



# Environmental Report 2011 in accordance with EMS ISO 14001 Guidelines

# **DekaBank Deutsche Girozentrale**

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## Glossary

Abbreviation	Explanation
AöR	Institution incorporated under public law (German: Anstalt des öffentlichen Rechts)
CO <sub>2</sub> e	CO2-equivalents according to GHG-Protocol (2004)
DGNB	German Sustainable Building Council (German: Deutsche Gesellschaft für nachhaltiges Bauen)
Empl	Employees
EnEV	Energy Saving Act as part of German Building Legislation (German: Energieeinsparverordnung)
FTE	Full time equivalents
GHG	Greenhouse Gas
GRI	Global Reporting Initiative
NGO	Non-Governmental Organisation
VfU	The Association for Environmental Management and Sustainability for Financial Institutions (German: Verein für Umweltmanagement und Nachhaltigkeit in Finanzinstituten e.V.)





## **Executive Summary**

With this 2011 Environmental Report, DekaBank is presenting its fourth environmental balance since the introduction of an ISO 14001 certified environmental management system in 2009. Part of the environmental management system is an annual environmental programme, in which DekaBank sets environmental targets for its priority action areas and defines measures for their implementation. The environmental balance allows the company to review the effectiveness of these measures, identify current trends in energy and material consumption and spot new potential action areas.

The 2011 Environmental Report includes an environmental assessment and the carbon footprint of the DekaBank locations in Frankfurt/Main. Moreover, a carbon footprint for DekaBank Germany was compiled, as well as a complete, company-wide carbon footprint for DekaBank AöR, including all sites in Germany, Luxembourg and Switzerland.

DekaBank operates a total of four buildings in Frankfurt/Main. Though energy consumption in absolute terms increased slightly by 2 per cent in 2011, at the same time the number of employees increased by 5 %, which indicates a further reduction of energy consumption per employee.

After traffic performance had been continuously increasing in recent years, in 2011 a slight reduction in total traffic volume (-1% compared to the previous year) was achieved despite the concurrent increase in employees. While the share of rail traffic decreased by 12%, there was a minor increase in air miles travelled (+ 2%). Business travel rules stipulating that alternatives to long-haul flights must be explored as part of the authorizing procedure remain in force in order to reduce air travel in favour of environmentally friendly means of transports in the future.

While paper consumption was almost halved since 2007, it stagnated in 2011 at a level similar to 2010.

After water consumption in Frankfurt decreased by 22 per cent in 2010, it slightly increased in 2011 (2 %) but still remained significantly lower than the level in 2009.

Waste generation decreased considerably since 2006. After a slight increase (+ 2.4 %) in 2010, waste generation was further reduced by 11 % in 2011.

The  $CO_2$  savings target of 5 % per year was not fully achieved (- 3 %) in 2011 at the Frankfurt site.  $CO_2$  emissions of DekaBank Germany and DekaBank AöR were also reduced at a comparable level. However, the increase in the number of employees and thus in energy consumption must be taken into account. When considering  $CO_2$  emissions by subject area, it becomes apparent that energy consumption and business travel are the main areas responsible for DekaBank's total  $CO_2$  emissions.



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# **1** Introduction

Corporate responsibility for environmental and climate protection is an important building block for the future competitiveness and long-term success of a company. Environmental protection is a viable part of a company's corporate strategy, and a company's environmental objectives should align with the company's corporate culture and business beyond environmental compliance goals. A sophisticated and proactive environmental policy is not only a best practice but also brings additional value.

DekaBank follows this principle and understands entrepreneurial environmental commitment not as required by law or the market, but rather acknowledges the opportunities arising through implementation of a comprehensive environmental management plan/strategy. Systematic and structured collection and reporting of environmental data is the basis for any forward-looking action. A precise analysis of material and energy flows and their corresponding environmental ramifications does not solely illustrate a company's environmental impact; it also allows market orientation and comparison with competitors. Above all, it reveals future areas of action, and identifies specific abnormalities, particularly high consumption rates, high saving potentials, trends and potential environmental targets.

