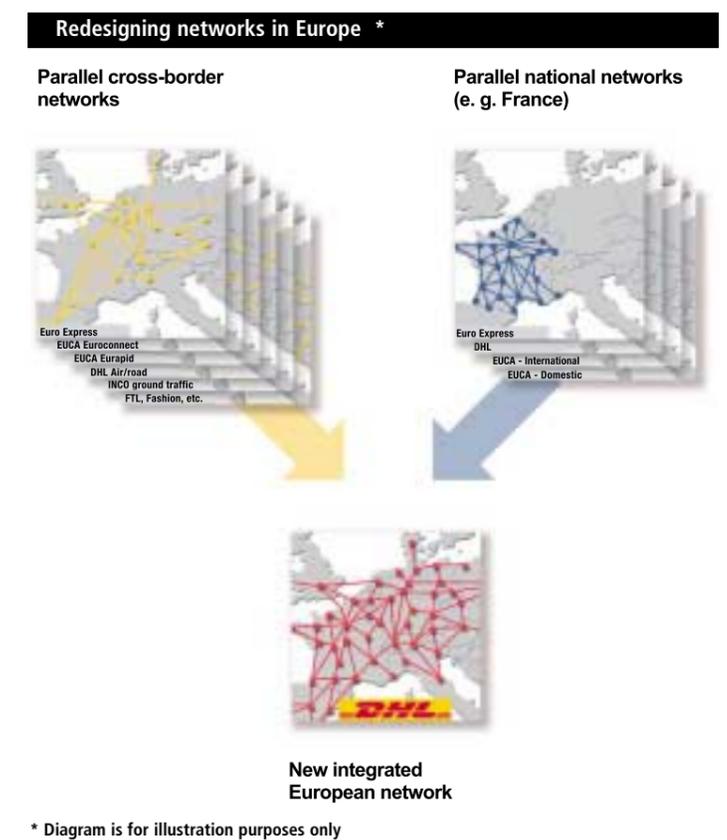
Integrating parallel networks

Special importance is attached to the integration of parallel networks, both at regional and at European and global level. Up to now, Deutsche Post Euro Express and the Group subsidiaries DHL and Danzas have been operating independent local pick-up & delivery networks.

As part of its in-house value creation programme STAR, Deutsche Post World Net envisages that these services will in future be offered as integrated services by DHL. This will reduce the number of trips and increase the capacity utilisation – which will have an immediate effect on eco-efficiency.

Deutsche Post World Net currently operates six parallel networks for cross-border traffic in Europe over and above its national network structures. These networks, which have hitherto operated independently of each other, are to be integrated as part of STAR. The measure

should contribute hundreds of millions to earnings by 2005 and will also have a positive impact on the environment.



»»» for the benefit of the environment



Interview with Dr Monika Wulf-Mathies, Head of the Policy and Environment Corporate Department at Deutsche Post World Net

Dr Wulf-Mathies, how eco-efficient is Deutsche Post World Net?

We are in a position to offer our services very eco-efficiently thanks to our dense networks. And there are of course parallels between the economic optimisation of our logistics networks and a high level of ecological efficiency. The more intensively we use our network structures, the lower the energy consumption and the level of emissions will be per transport service.

Can you give us an example?

The integration of the Deutsche Post, DHL and Danzas logistics networks. We can build on the respective logistics expertise, avoid parallel structures and prevent inefficient transports. That is very important, particularly in the international area. To this can be added improvements resulting from the introduction of intelligent routing. However, the choice of suitable means of transport is also important. Energy-intensive means of transport not only emit high levels of carbon dioxide, they also cost us a lot of money.

How environmentally-friendly are the nationwide networks that Deutsche Post operates in Germany?

That is an interesting subject. Deutsche Post AG's networks are shaped by the statutory mandate to provide mail and parcel services. We have to provide services not just in conurbations but also in sparsely-populated areas – that is an economic and environmental challenge. However, we do have an ecologically-efficient answer, even for those sparsely-populated areas, thanks to the high overall volume of shipments. Of course, it is not possible to make deliveries by bicycle or on foot in sparsely-populated areas but the density of our network provides the shortest routes possible under these circumstances. This means we are leagues ahead of where we would be if small volumes of mail were being distributed by a large number of different service providers with ecologically less-efficient networks. In order to meet the changing needs of our customers, we are endeavouring to make our networks even more flexible and efficient. PACKSTATION, a new delivery service, is an

innovative example of this. It gives customers the option of avoiding failed delivery attempts and having to make the same trip twice. They can pick up parcels from a centrally-located parcel machine while they are on the move.

Deutsche Post World Net has grown considerably in the past few years. How has the integration of the new subsidiaries impacted on the environment?

Our new subsidiaries can boast an excellent track record in this area. Just look at Danzas, for instance, which has had its own environmental guidelines for years. Or bear in mind that DHL is currently introducing environmental management systems in accordance with the ISO 14001 Standard in a large number of countries. Our subsidiaries in Scandinavia are setting a particularly good example, for instance, with the Grøna Ton (Green Tonnage) concept. But in Germany, we can also be proud of Parcel InterCity, our highly efficient product combining road and rail transport. For the Group as a whole, it is a matter of networking these activities, of expanding successful concepts and of learning from one another. And it is, of course, particularly important to make joint use of logistics systems and to organise them even more efficiently, especially in the air transport area. That

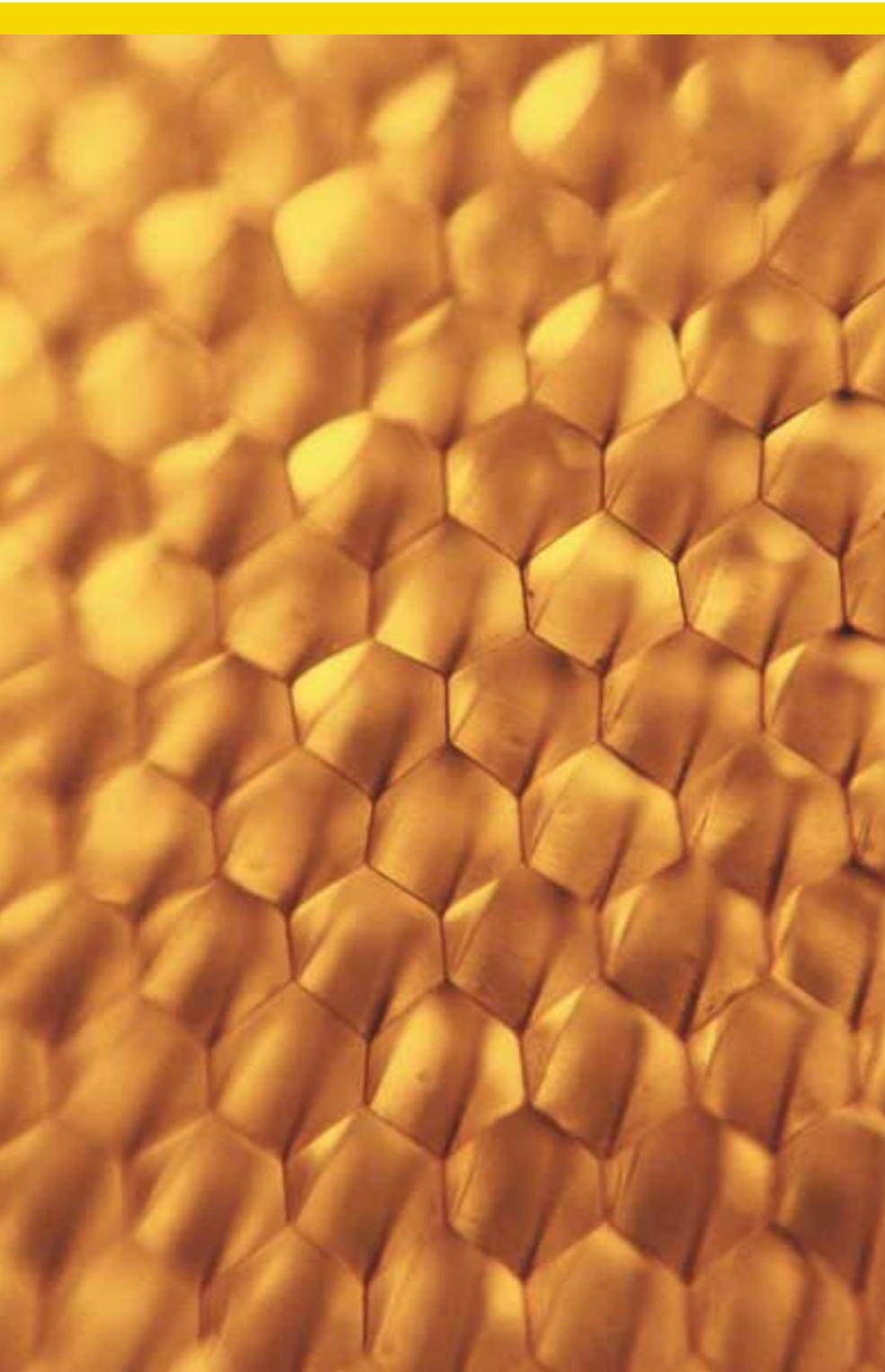
makes sense, both environmentally and economically, and has become a focus of our value creation programme STAR.

Air transport, in particular, is gaining importance in global trade. This is very problematic from the environmental point of view ...

It is both global trade links and our production and consumption habits that are speeding up the exchange of goods and information. This is where we need to gear ourselves to customer needs if we want to keep our market position. Global and at the same time swift transport networks are the basis of our competitiveness and would be inconceivable without air transport. However, we need to reduce environmental pollution as much as possible by using state-of-the-art technology, for instance, modern, economical and low-noise aircraft. Efficient utilisation of aircraft capacity is another important aspect. But we also want to document what types of pollution result from what types of transport services. That is why we have taken stock of a number of typical transport services in this environmental report. We are endeavouring to offer customers alternatives so that they have the option of choosing the more eco-efficient logistics product.

Dr Monika Wulf-Mathies has been head of the Policy and Environment Corporate Department in the Board Department of the Chairman of the Board of Management at Deutsche Post World Net since January 2001. She has previously worked at the Ministry of Economics, the Federal Chancellery, as Chairperson of the ÖTV trade union and as an EU Commissioner.

Conveying mail



Over 62,000 mail delivery districts are spread seamlessly over the whole of Germany like a honeycomb network – from the Halligen islands to the Zugspitze. We convey over 70 million items each working day for our customers in Germany alone. As a rule, letters are delivered within a day. To do so at affordable prices is only possible using state-of-the-art technology and sophisticated logistics. As such, the environmental track record is not just dependent on the distance covered by letters.

for instance from Munich out into the world



Emptying letterboxes in Munich: Collection is carried out using cars or estate cars.

The loaded truck leaves the delivery base and drives on to the mail centre in Munich.

Almost 90 percent of the items are handled fully automatically.

Outgoing letters are sorted according to routing regions.

For distances of up to 450 kilometres, trucks are used – sometimes with a trailer.

Trailers are changed at Ulm.

Shipments to Hamburg use the overnight airmail service.

A stopover is made in Frankfurt: the letters are resorted to other aircraft.

Having their morning mail in their letterboxes is something which business and private customers alike take completely for granted. Yet the collection, sorting and delivery of 70 million letter mail items every day is a logistical challenge. “J+1” is what customers and the legislator expect, namely delivery of items posted within Germany on the next working day. This is achieved in 95 percent of cases, with the result that Deutsche Post offers top quality by international standards.

This can only be achieved because we have developed a sophisticated logistics network. The decentralised collection of letters is followed by a complex sorting process in one of the 83 mail centres and then transport – sometimes just a few kilometres, sometimes 1,000 kilometres. The route taken by three different letter mail items is outlined below.

Munich – Stuttgart

A letter weighing 20g is posted in a letterbox in Munich – in one of over 100,000 throughout Germany. The letterboxes in a region are emptied on a specified route, the letters are then transported to the relevant delivery base from where they are brought to the mail centre in Munich 30 kilometres away in a 7.5 ton truck. These trips are referred to as “pre-carriage”.

The letters are cancelled and sorted at the mail centre – by routing region, corresponding to the first two digits of the postcode. Each day, several million letter mail items are processed, with the address being read by machines in almost 90 percent of the cases. It is only the high level of automation that facilitates timely and cost-effective processing.

The so-called “main carriage” takes place after sorting – the letters have to be transported to the mail centre in the routing region where the recipients’ addresses are located. When letters are transported from Munich to Stuttgart, the transport covers a distance of approx. 250 kilometres in the trailer of a large truck. At the hub (transshipment centre) in Ulm, the truck driver changes trailers and another one continues the trip to Stuttgart.

At Stuttgart mail centre, incoming items are sorted according to delivery bases and districts early in the morning. They are then driven to the connected delivery bases – the so-called “post-carriage” has begun. There are around 3,500 delivery bases throughout Germany, from where mail is delivered on foot or by bicycle in more than 50 percent of all the 62,000 districts.



International items go to the International Mail Centre Frankfurt (IPZ).

The letters are sorted at the IPZ and are flown to the USA, for instance, on scheduled flights.

Landing in New York: the letter is handed over to the national postal company.

and this is our environmental performance

The well-laden truck and trailer travels on to the mail centre in Stuttgart.



The journey by truck continues from Hamburg airport to Hamburg mail centre.



At the destination mail centre, the outbound mail is sorted and the letter is transported by truck to the delivery base.



Delivery takes place in the morning – in over 50 percent of cases, on foot or by bicycle.



Munich – Hamburg

If letters have to travel a large distance, “J+1” can only be ensured with swifter transportation. For distances of over 450 kilometres, the letters are driven to one of the country’s ten airports. State-of-the-art passenger aircraft usually fly a star-formation route to Frankfurt. They are filled to the brim with letter mail items. In Frankfurt, the items are reloaded as quickly as possible and are then flown on to their destination airport. Direct flights have also been organised on worthwhile routes.

In this particular case, the letter is transported from the mail centre in Munich to the airport. It is flown to Hamburg via Frankfurt and is then driven from the airport to Hamburg mail centre. There, incoming items are sorted according to delivery bases and districts and post-carriage then starts to the delivery bases.

Munich – New York

If a letter is destined for New York, it is driven by truck from the mail centre in Munich to the International Mail Centre in Frankfurt, where sorting takes place. The letter is then flown to the USA on an intercontinental flight. Once it has arrived in New York, the letter is handed over to the national postal company.

Greenhouse gas emission

The greenhouse gas emissions resulting from shipments and energy-generation processes are of particular importance. These emissions are indicated in grams carbon dioxide-equivalent.

A letter weighing 20 grams generates 18 grams of emissions on the route between Munich and Stuttgart – which, incidentally, is less than the emissions generated in manufacturing

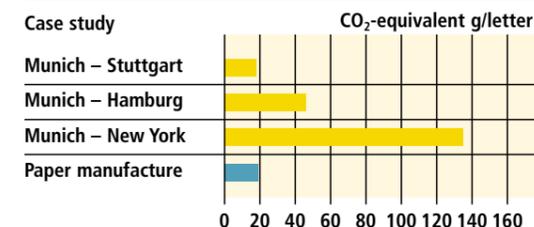
20 grams of letter paper. Most of these emissions are caused by the energy consumed by the mail centres. The truck transport during the main carriage only plays a minor role.

On the route between Munich and Hamburg, air transport generates the most emissions. The route to New York generates emissions of as much as 86 percent – and the letter is transported across a distance of 6,200 kilometres within the shortest space of time.

Analysis of emissions by process stages			
Case study:	Munich Stuttgart	Munich Hamburg	Munich New York
Distance:	250 km	850 km	6.200 km
CO ₂ -equiv./letter	18 g	49 g	140 g
Collection	17 %	6 %	2 %
Pre-carriage	2 %	1 %	<<1 %
Sorting incoming mail	29 %	11 %	4 %
Main carriage road	7 %	1 %	3 %
Main carriage air	–	76 %	86 %
Sorting outgoing mail	44 %	5 %	5 %*
Post-carriage	1 %	<<1 %	– **

* at the International Mail Centre Frankfurt
** not taken into account in the USA

Greenhouse gas emissions (case studies)



Greenhouse gas emissions in the three examples of conveyance of a 20-gram letter and comparison with the emissions generated in the paper manufacture of a 20-gram letter.

Delivering goods



Private individuals and companies alike tend to use parcels, small packets or pallets for the exchange of goods. With its extremely dense network, Deutsche Post World Net ensures nationwide delivery. This service has become indispensable today; whole branches of industry depend on it. At peak times, we handle around 2.8 million shipments a day in Germany. Sophisticated logistics and high transport efficiency also benefit the environment.

near or far, fast and punctual

A parcel is posted in Munich.



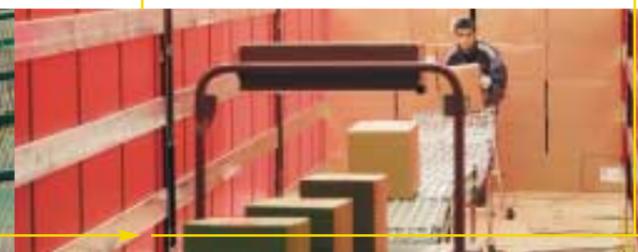
At the parcel centre, the parcels are coded on the basis of postcodes.



The parcels are sorted automatically by destination area ...



... and are loaded onto trucks.



In most cases parcels are transported by truck to the parcel centre in the destination area.



Parcel InterCity is used on the route between Munich and Hamburg.



As part of the express service, a courier picks the parcel up from the customer.



The parcels are transhipped at the hub in Staufenberg.



The parcels are driven to Hamburg on different-sized trucks ...



... and are transhipped at a parcel centre.



Delivery to the addressee.



Case study of a 5.5-kilogram parcel

A parcel is to be transported from Munich to Hamburg. It weighs 5.5 kilograms and was posted in Munich in the afternoon. Of course it is to arrive the following day, for “J+1” also applies to parcels transported by Deutsche Post: as a rule, parcels are delivered the following working day.

In the parcel service, over 400 delivery bases, approximately 11,300 delivery districts and 33 parcel centres provide nationwide coverage at prices that are standardised throughout Germany. The parcel centres include 5 international freight stations. The majority of parcels are conveyed by truck. However, the fast connection using Parcel InterCity is available for the route between Munich and Hamburg. Deutsche Post World Net provides this combined rail and road transport option in cooperation with DB Cargo. A whole train can

carry 60 swap bodies, and almost 90 percent of its capacity is utilised on the North-South/South-North route.

Parcel InterCity is an environmentally-friendly alternative to truck transport. Transporting the parcel in question over a distance of approximately 850 kilometres generated 410 grams of CO₂ emissions. However, on many other routes, trucks have to be used for the main carriage, because at present there are not enough options for linking rail and road ship-

ments. And often there is simply no demand for this service among business customers.

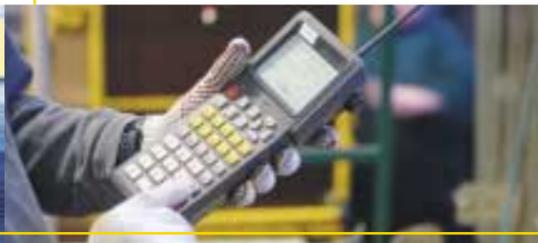
Truck capacity is utilised most efficiently – also for economic reasons. If one considers, for instance, the same 5.5-kilogram parcel being transported from Munich to Cologne by truck, covering a distance of approximately 600 kilometres, it generates 870 grams of CO₂ emissions. Incidentally: around 80 grams of these CO₂ emissions result from the delivery of the parcel in Hamburg or Cologne.

with positive results for the environment

Sorting of outbound shipments at the Hamburg parcel centre.



The parcels are loaded ...



... and are transported to the delivery base.



Delivery in the delivery district.



It is a different story with express items. Speed comes at a price: an express delivery generates around 800 grams of CO₂. As such, the deciding factor is that shipments cannot be delivered during ordinary delivery runs, but, in around 2,000 cases, have to be delivered each day by a smaller vehicle carrying fewer shipments.

The speed factor

Express items are also collected separately and are transported differently from ordinary parcels in the main carriage. The items are picked up from the customer's premises, sometimes late in the evening, and are delivered the following morning, sometimes even before 9 am. This means that an express parcel weighing 5.5 kilograms generates a total of 2,700 grams of CO₂ emissions.

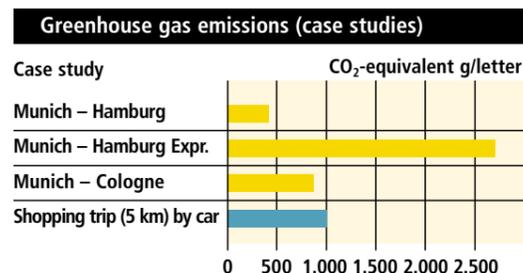
A parcel weighing 5.5 kilograms being transported 6,200 kilometres from Munich to New York actually produces almost 36 kilograms of CO₂ emissions. Air transport may offer the benefit of swift conveyance, even over large distances, but it has a bigger impact on the environment. Only 0.8 kilograms of those emissions are generated in Germany and 35 kilograms on the intercontinental flight. If the parcel were transported by ocean freight, the ship would only generate around 0.8 kilograms of CO₂ emissions, but the item would take about a week to deliver, which is mostly too long for customers.