With the introduction of an ISO 14001 certified environmental management system and the use of industry-specific key performance indicators according to VfU (The Association for Environmental Management and Sustainability for Financial Institutions), DekaBank systematised and standardised its environmental protection efforts. Moreover, DekaBank has committed itself to a continuous improvement process. For the enterprisewide collection, storage and monitoring of data, DekaBank has employed the SoFi software solution, a centralised sustainability management platform. SoFi allows company-wide data collection and reporting over time, enables simplified and accelerated data organisation and provides quality assured and complete data, and thus serves as the basis of the annual environmental report.

With an annual environmental balance, DekaBank regularly monitors its environmental programme and the progress of the implemented activities. Furthermore, resource and cost savings are quantified and the improved performance of the company is measured.

This 2011 Environmental Report documents the environmentally relevant energy and material flows from the reporting year, discloses their development since 2008 and states the resultant carbon footprints indicated in CO2-equivalents (CO2e)<sup>1</sup>. The results in this

<sup>&</sup>lt;sup>1</sup> According to GHG-Protocol, five further significant climate relevant gases in addition to CO<sub>2</sub> are understood under the term CO2-equivalent (CO2e): methane (CH4), nitrous oxide (N2O), sulphur-hexafluoride (SF6) and two groups of fluoride-hydro carbons (PFCs and HFCs). Calculations in this report are based on CO2-equivalents. The terms CO<sub>2</sub> emissions and GHG emissions will hereafter be used synonymously.





report relate primarily to the DekaBank locations in Frankfurt and, due to data availability, in a few cases to DekaBank Germany and company-wide to DekaBank AöR. The successes resulting from the environmental programme are presented and further actions are recommended.

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# 2 Key Topics and Context of 2011 Reporting

In 2011, DekaBank carried out its continuous improvement process by adopting a new environmental programme. Ongoing actions from the previous year were maintained and new environmental targets and additional measures were derived from the results of the previous environmental report.

**Reducing energy consumption** remained in focus. In addition to electricity saving measures and further improvements in building efficiency, measures specifically for sustainable procurement in various areas were put in place. In one of those projects, all PC and telephone hardware were substituted, with a special focus on the electric power consumption of the devices. Due to new technology, annual savings in electricity costs of 70,000 Euro are realistic. In addition, a variety of light sources were substituted by LED technology which will achieve savings of up to 20,000 kWh per year.

In order to further reduce the environmental impacts of paper consumption and mail distribution, additional measures were taken in 2011. By participating in the environmental protection programme GoGreen launched by Deutsche Post AG, DekaBank saved 362.3 tonnes of  $CO_2$  in 2011. As a supplement to the changeover to FSC certified paper in 2010, lighter 70 gram printer and copy paper was introduced. Christmas cards dispatched in 2011 were made from 100 % recycled paper and, in addition, an online version was made available to all employees. Moreover, major information activities were launched in order to reduce colour copies and colour printouts. Other projects for **reducing paper consumption** are in development, e.g. ePost mail dispatch, a secured electronic document dispatch by the Deutsche Post.

Another key topic of DekaBank's environmental programme is the **stakeholder dialogue on sustainability issues**. This includes the internal exchange of ideas for future environmental protection measures, which since December 2011 has been assisted by the "Sustainability Wiki" platform in order to improve internal information exchange and coordination of sustainability issues. A further measure to raise awareness on sustainability is its integration as an important component of the ethical responsibility of DekaBank staff, by incorporating it into the company's code of ethics. DekaBank also promotes environmental and sustainability issues through its membership in associations and federations. While supporting the Carbon Disclosure Project (CDP) since 2005, DekaBank became a Signatory Investor of the Water Disclosure Project (WDP) in 2010 and joined the Equator Principles Association. As part of its environmental programme, DekaBank will further intensify its stakeholder engagement in the coming years. Dialogues with several NGOs already began in 2011. In March 2011, DekaBank participated in the worldwide climate protection event "Earth Hour 2011".





Furthermore, DekaBank intensively communicates with its alliance partners about ecological operation measures and their achievements, in order to define and share best practice concepts.







# **3** Scope and basic data

### 3.1 Locations

This environmental balance covers the four DekaBank buildings situated in Frankfurt/Main (Trianon, Prisma, TA 10 and Skyper). Due to data availability, the scope is different in the two subject areas: paper consumption and business travel. The indicators for paper consumption apply to all sites in Germany. Correspondingly, for related data, the total number of employees of all German DekaBank locations was considered. Data on business travel were available for the entire company, covering the German sites and the sites in Luxembourg and Switzerland.

CO<sub>2</sub> emissions have been calculated for the Frankfurt site, as well as for DekaBank Germany and the entire DekaBank organisation with the sites in Germany, Luxembourg and Switzerland.

The few data gaps were filled with extrapolated values, in order to ensure data completeness and to comply with environmental management and  $CO_2$  standards (e.g. VfU indicators, GHG Protocol).

### 3.2 Building Floor Area

The total floor area (gross floor area) is subdivided into the four buildings considered, in Table 3-1. The data, provided by Real Estate Management, refer to 2011. The gross floor area compared to the previous year remained constant.

Following the recommendations of the VfU, gross floor areas are not used as a reference figure for relative indicators at a site or corporate level. They are merely used for internal data analysis and as a reference parameter for the analysis of energy consumption for comparison of buildings.

Table 3-1	Gross Floor Area by Buildings (Frankfurt)
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	Value		Portion
Trianon ML16		33,302 m²	31.7 %
Prisma HS55		47,000 m²	44.7 %
TA 10		14,443 m²	13.7 %
Skyper TA 1		10,310 m²	9.8 %

### 3.3 Employees

The employee numbers were provided by the central Human Resources department and may differ from the numbers referred to in the financial report for methodological reasons<sup>2</sup>. Similarly to the building floor area, the employee numbers reflect the values

<sup>&</sup>lt;sup>2</sup> Conforming to the demands of the VfU, employee numbers are indicated as Full Time Equivalents (FTE) whereby parttime employees are added up to a 100 % basis. Trainees, interns and external employees who are regularly present in





recorded at the end of the year. In the services sector, they are the most important reference value for the compilation of relative environmental indicators.

In 2011, the number of employees slightly increased by 5 % compared to the previous year. All buildings contributed to this increase but especially in the TA 10, the number of employees rose from 30 (in 2010) to 72 (Table 3-2).

For the key figures in paper consumption, business travel and  $CO_2$  emissions—due to the different system boundaries as referred to in Section 3.1—employees working outside the Frankfurt location were also considered. They will be indicated in each respective section. The total number of employees has slightly increased.

Table 3-2Distribution of Employees between the Individual Buildings
---

	Fiscal Year 2008		Fiscal Year 2009		Fiscal Year 2010		Fiscal Year 2011	
	Employees	Deviation to 2007	Employees	Deviation to 2008	Employees	Deviation to 2009	Employees	Deviation to 2010
Trianon ML16	1,349	50 %	1,330	-1 %	1,276	-4 %	1,342	5 %
Prisma HS55	1,175	31 %	1,115	-5 %	1,171	5 %	1,189	2 %
TA 10	30	-91 %	37	23 %	30	-19 %	72	140 %
Skyper TA 1	336	28 %	331	-1 %	337	2 %	348	3 %
Total	2,890	21 %	2,813	-3 %	2,814	0 %	2,951	5 %

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In relation to the number of employees, the floor area values have only marginally changed. The still particularly high values of the TA 10 building are due to the relatively low number of employees in relation to the gross floor area. During recent years, employees have been continuously moved to other buildings. In 2011 however, use of building TA 10 was once again intensified due to large-scale projects.

The buildings are also taken into account, as they are also a source of environmental effects. In contrast to the normal practice in financial reports, employees on maternity leave and "parent-time" are not considered.

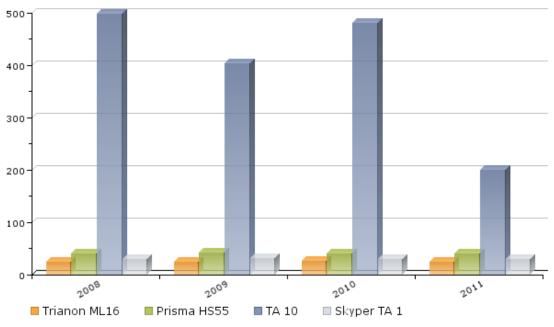






Table 3-3	Floor Area per Employee According to Buildings
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	Fiscal Year 2008		Fiscal Year 2009		Fiscal Y	Fiscal Year 2010		Fiscal Year 2011	
Trianon ML16	25	m²/FTE	25	m²/FTE	26	m²/FTE	25	m²/FTE	
Prisma HS55	40	m²/FTE	42	m²/FTE	40	m²/FTE	40	m²/FTE	
TA 10	498	m²/FTE	404	m²/FTE	481	m²/FTE	201	m²/FTE	
Skyper TA 1	31	m²/FTE	31	m²/FTE	31	m²/FTE	30	m²/FTE	