A comparison

Do goods have to be shipped as parcels for private customers as well? This question arises particularly in relation to the mail-order business, which is an important customer segment for Deutsche Post.

The alternative would be to purchase the goods on a shopping spree in the neighbouring town centre instead of ordering them from a mail-order company and having them delivered by the postal service. The most environmentally-friendly option would be to travel by bicycle or tram. But the goods (weighing 5.5 kilograms) have to be moved. It is therefore more realistic for consumers to drive by car – a total distance of 5 kilometres, which is an optimistic assumption. This short trip alone generates 1,000 grams of CO₂ emissions – more than postal delivery. This does not even take into consideration that the goods still have to get to the shops. The environmental performance for parcels, and therefore also for mail-order companies, compares favourably with purchasing in retail shops.

Analysis of emissions by process stages			
Case study:	Munich – Hamburg	Munich – Hamburg Express	Munich – Cologne
Distance:	850 km	850 km	600 km
CO ₂ -equiv./parcel	410 g	2,700 g	870 g
Collection	0 %	29 %	0 %
Pre-carriage	10 %	0 %	5 %
Inbound sorting	14 %	3 %	7 %
Main carriage road	–	29 %	68 %
Main carriage rail	30 %	–	–
Outbound sorting	22 %	9 %	10 %
Post-carriage and delivery	24 %	30 %	10 %



Greenhouse gas emissions generated by the transport of a parcel weighing 5.5 kilograms on different routes and, by comparison, the emissions resulting from a shopping trip by car.

Using logistics



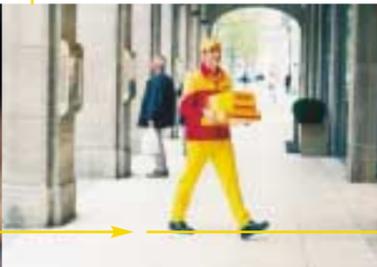
Trade in goods does not stop at national borders and is a mixture of a large number of individual orders, regular shipments for business and industry and so-called value-added services. Logistics is therefore a planning and intellectual challenge for our specialists at DHL. As such, efficiency is an economic requirement and helps our customers to enhance their environmental track record.

▶▶▶ in service networks

A notebook is defective. The manufacturer is informed.



DHL picks the machine up in Milan by courier.



It is transported from Italy to Belgium.



Repairs are carried out at a DHL logistics centre in Brussels.



Three days later, the notebook has been repaired and is back in Milan.



Many high-tech companies offer their customers a repair service under the warranty or as part of special equipment servicing contracts. This often places high demands on logistics. An example of this is repairs to a notebook. The customer requires the notebook back in proper working order as quickly and reliably as possible, because in most cases it is a key tool that is indispensable. For this reason, the repairs need to be completed quickly and the downtime must not last more than a few days, certainly not a few weeks.

A typical case: in Milan, Italy, a notebook develops a fault. The owner contacts the manufacturer's after-sales service department, which in turn requests DHL to pick the notebook up.

A DHL courier picks the notebook up from the owner's premises. Together with other shipments, it is first taken by truck to the

DHL base in Bergamo, from where, along with other items from all over Italy, it is flown to the DHL hub in Brussels.

In Brussels, DHL offers an example of so-called value-added services. The logistics specialist holds all the replacement parts in storage for the manufacturer at a special DHL Express logistics centre and even carries out the repairs. The repaired notebook is shipped back the very same day by the same mode of conveyance and arrives back at the owner's premises in Milan just three days after being picked up. If required, DHL can also provide a replacement machine while the customer's computer is out of order.

In this case, it is not the computer owner, but the manufacturer, who is DHL's customer. This system saves the manufacturer from having to provide warehouse capacity and

repair services in every country, thereby facilitating a more cost-effective repair service for this type of equipment.

Repairing or manufacturing from scratch?

What do repairs mean in terms of the environment? The rapid transportation of an item between Bergamo and Brussels (there and back) on a modern Boeing 757 produces – calculated on the basis of an item weighing approximately 3 kilograms – 4.7 kilograms of CO₂ emissions. Adding the road transport in Italy and Belgium brings the total emissions generated to around 6 kilograms of CO₂. By way of comparison: the same amount of CO₂ is produced by generating 9.1 kWh of electricity in Germany or by using up 1.8 litres of diesel fuel driving your car. This example includes the emissions produced in supplying the diesel to the petrol station. Thus, even if

an economical diesel vehicle is used, a 30 to 40-kilometre run also generates 6 kilograms of CO₂ emissions.

And here is another interesting point to bear in mind: The manufacture of a new notebook also requires an energy input. Specialist publications estimate the CO₂ emissions generated by the manufacture of a PC and by the production of the required raw materials at several hundred kilograms of CO₂. Seen in that light, repairing a notebook is definitely better than buying a new one, thanks to efficient logistics.

➤➤➤ and in holistic systems



One can hardly imagine the logistics sector without road transport services using trucks. They provide great flexibility in terms of scheduling, a high level of transportation quality even for goods that are susceptible to damage and they also function in areas where other means of transport, for instance, rail, are not available. The final delivery of goods, both to private households and to businesses, is hardly feasible without delivery vans and trucks.

In environmental terms, this is associated with the use of fossil fuels and the emission of air pollutants, in particular carbon dioxide with its attendant greenhouse effect. However, there are intelligent concepts to reduce the overall effect of these emissions, without having to dispense with transport services. One of these concepts is the Grøna Ton or “Green Tonnage” system used by DHL, which has been available in Sweden since April 2002.

Using Grøna Ton to combat climate change

The Grøna Ton system involves switching from fossil fuels – in other words, oil – to renewable fuel resources – such as biogas. It is a recognised fact that the carbon dioxide which is produced by burning biogas does not contribute to the greenhouse effect. Biogas can, for instance, be produced as a by-product of sewage treatment or of agriculture.

A major problem with environmentally-friendly fuels of this type is their higher price. However, a growing number of customers, particularly in Scandinavia, are prepared to spend more money for the sake of the additional benefits that use of such fuels produces for the environment. Customers can, for example, receive a certificate evidencing the amount of fossil carbon dioxide and other emissions that they have saved. This scheme is becoming increasingly important, particularly in conjunction with the European Emissions Trading Scheme for greenhouse gases.

In Sweden, DHL, at the request of its customers, is using trucks that run on biogas, among other things. The emission savings are credited to the customer’s emission account. Upon request, customers who are leaders in the area of CO₂ emission reductions are commended on the DHL Nordics homepage. This environmentally-friendly transport service is approximately 5 cents more expensive per tonne-kilometre than the conventional alternative, however DHL only charges for the additional costs incurred.

The Swedish retail chain COOP Sverige AB has purchased DHL’s Grøna Ton for part of its transport volume: 1.25 million tonne-kilometres, resulting in a reduction of 425 tons of CO₂. Another Scandinavian key account saves around 169 tons of CO₂ by using Grøna Ton.

One problem with biogas is the fact that it is not available nationwide. Despite this, the Grøna Ton system can still be used. It involves doing a kind of compensatory deal, similar to

the type of transaction that is common in Germany, for instance, in relation to the purchase and feeding in of eco-electricity. In this case, the truck fills up with ordinary natural gas. In return, DHL undertakes to purchase the corresponding amount of biogas and to feed it into a stationary gas network instead of natural gas. This type of system is already in operation near Uppsala in Western Sweden.

Comparison of emissions			
Pollutant	Biogas kg	Diesel kg	Savings kg
GWP (in CO₂-equiv.)	166,939	456,499	289,560
- CO ₂	27,122	450,090	422,968
- CH ₄	6,079	47	-6,032
- N ₂ O	0	18	18
NO _x	1,442	4,384	2,942
SO _x	33	123	90
NMVOOC	5,019	257	-4,762
Particles	26	70	44

Comparison of emissions for the COOP example, where 1.25 million tkm with biogas are offered. Even if other emissions that have a bearing on the greenhouse effect, such as methane (CH₄) or laughing gas (N₂O), are taken into account, the global warming potential (GWP) is far lower at -290 tons. The levels of other air pollutants are also lower. Only the level of volatile organic carbons (CH₄ and NMVOOCs) is higher with biogas.

Protecting the environment



Environmental protection is part of our responsibility as a global group. The logistics services we provide are necessary, but at the same time, they have an impact on the environment that we need to take into consideration. In this regard, the sheer size of our Group, with around 380,000 employees and subsidiaries all over the world, poses a special challenge. It means that one of our major tasks is to link and structure our many activities, enabling us to create a network of expertise and experience spanning a large number of countries around the globe.

by introducing new structures



Clear responsibilities within the Group

Within Deutsche Post World Net, the new Corporate Environmental Policy is the platform and guideline for our global environmental commitment. This new environmental policy has given rise to a reorganisation of responsibilities, which makes each board member responsible for environmental protection in his particular division. This also applies to subsidiaries that are autonomous under company law. The Chairman of the Board of Management coordinates the various cross-departmental responsibilities. For instance, once a year, he receives environmental protection reports from the individual board departments.

The Policy and Environment Corporate Department plays a major role in this area, coordinating cross-divisional environmental responsibilities, providing advice to the corporate departments and heading the new group-wide Environmental Committee.

A good starting point

The international ISO 14001 Standard enables companies to have their environmental management systems tested for conformity with internationally accepted modern standards. For a globally operating group like Deutsche

Post World Net a uniform international standard such as this has the great benefit of introducing comparable standards in different countries and in different areas of business. Many subsidiaries are already showing commitment in this area. As early as 1999, the first companies in the Danzas group, for example in Finland and Sweden, had their environmental management systems tested in accordance with ISO 14001. In the meantime, almost 90 percent of Danzas' former Nordic companies have attained ISO certification and the aim is for all of them to have gained certification by the end of 2003. In 1999, DHL Aviation, likewise, published its environmental policy and began to have its activities on the ground and in the air certified in accordance with ISO 14001.

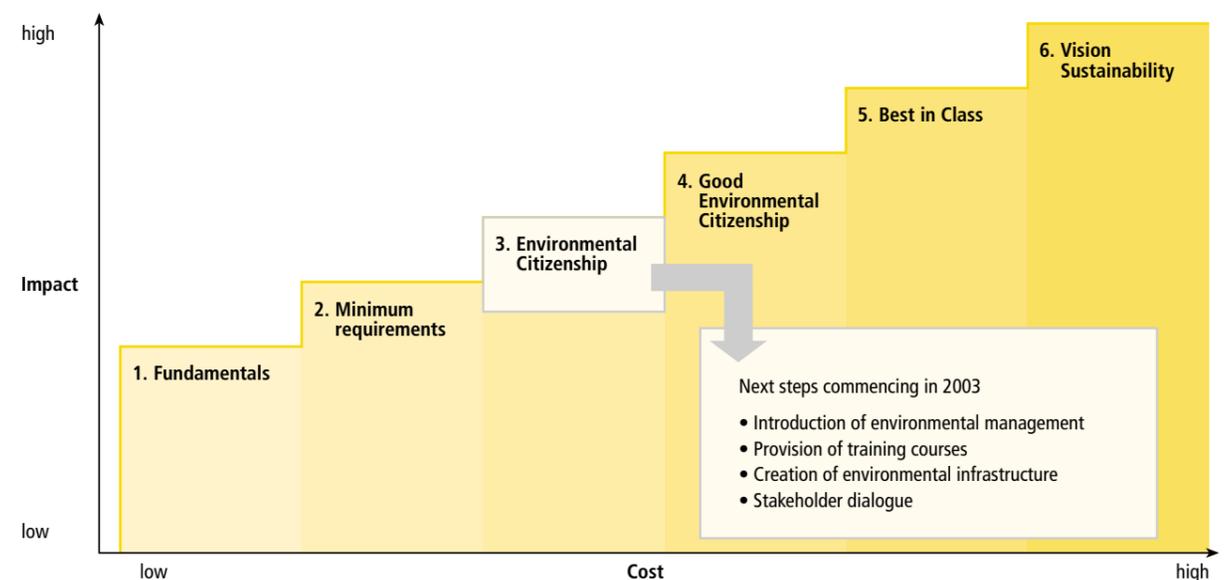
Vision of sustainability

Since the autumn of 2000, the STEP II (Starting Europe's leading Parcel Network) project, which is helping Deutsche Post World Net to establish itself as the leading service provider in the European parcel business, has been underway at DHL Express Europe. An important component of STEP II is the "environmental citizenship" module. The module is based on a six-tier concept (see graph), which aims to raise the DHL Express network to a

uniform level in the area of environmental protection. It will enable the companies involved to respond appropriately to the specific requirements in their respective countries. The concept involves companies attaining "good environmental citizenship" status after certain minimum standards have been met. It means, in effect, integrating environmental thinking into DHL Express Europe's day-to-day operations, with a view to reducing costs and, at the same time, reducing the level of environmental impact.

The "environmental citizenship" concept is currently being implemented through the nationwide introduction of an environmental management system. The aim is for every company in the DHL Express Europe network to have achieved certification in accordance with the international ISO 14001 Standard by 2005 at the latest. The long-term vision is to embed the principle of sustainability in day-to-day operations.

Six steps to a sustainable DHL Express Europe network



through technical innovation



Energy-saving Corporate Headquarters

In December 2002, the Group moved its Headquarters to the Post Tower in Bonn. During its construction, particular consideration was given to environmental protection. Some of the building materials and the materials used for the interiors were selected according to environmental criteria. The building's proximity to the Rhine means that there is an adequate supply of ground water, which is used for heating and cooling via heat exchangers. The double-glazed façade also allows fresh air to flow into the building, making expensive air-conditioning systems superfluous. This façade allows the temperature to be regulated inside the building and functions like an insulating air cushion. This is likely to reduce heating requirements in winter by 20 percent. Experts estimate that the overall energy consumption of this modern high-rise building is around a third lower than in a conventional structure.

Low-noise aircraft at DHL

The key problem with air traffic, besides the emission of pollutants, is noise. That is why international noise standards are becoming increasingly stringent. From 1 January 2006

onwards, new aircraft will have to meet the so-called "Chapter 4" criteria laid down by the International Civil Aviation Organisation (ICAO). The DHL aircraft already meet this standard. As part of the biggest investment programme in DHL's history, the company is spending EUR 1.3 billion to buy a total of 34 Boeing 757 Special Freighters, which will replace its old Boeing 727s. Compared to the B727s, these aircraft generate 77 percent less noise on takeoff and 13 percent lower CO₂ emissions. This makes them some of the most modern and quietest aircraft currently in use in the freight sector.

Low-emission vehicles in London

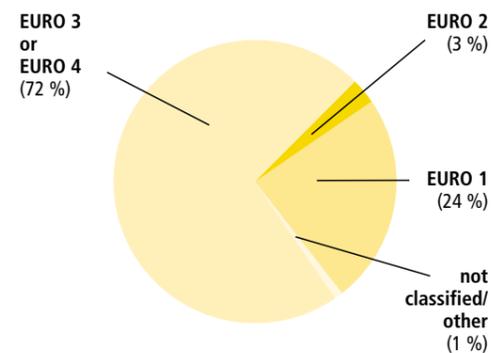
Since February 2003, anyone wishing to drive their car into London's city centre has had to pay a toll charge. The reason for this drastic measure is the huge growth in traffic and the associated environmental pollution. Environmentally-friendly vehicles are exempted from the charge: that also applies to over 120 vehicles which DHL has acquired in the UK during the past four years and to 100 further gas-powered vehicles which are being acquired this year. Gas-powered vehicles release far fewer pollutants into the environment than conventional vehicles.

In addition, DHL operates 10 so-called quadricycles and two electric vehicles in London. Quadricycles are bicycles that are used for light loads on inner-city courier trips – true zero-emission vehicles. This makes DHL the most innovative courier service in the UK and has seen it receive several awards for its green fleet policy.

Modern fleet policy

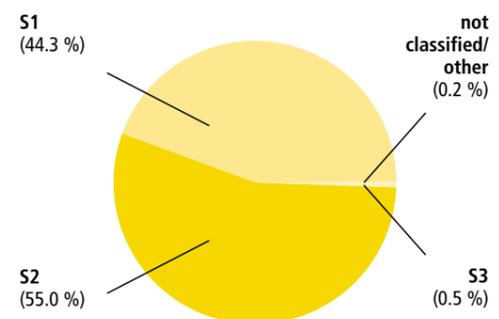
Deutsche Post World Net has over 50,000 yellow vehicles out on Germany's roads every day – since 1980, incidentally, in their heavy metal-free "broom yellow" livery. Around 8,000 new yellow vehicles are registered each year. For new vehicle purchases, the important considerations, in addition to the purchase price, were functionality, fuel consumption and emission level (see graph). The Group has also traditionally shown a great interest in environmentally-friendly drive systems. It has repeatedly run trials with electrically powered delivery vehicles. In the past few years, it has also tested vehicles that run on natural gas and used them, among other things, at the EXPO in Hanover.

Emission limit categories for cars and vans



A high percentage of the roughly 52,000 cars and vans of up to 3.5 t and the approx. 4,000 trucks >3.5 t operated by Deutsche Post AG already meet the stringent EURO 3/4 or S2/3 emission standards (as of 2001).

Emission limit categories for trucks > 3.5 t



»»» in work procedures and in the range of products



Training courses with a great reach

Deutsche Post World Net is one of the biggest fleet operators in Germany. Deutsche Post's fleet used over 136 million litres of fuel in 2001. DHL Express Europe (formerly Deutsche Post Euro Express) alone has over 23,000 parcel delivery agents out on the road with their vehicles every day. That makes driving courses on energy-saving driving techniques a sensible option. In March 2002, a joint campaign to promote fuel-saving driving techniques was launched in association with the ADAC (the German automobile association) and the Federal Ministry of Transport.

Pilot tests involving a total of 268 drivers were conducted in eight DHL delivery districts served by the Rodgau, Regensburg and Rüdersdorf branches. The training courses, run by professional instructors and involving small groups, covered theoretical and practical aspects and taught energy-saving, accident-prevention and defensive driving techniques. It was possible to gauge how successful the scheme was by comparing consumption and cost levels prior to and following the training course. Overall, the pilot tests resulted in energy savings of around five percent, and in some delivery districts as high as twelve

percent. The result achieved in the area of accident prevention was even better: 45 percent fewer accidents, meaning a 19-percent reduction in accident-related costs.

This pilot test is now becoming a permanent feature: in future, six full-time instructors will train drivers in DHL Express Germany's parcel network. The aim is for all delivery staff to have attended a one-day course within three years.

"Biodiversity" thanks to vigilant staff

A new species has evolved at the MAIL Branch in Düsseldorf: the savers. A team of eleven staff have been given the responsibility, in addition to their regular duties, of ensuring that sparing use is made of energy and resources. At the mail centre, conveyor belt operating times have been optimised. At delivery bases, modern technology switches off lights when everyone has gone. In addition, there have been improvements in the areas of heating, water consumption and waste separation. This reduces environmental pollution and, at the same time, saves money. The clever savers are just one example of the many committed teams and employees who ensure that due consideration is given to environmental protection within Deutsche Post World Net.

Intelligent structural planning

Instead of being fitted with a conventional air-conditioning system, Deutsche Post PrintCom's new production centre in Stuttgart has been equipped with a recooling plant, which utilises the difference between the waste heat given off by the production machines and the outside temperature. With an outside temperature of up to 10° C, this system eliminates the need to use fossil energy, thereby reducing heating energy requirements by 615,000 kWh annually. This equates to a saving of over EUR 60,000 a year.

Reusable packaging

When it introduced the Postbox four years ago, Deutsche Post brought an innovative, reusable packaging system for parcel dispatch onto the market. Around 800,000 boxes are currently in use as part of a closed-cycle system. After use, Postboxes are cleaned and are again available for use by customers. They are made of the plastic polypropylene and have a life cycle of around ten years. Containers no longer used are almost completely recycled and reprocessed into new Postboxes.

More printing with recycled paper

An increasing number of companies now just deliver the data to be printed instead of finished letters. The printing, enveloping and franking of items are handled by Deutsche Post PrintCom, which has eight large printing centres. In 2001, around 965 million letters were produced and approximately two billion sheets were printed at PrintCom, a large percentage of them on recycled paper. Since July 2000, for instance, Deutsche Telekom's mail items have been printed on recycled paper. That is more than a billion sheets a year.

Award for environmentally-friendly customers

Each year, DHL Freight, formerly Danzas Germany, presents an environmental award to companies that make intensive use of Parcel InterCity (PIC) for their shipments and have thereby played a special part in encouraging the shift of freight transport from road to rail. In 2001, the award was presented to the mail-order company Otto, and in 2002, the furniture store Ikea was the recipient. Ikea transports 100 to 120 swap bodies to the 27 Ikea furniture stores in Germany each day – most of them using PIC.

»»» by getting staff actively involved



Interview with Margrit Wendt,

Chair of Deutsche Post AG's Corporate Works Council

Ms. Wendt, what importance does environmental protection have for Deutsche Post World Net's staff?