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# 4 Environmental Balance -Energy and Material Flows

The environmental balance follows the suggestions of the VfU. Content and structure of these recommendations align with the Global Reporting Initiative (GRI) guidelines, the internationally recognised standards for sustainability reporting. The order of the environmental topics in the balance reflects their relevance.  $CO_2$  emissions resulting from energy and material consumption are listed in Section 5.

### 4.1 On-site Energy

Between 30 and 40 per cent of the global final energy consumption is caused by the buildings sector<sup>3</sup>. Thus, buildings account for more  $CO_2$  emissions worldwide than the transport sector. This impressively illustrates the importance of energy management for buildings when it comes to reducing consumption and using energy efficiently. The financial sector focuses especially on the energy consumption of buildings. Electricity and heating energy needed for data processing, cooling, heating pumps or lighting cause by far the most significant environmental impacts of a non-manufacturing company.

#### 4.1.1 Data Sources, Data Resolution and Corrections

The reporting was based on the real consumption data from 2011 for the four considered buildings.

#### 4.1.2 Results and Interpretation

The majority of energy is consumed in the Trianon and Prisma buildings (see Table 4-1). The TA 10 and Skyper buildings contribute considerably less to the overall energy consumption. Energy consumption in building TA 10 is relatively high due to the large area of space even though only a few employees currently work there. Although reduction of energy consumption has not continued in 2011 but the value slightly increased by 2 % compared to the previous year, it still remained significantly lower than the 2009 level (Table 4-2).



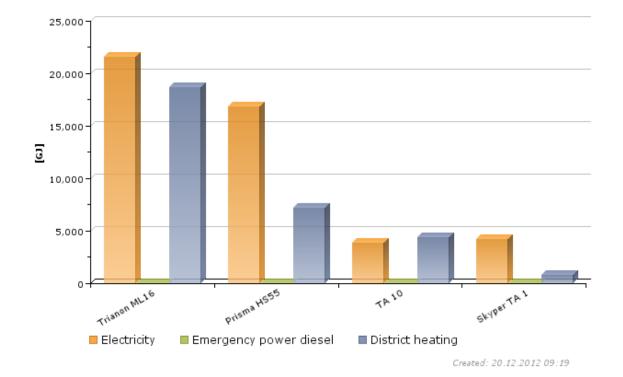
<sup>&</sup>lt;sup>3</sup> World Business Council for Sustainable Development (WBCSD, 2009): Transforming the market: Energy Efficiency in Buildings.





5, 1		5,		
	Trianon ML16	Prisma HS55	TA 10	Skyper TA 1
Electricity	21,602 GJ	16,802 GJ	3,884 GJ	4,212 GJ
Emergency power diesel	37 GJ	36 GJ	19 GJ	2 GJ
District heating	18,694 GJ	7,159 GJ	4,364 GJ	820 GJ
Tota	40,333 GJ	23,997 GJ	8,267 GJ	5,034 GJ





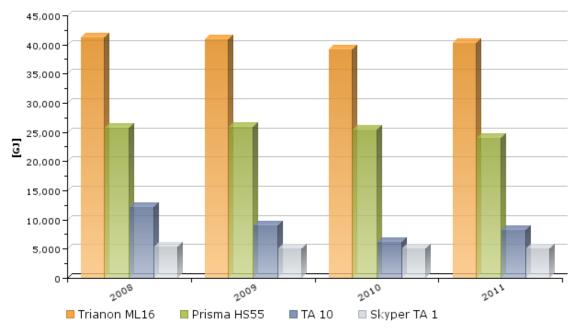
In terms of environmental performance of DekaBank, the development of the relative values is of higher significance than the total energy consumption. Table 4-3 shows a significant decline in total energy consumption relative to the number of employees. Among others categories, the specific electricity consumption per employee (see Table 4-4) was reduced in all buildings.