It is certainly unique for a company to employ around 37,000 cyclists and pedestrians on a full-time basis – meaning our mail delivery staff. Despite the physical strain that the job involves, this example highlights one thing: it is the commitment and involvement of our staff that makes active environmental protection possible.

Nonetheless, many transports by truck are necessary ...

Yes, but our organisation offers tremendous advantages in this area: Where else do you have advanced training courses that reach thousands of drivers? We can refer them to specific driving courses that promote energy-saving and accident-prevention techniques, thereby improving quality. That would be impossible if our transport business was only handled by small subcontractors. Moreover,

their vehicles generally do not meet Deutsche Post World Net's more environmentally-friendly standards.

Deutsche Post in the role of an environmental action group ...

That, of course, is not the case – we, too, are faced with conflicting goals between economic efficiency, social expectations and occupational health and safety issues as well as environmental protection. That is why the sustainability approach is so important. We want to try and use it to overcome existing inconsistencies and conflicts of interest. However, that requires openness in dealing with the issues and an honest assessment of the various goals.

Is that not becoming increasingly difficult in an international company like Deutsche Post World Net?

On the contrary: Completely new opportunities for sustainable development are emerging in this area. Staff in the different countries

must see one another not as competitors but as partners, who share high-quality social and environmental standards. This common identity and common rules – in many global groups that is already taken for granted, and I see a great opportunity for this at Deutsche Post World Net as well.

Where do you see the greatest opportunities for improvement in the area of environmental protection?

As is so often the case, where we can improve things is in the many small areas where there are shortcomings: use less energy here, separate more waste there or use recycled paper instead of virgin fibre-based paper. If we can motivate the employees to play an active part in this and to become enthused about a suggestion scheme that also takes environmental criteria into consideration, then we will have achieved a great deal.

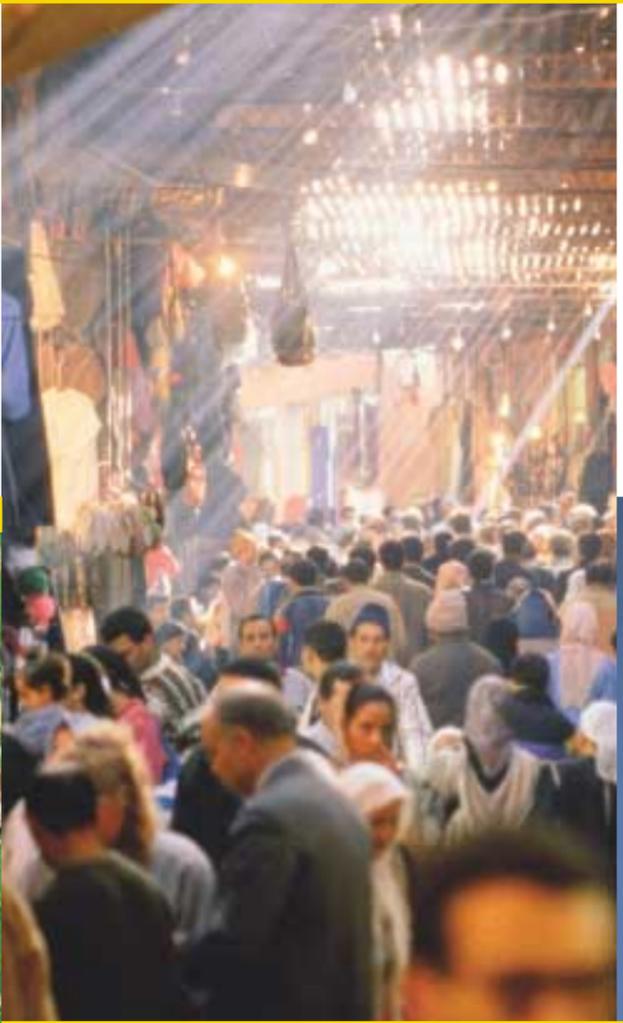
And one point we should not forget: The 380,000 employees act as multipliers in society. The environmental protection measures that our employees experience and help shape at our company they will also practise at home and teach their children.

How can you as an employee representative encourage that?

We will strive to ensure that corporate environmental protection does not just remain a noble goal but is also implemented in practical terms. Because we believe that this is the only way in which we can fulfil our social responsibility. That, in turn, will generate commercial benefits for our company and will help to further enhance the public confidence and reputation it enjoys – over the long term. However, long-term developments are, after all, what sustainability is all about and as employees that is of major importance to us, for instance, when we think about safeguarding jobs.

Margrit Wendt was previously a member of the Staff Council at Deutsche Post from 1976 to 1980 and from 1987 to 1991; she has been a member of the Central Works Council since 1991 and Chair of Deutsche Post AG's Central and Corporate Works Council since 2000. Since 2002, she has also chaired the ver.di Trade Union Council.

Operating sustainably



How can we meet the needs of people living today, without jeopardising the possibilities future generations have of meeting their own needs? This key issue in terms of sustainable development is the point of departure for many forms of environmental commitment. It encompasses social concerns as well as environmental and economic ones. Deutsche Post World Net also feels committed to this principle. Together with our partners, we are looking to find the right strategies and approaches and we are open to new ideas.

▶▶▶ through joint development



At the Millennium Summit in New York in 2000, the Member States of the United Nations set themselves the goal of halving the number of people living in extreme poverty by the year 2015. That is not only a major contribution to securing lasting peace, freedom, stability and justice. It must also be regarded as the foundation of effective, global environmental protection.

Deutsche Post World Net is facing up to this responsibility. This we are doing by taking steps to foster communication and mobility as well as by transferring of know-how to developing countries. It includes involvement both in bilateral and in multilateral projects.

Co-operation with the World Bank

Deutsche Post World Net has made a total of \$ 500,000 available to the World Bank under a partnership agreement. In addition, Deutsche Post World Net is providing its own experts to assist with modernising the postal

and logistics infrastructure in developing countries. This can provide a stimulus to economic development and assist in the fight against poverty. Deutsche Post Postal Trust Fund projects have already been completed in Mali, Mozambique, Ethiopia, Senegal and Egypt as well as in Guatemala, India and Bosnia-Herzegovina. Experts from the company have been involved in World Bank projects in India, Egypt and Algeria. Deutsche Post World Net is the only logistics company in the world that supports the work of the World Bank so extensively.

Promoting training

Via its membership of the Universal Postal Union (UPU), Deutsche Post World Net is involved in the modernisation of postal systems, particularly in developing countries. On the occasion of the Universal Postal Congress held in Beijing in 1999, Deutsche Post World Net provided DM 1 million (> EUR 500,000) for the Special Fund, which promotes training

schemes aimed at improving quality at international mail processing centres.

Commitment to United Nations' initiative

In August 2001, DHL signed the United Nations' "Global Compact" initiative. The Global Compact was initiated in 2000 by UN Secretary-General Kofi Annan and sees itself as a forum for the establishment of social and environmental cornerstones to support a sustainable global economy.

Active participation in the World Economic Forum

DHL's many activities also include signing the declaration on corporate social responsibility at the World Economic Forum in Davos. In so doing, DHL, like over 40 other companies at the World Economic Forum, has joined the Global Corporate Citizenship Initiative (GCCCI). A member of the Board of Management of Deutsche Post World Net chaired a working

meeting of representatives from the logistics and transport industry at the World Economic Summit in 2003. The focus at that meeting was on the role and responsibility of corporations in society. Topics covered included night flights, traffic congestion in large conurbations or the balance between sustainable development goals and economic objectives against the backdrop of global competition.

As part of the World Economic Forum, DHL is also involved in the Global Digital Divide Initiative (GDDI). This initiative aims to bridge the gap to those countries and sections of the population that have largely been excluded from the information society up to now because of a lack of technology. The GDDI runs targeted education programmes and programmes to support small and medium-sized enterprises in South Africa and Brazil.

➤➤➤ through social dialogue



Deutsche Post World Net regards its involvement in debates on socio-political issues as a matter of course. Two examples: The employees' representative body and Deutsche Post AG's Board of Management issued a joint declaration against right-wing extremism and discrimination. A wide range of activities, ranging from an "Antiracism" Action Day, held in Rostock in March 2003, to related educational seminars for trainees, underpinned this position. A great deal of importance is also attached to providing support to female employees in society and within our company. In 2000 and 2003, Deutsche Post AG was presented with a quality award by TOTAL E-Quality Deutschland e.V. for actively promoting equal opportunity.

Critical opinions are needed

This socio-political involvement applies equally to the environmental area. Many issues are the subject of controversy and debate. What can society and customers expect of companies? What should be required of companies in terms of sustainable development? What type of political framework is needed to achieve this? What options and limits exist in the transport sector? Deutsche Post World Net is

ready to engage in this debate and intends to consider the arguments together with other social groups. That is why the company is seeking to initiate a dialogue in specific areas.

The first stakeholder dialogue on environmental protection, which was held in Bonn on 13 December 2002, marked the prelude to a more extensive exchange. Transport experts and representatives of environmental organisations discussed their positions and expectations with the Policy and Environment Corporate Department. Subjects discussed included, among others, environmentally-friendly logistics services, new technologies, combined services, the role of global air transport and the emissions trade in the transport sector. The idea of measuring environmental performance in respect of the services Deutsche Post World Net provides has already been taken up in this environmental report. The stakeholder dialogue will be continued in 2003.

Active networking

Deutsche Post World Net seeks an active exchange of ideas in various bodies and forums:

- in the Global Compact

- in the Bundesdeutscher Arbeitskreis für Umweltbewusstes Management (B.A.U.M.) e.V. (German Environmental Management Association)
- in the Universal Postal Union (UPU), a global union of states
- in the Business Leaders' Initiative on Climate Change (BLICC)

Deutsche Post World Net's subsidiaries are also becoming involved in environmental issues. The former Danzas, for example, is involved in FreightForward Europe (FFE), an association of nine of the largest logistics companies in Europe. An important topic on the association's agenda is the promotion of multi-modal transport. Work is also underway to find a standard calculation method for the emissions trade in the logistics sector.

Environmental partnership

As part of the KLIMAOASE campaign, Deutsche Post AG is donating EUR 250,000 to help fund environmental projects aimed at bringing more nature and greenery to German cities. The German environmental association Bund für Umwelt und Naturschutz Deutschland (BUND), whose 250,000 members make

it one of the largest environmental groups in Germany, is running these projects in conjunction with the participating cities and is ensuring that they are competently managed and implemented.

The KLIMAOASE project aims to create "green islands" throughout Germany in order to help improve the quality of life in cities. The aim is to bring nature to the city so that plants and animals can find a suitable habitat and city dwellers can feel at home in the city, despite the increased traffic and noise pollution.

Deutsche Post is well aware that cities need a well-developed transport infrastructure for an efficient mail and parcel network. However, initiatives which ensure that cities remain a nice place to live in are just as necessary and it is intended that the KLIMAOASE project should play its part in achieving this aim. The creation of ponds, butterfly meadows, children's projects in wooded areas and other "green islands" in cities is being promoted.

➤➤➤ and consideration for one's fellow human beings



Interview with the scientist Prof. Dr. Dr. Franz Josef Radermacher

Professor Radermacher, can we still shape globalisation today?

Yes, indeed, we can shape globalisation and we must shape globalisation, because in today's globalisation processes there are a lot of mistakes being made. Globally, we are not on the road to sustainable development. For that reason, economic, social, cultural and environmental issues need to be linked far more effectively at international level than is the case today.

A kind of Marshall Plan for the South is a key element in your deliberations. What exactly do you mean by that?

Implementation agreements with poorer countries focusing on training and medical care, support for women, culture, social equality and a high level of environmental protection are the key to a better world for both the North and the South. The crucial point is financing a global Marshall Plan of this type. There are interesting instruments that can be used for this purpose, and we should all discuss these together. They range from a fair trade in CO₂ emissions rights to a

so-called Tobin Tax on financial transactions. I would say that what is needed here is a global deal, made possible by co-financing. Such co-financing arrangements have worked well, for instance, when the Montreal Protocol banning the use of CFCs was implemented or in the case of EU enlargement. Something similar is now due on a global scale.

What chance does the environment have in this scenario? Won't this lead to a strong increase in the global use of resources?

A scenario of this type really is the prerequisite for limiting the use of resources and for protecting the environment. Because, with a globalised economy, we have to protect the environment worldwide. Admittedly, it is not easy to link development in poorer countries to the enforcement of specific limits in respect of the use of resources and environmental pollution. However, the right deal using co-financing will lead to honest prices and asymmetrical growth processes between the North and the South and will enable the potential of technological progress to be fully realised.

How important do you consider the development of infrastructures in the South to be, for instance, in the communications and logistics area?

The aim of a balanced or eco-social path is to bring about a high level of social equality worldwide. In order for this to happen, all of the world's population needs to be educated and trained, to be kept healthy and to be provided with modern and effective infrastructures, because only well-trained people, who also have sound infrastructures, can create value by global standards. In this regard, in modern, heavily knowledge- and information-based economies, communications and logistics are key areas in which suitable infrastructures need to be developed. In some cases, that is not easy to do. However, there are some interesting attempts being made to achieve this goal. If you go about it the right way, developing infrastructures of this kind plays a part in fostering growth and social equality. At the same time, it is an important prerequisite for monitoring the global environmental situation and thus implementing high environmental standards.

Can Deutsche Post World Net, as a company that operates on a global scale, play a role in a global deal?

Yes, of course, because Deutsche Post World Net is a global player. By providing infrastructure alone, Deutsche Post is playing a major role. It can do even more, for example, by providing triple bottomline reports on the economic, social and environmental impact of its own activities, something which the Global Compact, for instance, an initiative launched by UN Secretary-General Kofi Annan, aims to foster at international level. However, that is not all.

In addition to these contributions at system level, companies can do a great deal in terms of concrete measures, thereby also reflecting their responsibility at system level, of course. What is important, insofar as the market situation allows it, is to establish a high level of environmental protection in one's own country, also via state guidelines in this area. It is also essential, by providing training and proper jobs, to build up the know-how required for individual development and, at the same time, to create the basis for the peaceful co-existence of cultures, all over the world.

Prof. Dr. Dr. Franz Josef Radermacher is head of the renowned research institute "Forschungsinstitut für anwendungsorientierte Wissensverarbeitung (FAW)" in Ulm. A mathematician and economist, he specialises in issues relating to the future and sustainable development and he is a Member of the Club of Rome.

Global networks help



We can only meet the worldwide economic, political and environmental challenges facing us if we act at a global level. This includes exchanging experience and knowledge, including all countries in the economic value chain and making the best possible use of technological innovations. Sustainable development is a task where the overall result is what counts above all. It includes our responsibility for the poverty-stricken – whether in poor countries or on our own doorstep. Organised aid requires networks.

▶▶▶ economic development



Humanitarian aid facilitated by logistics

Rapid, efficient and global logistics is essential. Many relief operations that are organised when natural disasters, famines or epidemics strike or wars break out depend on an efficient transport network. Deutsche Post World Net and its subsidiaries can look back on a long tradition of supporting relief operations.

For example, Deutsche Post World Net initiated the “Food for Afghanistan” programme together with the international relief organisation CARE and the North Dakota Farmers Union. In 2002, a total of 1,000 tons of wheat, intended for needy widows and children in Kabul, were shipped from the USA to Afghanistan in 53 ISO containers. This quantity is enough to meet the basic food needs of 1,700 families for a year. It is also important to create a permanent link between Afghanistan and the outside world: DHL was the first

company that was able to offer scheduled flights from Bahrain to Kabul. Afghanistan has, in the meantime, been integrated into DHL’s international network.

Many individual examples

When a major earthquake shook El Salvador in January 2001, staff at the Group subsidiary DHL Worldwide Express organised a relief operation in which the earthquake victims were provided with blankets, clothes, medicines and, of course, food. On a day of action in Belgium, for every item that DHL picked up that day, it added five Belgian francs to help the earthquake victims.

Deutsche Post World Net continually supports citizens’ activities that aim to help people in need. The EXPRESS Corporate Division in Germany provided vehicles when the organisation Kölner für Menschen in Not e.V. organised

relief shipments of medicines, medical instruments and food to Romania. Deutsche Post staff and citizens of Neumark also drove relief supplies for the hospital, the old people’s home and the educational establishments in Drjanovo, Bulgaria, to their destination, 2,200 kilometres away.

The aftermath of 11 September 2001 also created a difficult situation, when the general air traffic situation and the security situation were extremely tense: Important medical equipment and supplies from a German pharmaceutical company were urgently required by American hospitals. DHL successfully completed the shipment.

Help for flood victims

Deutsche Post provided EUR 3 million in aid to support the victims of the disastrous floods that hit Germany in August 2002. This enabled

financial assistance to be made available not only to staff who had been affected by the floods but also to outside social institutions, such as Erich Kästner School in Bitterfeld. In addition to making financial donations and donations in kind, many staff became actively involved in the battle against the floods. 344 staff were granted leave of absence to enable them to support the relief organisations. Part of Deutsche Post World Net’s fleet was made available to transport sandbags and for other runs as part of emergency operations. As well as this, a special stamp with a market value of 56 cent and a surcharge of 44 cent was issued – an effective measure that Deutsche Post also uses on many other occasions to collect money for charity.

➤➤➤ in solving global environmental problems



Changing structures and shipments

The rich, highly-industrialised nations have a special responsibility: to create fair trading conditions and to open their markets up to products from developing countries so that the latter are able to determine the pace of their development themselves. This is the only way the international division of labour can also be a chance for poor countries to participate in economic processes and in global value creation.

A logistics infrastructure is one of the prerequisites for greater prosperity. In particular, developing countries must no longer be restricted to their role as suppliers of cheap foodstuffs and raw materials. They must also be able to produce and offer high quality products. By processing their raw materials, these countries create the added value that they urgently need for their economic development.

Know-how is required to create advanced production facilities. Machines and high-technology are needed; and, finally, the manufactured products need to be transported – not just iron ore, cotton or sugar, but also com-

puters, cars and medicines. This requires modern logistics systems that convey the goods to world markets safely, quickly and cheaply.

Integrated environmental performance

Overall, there is no need for this to have a negative impact on the environment. Because, whereas global shipments of processed products are increasing, smaller and smaller quantities of bulk raw materials are being shipped from the developing countries to the industrialised countries for processing. The industrialised countries are changing from being the world's processors to being the suppliers of the required know-how; the processing is done locally. What is also taught is efficient and environmentally-friendly production methods and logistics structures.

With regard to transportation, it is also a question of keeping sight of the overall picture. Often it is only higher transport costs for intermediate or finished products that improve the environmental assessment over the entire life cycle of a product from its manufacture and use right through to its disposal.

Interview with Christoph Bals, Campaign Director of GERMANWATCH

Mr. Bals, what are the environmental focal points in the transport sector?

Air transport has the potential to become the number-one problem, at least as regards global climate change. For this reason, it should become standard for international companies to answer three questions: What proportion of air transport can be avoided completely – for instance, through innovative electronic communications? What can be switched – for example, to rail? How can the emissions that the company produces despite its best efforts be offset by climate protection measures in other sectors?

Do you see innovative technologies or concepts as providing solutions?

In the land transport area, rail transport has an advantage over road transport in terms of its impact on the environment and our climate. With its parcel business, Deutsche Post has a commodity which, in terms of its size, is suited to rail transport if innovative technologies are used. A major potential rail-freight transport user like Deutsche Post should publicly

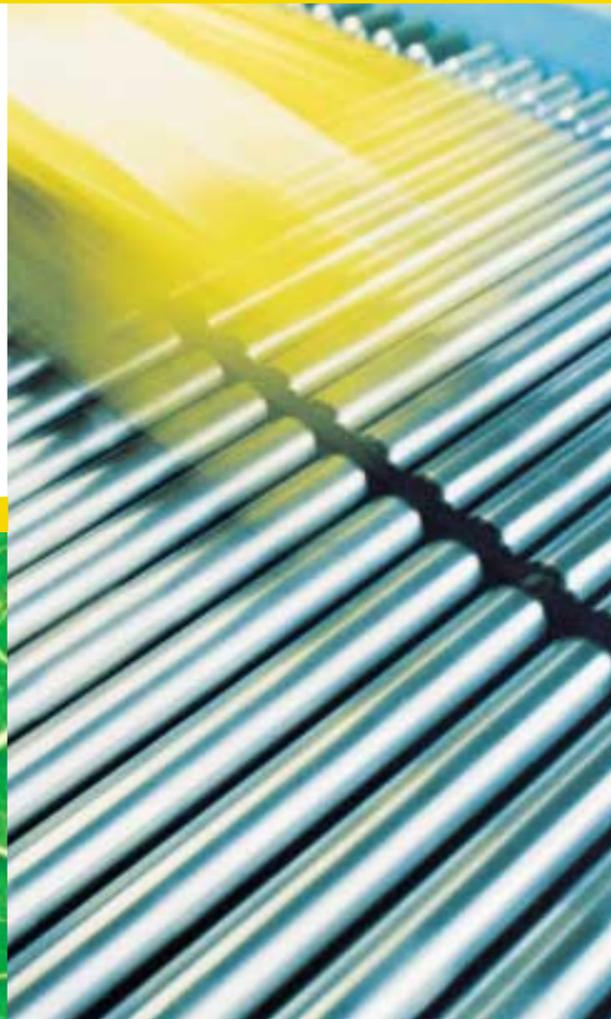
announce what it requires of rail in order to use it to transport a larger proportion of its freight. We at GERMANWATCH will be pleased to contribute our expertise to a debate of this type.