#### Table 4-2 Development of Total Energy Consumption

	Fiscal Year 2008		Fiscal Year	Fiscal Year 2009		2010	Fiscal Year 2011		
GJ Deviation to 2007		Deviation to 2007	GJ	Deviation to 2008	GJ	Deviation to 2009	GJ	Deviation to 2010	
Trianon ML16	41,248	-12 %	40,828	-1 %	39,195	-4 %	40,333	3 %	
Prisma HS55	25,701	1 %	25,942	1 %	25,365	-2 %	23,997	-5 %	
TA 10	12,179	-14 %	8,970	-26 %	6,151	-31 %	8,267	34 %	
Skyper TA 1	5,353	-21 %	5,126	-4 %	5,121	-0 %	5,034	-2 %	
Total	84,481	-10 %	80,867	-4 %	75,833	-6 %	77,631	2 %	



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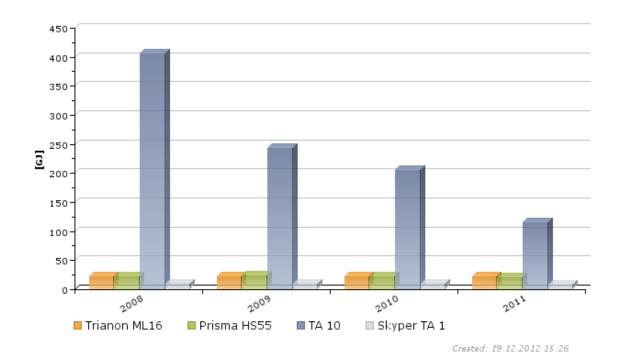






Table 4-3	Development of Relative Total Energy Consumption per Employee
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	Fiscal Year 2008		Fiscal Year	Fiscal Year 2009		2010	Fiscal Year 2011		
	GJ/ empl.			Deviation to 2008	GJ/ empl.	Deviation to 2009	GJ/ empl.	Deviation to 2010	
Trianon ML16	22.2	-43.7 %	22.3	0.5 %	22.3	0.1 %	21.6	-3.0 %	
Prisma HS55	21.9	-22.8 %	23.3	6.4 %	21.7	-6.9 %	20.2	-6.8 %	
TA 10	406.0	810.6 %	242.4	-40.3 %	205.0	-15.4 %	114.8	-44.0 %	
Skyper TA 1	9.4	-43.7 %	9.0	-4.7 %	8.7	-3.2 %	8.0	-8.4 %	

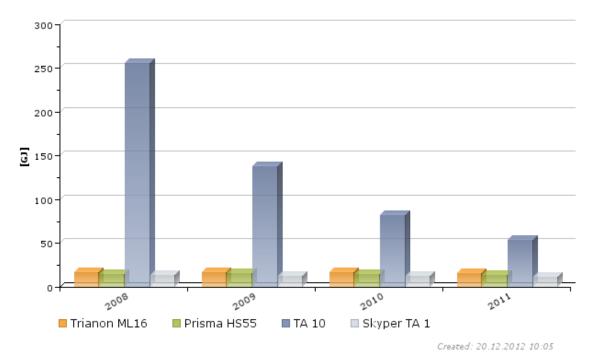






#### Table 4-4 Development of Relative Electricity Consumption per Employee

	Fiscal Year 2008		Fiscal Yea	r 2009	Fiscal Yea	r 2010	Fiscal Year 2011		
	GJ/ empl.			Deviation to 2008	GJ/ Deviation to empl. 2009		GJ/ empl.	Deviation to 2010	
Trianon ML16	16.581	-30.713 %	16.706	0.757 %	16.762	0.333 %	16.097	-3.967 %	
Prisma HS55	14.523	-24.633 %	15.303	5.369 %	14.404	-5.875 %	14.131	-1.891 %	
TA 10	256.022	696.798 %	137.678	-46.224 %	82.563	-40.032 %	53.938	-34.671 %	
Skyper TA 1	13.571	-25.890 %	13.124	-3.288 %	12.835	-2.202 %	12.104	-5.702 %	



Since the gross floor area in relation to the relatively small number of employees is quite large, values for energy consumption and electric power consumption per employee in the TA 10 building are particularly high. Specific district heating consumption in 2011 increased slightly in all buildings except for the Prisma building (see Table 4-6) with a significant decrease of 15 %. However, the Skyper building shows the lowest district heating consumption with approximately 22 kilowatt hours per m<sup>2</sup> and almost achieves Passive House standards (<15 kwh/m<sup>2</sup>). The relative consumption value of the Trianon building, by contrast, is the largest and exceeds the value of the Skyper building by a factor of seven.

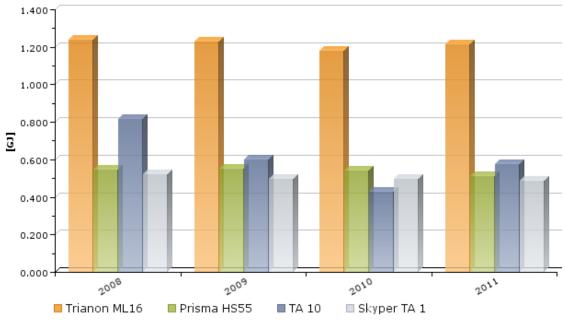






Table 4-5	Development of Relative Total Energy Consumption per m <sup>2</sup>
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	Fiscal Year 2008       GJ/m <sup>2</sup> Deviation to 2007		Fiscal Ye	ar 2009	Fiscal Ye	ar 2010	Fiscal Year 2011		
			GJ/m <sup>2</sup> Deviation to 2008		GJ/m <sup>2</sup> Deviation to 2009		GJ/m²	Deviation to 2010	
Trianon ML16	1.239	-12.332 %	1.226	-1.017 %	1.177	-3.999 %	1.211	2.902 %	
Prisma HS55	0.547	0.982 %	0.552	0.937 %	0.540	-2.224 %	0.511	-5.395 %	
TA 10	0.815	-13.774 %	0.600	-26.343 %	0.426	-29.062 %	0.572	34.416 %	
Skyper TA 1	0.519	-20.953 %	0.497	-4.242 %	0.497	-0.091 %	0.488	-1.709 %	



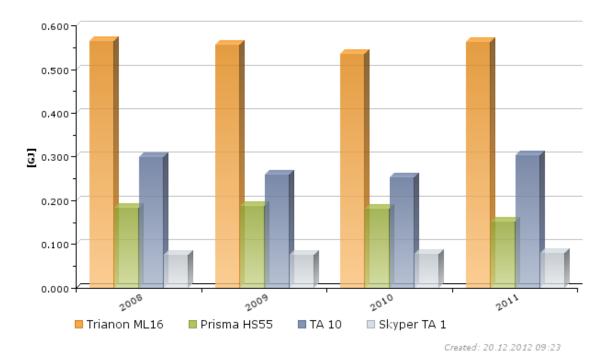
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Table 4-6	Deve	elopment of	Relative	e District He	ating Co	onsumption	per m <sup>2</sup>		
	Fiscal Year 2008		Fiscal Ye	ear 2009	Fiscal Ye	ear 2010	Fiscal Year 2011		
	GJ/m²	Deviation to 2007	GJ/m²	Deviation to 2008	GJ/m²	Deviation to 2009	GJ/m²	Deviation to 2010	
Trianon ML16	0,564	-25.926 %	0,556	-1.410 %	0,534	-4.059 %	0,561	5.170 %	
Prisma HS55	0,183	6.167 %	0,188	2.824 %	0,180	-4.242 %	0,152	-15.404 %	
TA 10	0,300	14.083 %	0,258	-13.873 %	0,253	-1.980 %	0,302	19.362 %	
Skyper TA 1	0,077	-59.833 %	0,076	-1.471 %	0,077	1.792 %	0,080	3.275 %	





#### 4.1.3 Recommendations

- Energy efficiency is becoming increasingly important. In this context, an energy • management system certified to DIN EN 50001 provides a tool to detect further ecological weak points and mobilise saving potentials.
- Since DekaBank's indirect CO<sub>2</sub> emissions<sup>4</sup> are primarily due to electricity consumption, a switch to electricity generated from renewable power sources would significantly reduce these emissions. During the reporting period, a share of 25 % of electricity certified by the Green Electricity Label (Grüner Strom Label) was purchased for 2013. This will significantly reduce indirect CO<sub>2</sub> emissions.
- To further reduce electricity consumption, end-user devices of high energyefficiency are given preferential consideration in purchasing. In 2011, a groupwide changeover to more energy efficient and more environmentally friendly data projectors took place. Such activities should be consistently expanded to other office equipment.