What expectations do you as a non-governmental organisation have of global companies like Deutsche Post World Net?

Currently, a dramatic change is taking place in this area. In the past, it was only the government that had to justify its actions to its voters. Now it is becoming increasingly evident that global companies, especially those that have a brand to defend, also have to justify their actions to their customers and to a critical public. It is a question of international companies assuming responsibility for the social and environmental consequences of their activities. That includes, as a first step, disclosing how Deutsche Post currently conducts itself in respect of its social and environmental responsibilities. The information presented should, where possible, be underpinned by a few significant quantitative indicators.

Christoph Bals is head of "RioKonkret" at GERMANWATCH, a non-profit North-South initiative, which, among other things, is actively working in the area of climate protection. Its aim is to "develop the North" and work towards social and environmental sustainability in Germany by engaging in a dialogue with politicians and business people.

Identifying potentials



Our networks are used to convey goods and information. In order to be able to provide these services, we have to use resources, and this in turn produces emissions and waste. These are summarised in Deutsche Post AG's first environmental balance. From them, we have derived measures which are intended to lead to even better use of our resources and the restriction of environmental impact to a minimum. Our potential: our logistics know-how, our staff and technological optimisation.

and describing them in the environmental balance



The first environmental balance for Deutsche Post AG relates to 2001. It encompasses business activities in Germany, excluding subsidiaries such as Danzas or the stake in DHL, as it was not possible to include all areas in this first collection of data. The collection of data for the environmental balance was preceded by an analysis of the processes used. This enabled

the environmentally-relevant information to be circumscribed.

The environmental balance is characterised by the facilities and processes that are connected with mail and parcel services. The energy input, comprising electricity, natural gas, fuel oil and district heating, is used mainly to provide heating and light to real estate, such as mail and parcel centres, branches and retail outlets and administration buildings, and to operate the sorting facilities in the mail and parcel centres. In addition, fuel consumption is a major factor for a logistics company.

Use of paper plays an important role as well. The total quantity of around 55,000 tons also includes finished printed products, ranging from stamps to Packsets, the cardboard boxes used for parcel dispatch, as well as the paper that Deutsche Post PrintCom uses to fulfil customer orders. Overall, recycled paper accounts for approximately 40 percent of the total.

The water used was drawn solely from public drinking water supplies, with wastewater being channelled into public sewerage systems. There

was no wastewater contamination from specific production processes. The bulk of the packaging material used comprises durable, reusable plastic containers, which are used as transport containers in the letter mail area.

The main hazardous substances listed are fuel oil and diesel fuel. The data has been taken from the register of hazardous substances, last updated in May 2002, and is valid for Deutsche Post AG in Germany, excluding subsidiaries. Paper and cardboard account for a significant proportion of the total volume of waste. Approximately 78 percent of all waste is recycled.

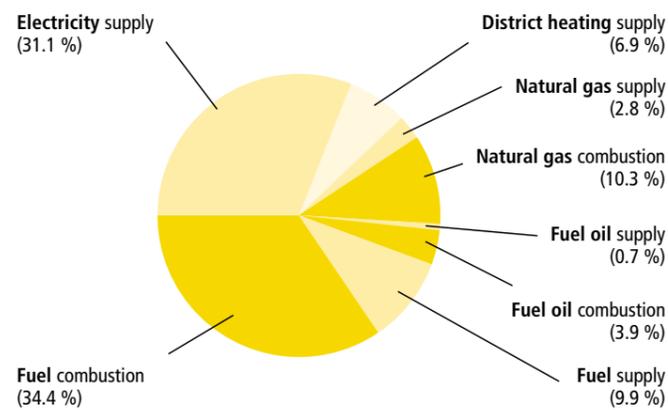
The energy and fuel consumption level determines the level of emissions. In calculating the emission levels, the emissions produced in supplying the sources of energy, for instance, by electricity generation or by the supply of fuels and fuel oil, were also included. They account for a significant proportion of the total emissions listed (see graph). The TREMOD model developed by the Heidelberg *ifeu-Institut für Energie- und Umweltforschung* was used as the basis for calculating emissions resulting

from fuel use. For emissions resulting from the supply of energy, the GEMIS model developed by the *Öko-Institut* in Darmstadt was used.

The emission of greenhouse gases, indicated as a CO₂ equivalent, is important as a key indicator. This value comprises the weighted carbon dioxide (CO₂), methane (CH₄) and laughing gas (N₂O) emissions. Approximately 31 percent of the CO₂ equivalents result from the generation of the electricity used. The largest proportion, approximately 44 percent, results from fuel use. The latter is at the same time the major source of nitrogen oxides (NO_x), accounting for just under 80 percent thereof.

In terms of the total traffic emissions produced in Germany, Deutsche Post AG's fleet accounts for approximately 2.4 per mill of the CO₂ emissions and approximately 2 per mill of the NO_x emissions. Our vehicle fleet accounts for just under 1.2 per mill of the total number of vehicles in Germany. When comparing these figures, it should be noted that in our fleet the percentage of vans (so-called LDTs) is far higher and the percentage of cars far lower than the German average.

CO₂ emissions 2001



CO₂ emissions broken down by source. The dark sections show the emissions directly produced by Deutsche Post AG, while the light sections show the indirect emissions that were produced not by the company but by the energy supplier.

in environmental facts and figures for 2001

Input

Energy input (end energy)		
	Quantity	Unit
Electricity	484	million kWh
District heating	195	million kWh
Natural gas	461	million kWh
Fuel oil	129	million kWh

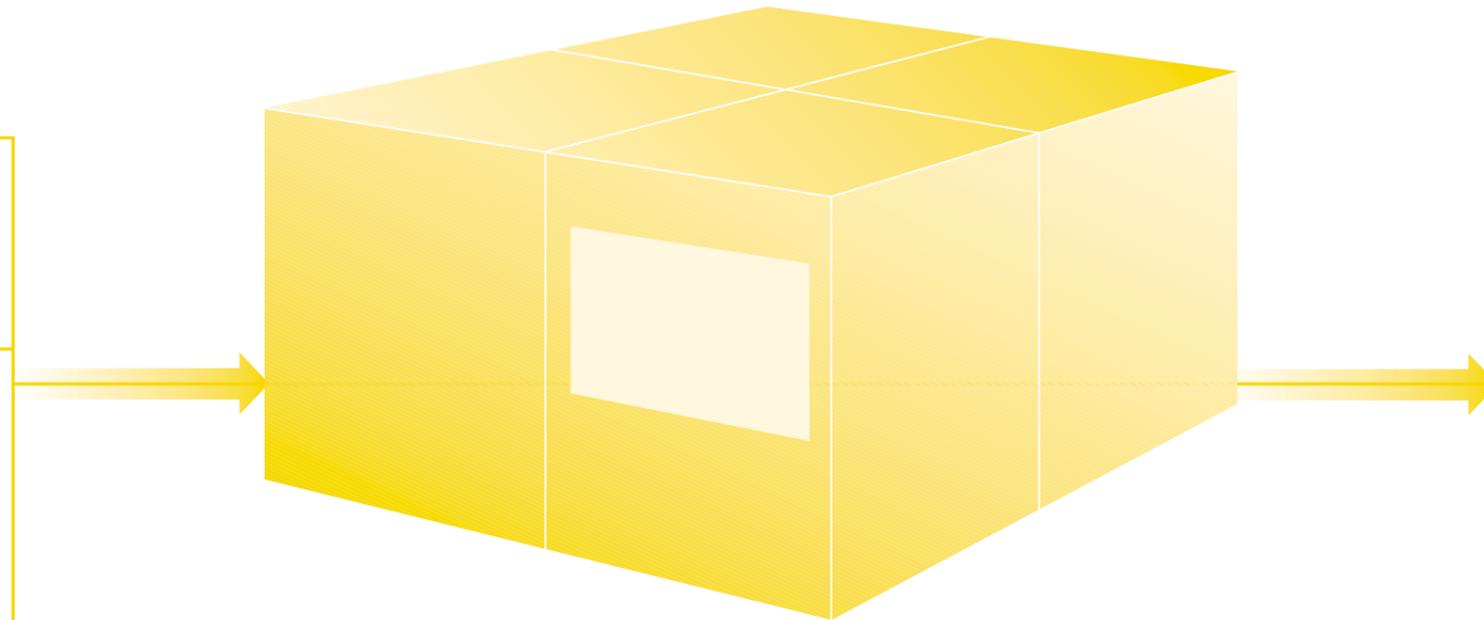
Fuel input		
	Quantity	Unit
Petrol	8.6	million litres
Diesel	127.5	million litres

Paper input		
	Quantity	Unit
Paper, total	55,373	t
thereof: - printed matter	38,713	t
- production/PrintCom	13,730	t
- office documents	2,930	t
thereof: - recycled paper	(40 %) 21,948	t
- standard paper	(60 %) 33,425	t

Water input		
	Quantity	Unit
Drinking water	1.308	million m ³

Packaging materials input		
	Quantity	Unit
Plastic packaging, total	2,332	t
thereof: - plastic bags	112	t
- plastic containers	2,220	t

Hazardous substances input		
	Quantity	Unit
Total	259	t
	2,700	m ³



Inventory

Fleet inventory		
	Quantity	Unit
Powered vehicles	58,732	units
thereof: - motorised bikes	60	units
- e-bikes	2,000	units
- cars, vans < 3.5 t	52,516	units
- trucks > 3.5 t	4,156	units
Other vehicles	36,625	units
thereof: - bicycles	23,459	units
- delivery carts and trolleys	11,647	units
- trailers	1,519	units

Real estate inventory		
	Quantity	Unit
Group-wide total, owned	approx. 7,000	units
Net floor space, Germany	11.0	million m ²
thereof: - owned	8.3	million m ²
- rented	2.7	million m ²
- factory space	5.5	million m ²
- living and social area	1.1	million m ²
- retail space	0.9	million m ²
- office space	1.4	million m ²
Vacant space	1.0	million m ²

Output

Waste output		
	Quantity	Unit
Total	70,200	t
thereof: - hazardous waste	2,640	t

Emissions output (incl. supply)		
	Electricity	Distr. heating
CO ₂ equivalent (t)	326,000	73,000
CO ₂ (t)	305,000	67,000
CH ₄ (t)	754	227
N ₂ O (t)	12	4
SO ₂ (t)	328	40
NO _x (t)	278	95
Dust (t)	36	5
CO (t)	105	66
NMVOc (t)	19	12

	Natural gas	Fuel oil
CO ₂ equivalent (t)	137,000	48,000
CO ₂ (t)	123,000	47,000
CH ₄ (t)	599	50
N ₂ O (t)	1	0
SO ₂ (t)	9	73
NO _x (t)	108	34
Dust (t)	5	4
CO (t)	77	28
NMVOc (t)	14	11

	Fuels	Total
CO ₂ equivalent (t)	466,000	1,050,000
CO ₂ (t)	451,000	993,000
CH ₄ (t)	419	2,049
N ₂ O (t)	19	36
SO ₂ (t)	935	1,385
NO _x (t)	2,040	2,555
Dust (t)	240	290
CO (t)	1,050	1,326
NMVOc (t)	482	538

The 2001 environmental facts and figures relate to Deutsche Post AG and do not yet contain the figures for Danzas, DHL and other new companies owned by Deutsche Post, nor are third-party services, e.g. freight forwarders, included.