<sup>&</sup>lt;sup>4</sup> Description of indirect emissions in Section 5.1.

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- For improving both internal and external benchmarks, consumption figures for further locations should be available. The energy performance requirements by EnEV (Energy Saving Act as part of the German Building Legislation) or the certification standards of the German Sustainable Building Council (DGNB) can be used as a basis for an adequate performance measurement system.
- Many adjustments in terms of building efficiency were already made. For future modifications or renovations of buildings, incorporating sustainability aspects during the planning and construction stages and further involving the purchasing department are essential.
- Future energy saving measures can be even better prioritised and their results differentiated and presented by utilising the comprehensive tools of the SoFi sustainability software that is already employed.

### 4.2 Business Travel

Operational mobility is the second major contributor in terms of environmental impact in the financial services sector. Similar to other sectors, the trend has pointed to an increase in traffic volume in recent years. The biggest challenge in the coming years will be to ensure both mobility and sustainability, and to decouple environmental impacts from traffic performance. Technological developments, like more efficient engines, can contribute, but at the moment there is no prospect of the trend being reversed. It is necessary to develop a comprehensive mobility concept and to implement mobility management. Financial service providers can directly influence environmental impacts related to mobility by substituting business travel with modern video and IT technologies, and, when that is not possible, by using environmentally friendly means of transports. Travel within Germany and, to a certain extent, within Europe can be increasingly shifted from air and road to the more environmentally friendly rail.

#### 4.2.1 Data Sources, Data Resolution and Corrections

A breakdown of business travel activities to the site level was not possible and therefore the data refer to the entire DekaBank organisation. This includes the sites in Luxembourg, Switzerland and all of Germany. Thus, a benchmark comparison covering all sites is not possible.

The following staff numbers for the locations in Germany, Switzerland and Luxembourg were considered in this context:

2008: 3,992 FTE 2009: 3,729 FTE 2010: 3,724 FTE 2011: 3,997 FTE





When analysing the road kilometres travelled, employee vehicles that were used for business-related travel were considered in addition to company cars. However, the proportion of business-related travel of the total of kilometres travelled had to be estimated. A general proportion of 60 % was assigned.

#### 4.2.2 Results and Interpretation

In the past, DekaBank's total traffic volume continued to grow every year; between 2007 and 2010 it increased by over 25 %. For the first time in years, a slight reduction of kilometres travelled was achieved in 2011. Only air traffic volume increased slightly during the last year (2 %) but remained below the previous year's rise of 19 %. Rail traffic decreased by 12 %. This development should be closely monitored, particularly because air travel increased and car travel remained almost constant (Table 4-7). The comparatively large distance travelled by air was mainly caused by long-haul flights. In the final analysis, the proportion of air travel contributed 56 % (+2 %) to the total traffic volume, while almost one third of the kilometres were travelled by car. The long-haul flights are mainly due to increasing business activities outside Europe. Rail travel area still holds great potential for shifting to public means of transports and also for absolute reduction. The value for kilometres travelled by air in 2010 had to be corrected from 10,285,502 km to 10,544,559 km, due to a detected error in data preparation. This means an increase of 2.5 %.