Introducing measures

Selected measures to be implemented throughout the Group (see following page for further details)

Short title	Explanation/subprojects	Goals	Dates
Staff			
Training for executives	Training executives' skills and raising their awareness of the issues of sustainability and environmental protection	<ul style="list-style-type: none"> To communicate DPWN's fundamental policies on the environment and sustainability, explain DPWN's environmental relevance and show potential initiatives 	<ul style="list-style-type: none"> From 2003 onwards
Training for Express delivery staff	Training delivery staff who service the DHL Express Germany parcel network in accident-prevention and fuel-saving driving techniques.	<ul style="list-style-type: none"> To train 6 full-time instructors To provide initial training for all delivery staff To provide ongoing training for all delivery staff 	<ul style="list-style-type: none"> From late March 2003 onwards Within 3 years of completing training of instructors Within 3 years of completing initial qualification
Training for Mail Production staff	Upgrading the skills of the Mail Production staff and raising their awareness of the issues of sustainability and environmental protection	<ul style="list-style-type: none"> To include the issues of environment and sustainability in job-related discussions with Mail Production staff 	<ul style="list-style-type: none"> Training for approx. 80 multipliers by late 2003 Training for all Mail Production staff by late 2005
Environmental management			
ENC	Environmental citizenship & network programme in the DHL Express Europe network	<ul style="list-style-type: none"> To implement a six-step programme with the aim of achieving "good environmental citizenship" To develop an appropriate network of expertise To introduce an environmental management system for all the European branches in the DHL Express Europe network To implement an EMS in accordance with ISO 14001 and attain certification, where appropriate 	Late 2004
Logistics networks			
Pick-up & delivery networks	Optimisation of the pick-up & delivery networks in Germany and Europe <ul style="list-style-type: none"> Combining sub-networks Using the pick-up & delivery networks for similar letter mail products in Germany Routing 	<ul style="list-style-type: none"> To reduce mileage To increase the level of efficiency of means of transport This project is currently in the initial definition and evaluation phase. It is therefore not yet possible to set goals. With regard to mileage, the next environmental report will show a reference number and a goal that pertains to it.	Late 2005
Air freight	Optimisation of the DHL air networks worldwide <ul style="list-style-type: none"> Increased use of own capacity within the Group Pooling freight orders 	<ul style="list-style-type: none"> Estimated freight volume with the addition of Danzas Air&Ocean and DPGM: an additional 17,000 tons in 2005 	Late 2005

Short title	Explanation/subprojects	Goals	Dates
Logistics networks			
Air freight	<ul style="list-style-type: none"> Transferring Danzas Air&Ocean and Deutsche Post Global Mail shipments that have until now been flown by third-party air-freight carriers to the DHL air-freight fleet 	<ul style="list-style-type: none"> To increase the capacity utilisation on DHL aircraft by adding Danzas Air&Ocean and DPGM shipment volumes, without creating new flight capacity for each trade lane 	Late 2005
Overnight airmail network	Reducing the number of daily flights in the overnight airmail network	<ul style="list-style-type: none"> To reduce emissions resulting from air transport by switching to road transport To reduce the noise pollution caused by night flights To reduce the number of flights in the German overnight airmail network by 9 flights (from 32 to 23) per night as compared with December 2002 	By late-March 2003
Routing mail delivery	Optimisation of the mail delivery network through improved IT-based routing	<ul style="list-style-type: none"> To reduce specific runs by 4 percent 	Late 2003
Real estate			
Heating energy conservation measures in parcel centres	Determining and implementing potential heating energy conservation measures in the German parcel centres	<ul style="list-style-type: none"> To evaluate a pilot project in a parcel centre To identify measures that can be applied in other parcel centres To implement them in all parcel centres 	Late 2004
Heating energy conservation measures in mail centres	Determining and implementing potential heating energy conservation measures in the German mail centres	<ul style="list-style-type: none"> To run and evaluate a pilot project in a mail centre To identify measures that can be applied in other mail centres To implement them in all mail centres 	Late 2005
Waste management, Germany	Enhancing training measures for the staff responsible for waste management in Germany	<ul style="list-style-type: none"> To improve the separation of different types of waste, thereby increasing the proportion of recyclable waste 	ongoing
Vehicles			
Alternative drive systems	Involvement in project partnerships aimed at promoting, disseminating and further developing alternative drive technologies	<ul style="list-style-type: none"> To provide practical test environments To assist in developing and promoting sustainable drive concepts for logistics vehicles 	ongoing
Procurement			
Recycled paper	Informing staff about the benefits of using recycled paper	<ul style="list-style-type: none"> To increase recycled paper use as a percentage of total office paper use 	ongoing

» » » in a combined effort

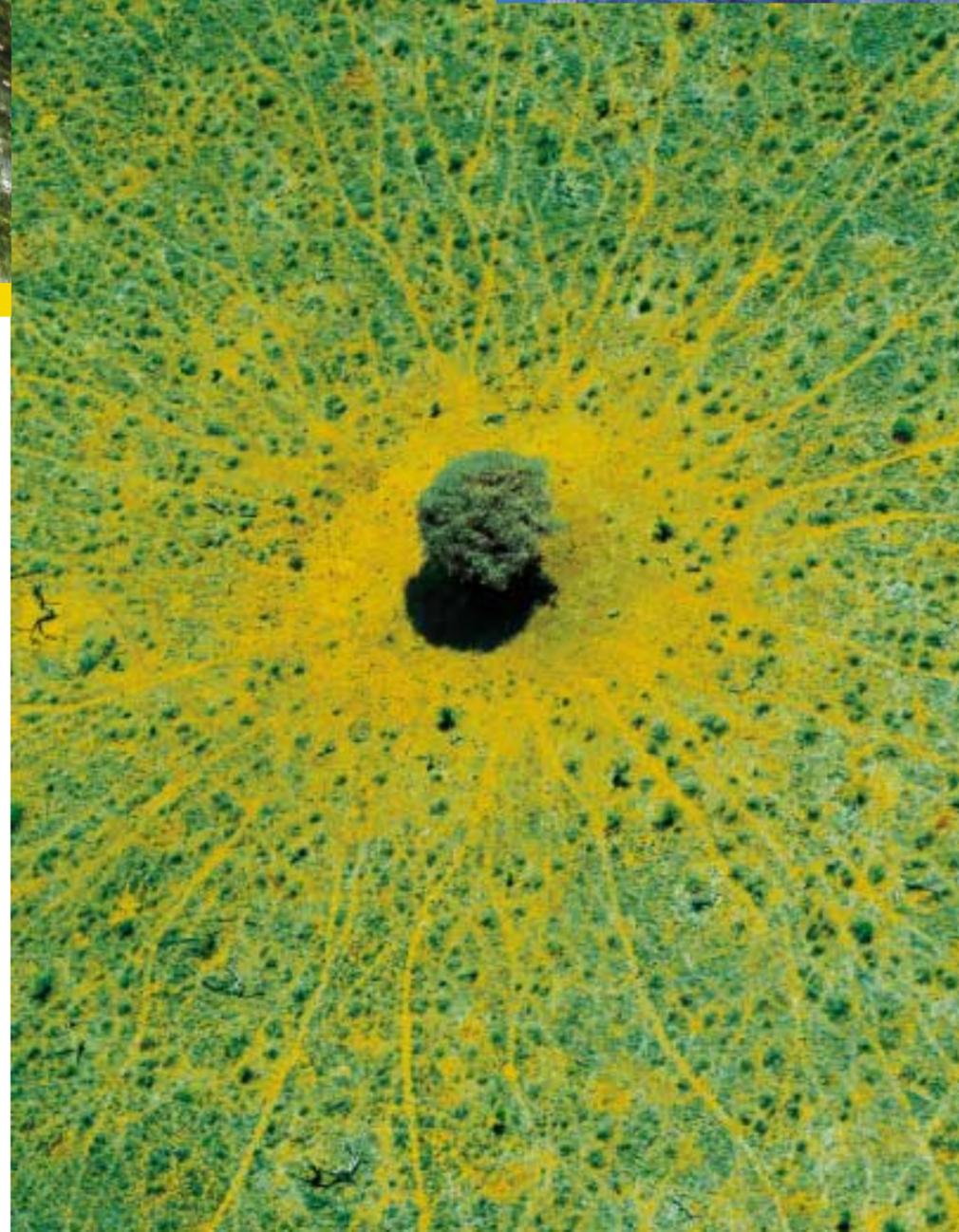


The environmental report clearly shows that energy and fuel consumption have the biggest impact on the environment, both in terms of the utilisation of resources and in terms of the emissions generated. It is our aim to limit this impact to a minimum. Resources must be used sensibly and efficiently. The technology and equipment and also the processes we use must meet modern, advanced standards. We have developed an environmental programme comprising measures that tackle the various issues.

As a company, we are relying on the involvement and commitment of our global workforce of around 380,000 employees. By upgrading their skills, we want to make it possible for them to implement Deutsche Post World Net's environmental guidelines in their personal working environment. By doing so, we hope to improve our environmental track record in all corporate divisions and in respect of all operational processes. The environmental citizenship & network programme in the DHL Express Europe net-

work complements this with a structured environmental management approach and a far-reaching vision of sustainability.

Our logistics networks represent a key element of our expertise and our commercial success. Optimising these networks, a goal that has been defined in the in-house value creation programme STAR, is a major focus of the measures we are introducing. Their aim is to greatly improve efficiency, in other words, to make better use of existing network capacity, to reduce mileage while offering the same or indeed an improved level of service, to make better, more targeted use of resources and reduce specific emissions. Reducing the number of flights in the overnight airmail network, in particular, will have a positive impact, although this will not be reflected in the environmental balance presented here owing to its particular limits. Other measures, for instance those aimed at saving heating energy at the mail and parcel centres, supplement this programme.



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Natural networks

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