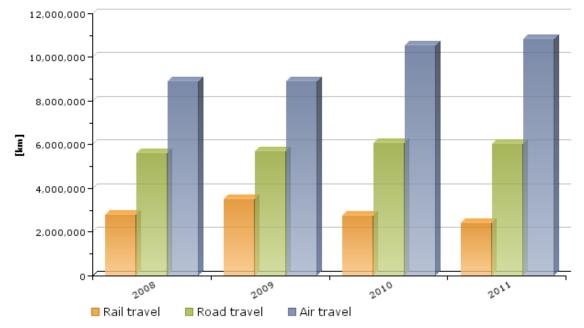






#### Table 4-7 Development of Total Business Travel By Means of Transport

	Fiscal Year 2008		Fiscal Year 200	09	Fiscal Year 20	10	Fiscal Year 2011		
	km	Deviation to 2007	km	Deviation to 2008	km	Deviation to 2009	km	Deviation to 2010	
Rail travel	2,784,892	19 %	3,496,171	26 %	2,745,956	-21 %	2,420,000	-12 %	
Road travel	5,600,265	16 %	5,665,846	1 %	6,070,742	7 %	6,000,741	-1 %	
Air travel	8,882,391	10 %	8,886,138	0 %	10,544,559	19 %	10,808,157	2 %	
Total	17,267,548	13 %	18,048,155	5 %	19,361,257	7 %	19,228.898	-1 %	

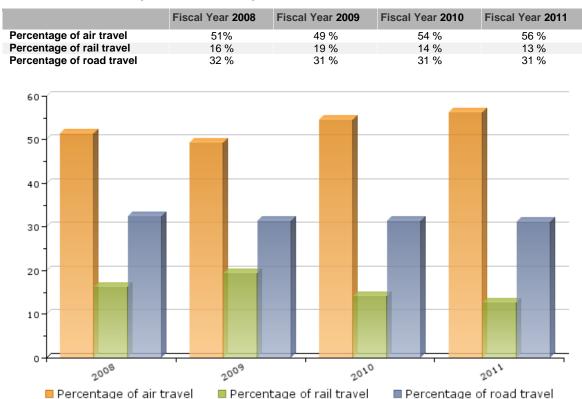


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#### Table 4-8 Development of Modal Split of Total Business Travel



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#### 4.2.3 Recommendations

Efforts to reduce business travel should remain an area of focus. Therefore, a comprehensive mobility concept is to be developed. Goals must be defined for the coming years in order to reverse the current trend of reducing kilometres travelled by rail, by increasingly shifting road travel to rail. Since mobility remains a basic prerequisite for the success of a financial institution such as DekaBank, all feasible and promising measures must be coordinated instead of single measures being followed, but without restricting business activities and flexibility of the employees. Building blocks for such a mobility concept and mobility management are, for example:

- Improving availability of data on business travel (in terms of locations, purposes and user groups)
- Analysing the need for action (identification of the decisive drivers)
- Defining differentiated environmental goals (relative to traffic performance, proportion of means of transport, environmental impacts, etc.)
- Developing a practicable package of measures
  - o Optimised business travel management







- Incentive programme for controlling means of transport (bonus system for environmentally friendly travel in Germany or neighbouring European countries)
- o Compensatory measures (e.g. carbon-neutral air and road travel)
- Incentivising employees from the same region of residence to car-pool (offer lifts on the Intranet)
- Offering fuel saving training to outdoor staff or employees with comparatively high kilometre-rates (Agenda 2012)
- Including specifically climate-friendly models in the selection when renewing the vehicle fleet

### 4.3 Paper consumption

In contrast to industrial companies with mainly direct material flows, for service providers, paper consumption is a crucial factor. The manufacturing of paper is energy and water intensive and therefore contributes significantly to the environmental impacts of a financial service provider. Another contribution comes from the production of the wood raw material. The magnitude of its impact depends on the sourcing, i.e. whether the wood was harvested from sustainable forests. Thus, sustainable procurement of office material like paper is considered very important.

#### 4.3.1 Data Sources, Data Resolution and Corrections

Figures on paper consumption apply to DekaBank Germany. Therefore the following employee numbers from the remaining sites in Germany were additionally taken into account:

2008: 630 FTE 2009: 517 FTE 2010: 523 FTE 2011: 558 FTE

The sum total number of employees for all locations in Germany:

2008: 3.520 FTE 2009: 3.330 FTE 2010: 3.337 FTE 2011: 3.509 FTE

Key paper consumption figures per employee per day are based on 250 working days according to VfU.





#### 4.3.2 Results and Interpretation

Paper consumption in 2011 stayed at a similar level as it was in 2010 (-1 %). However, here it should be noted that the number of employees increased and thus demand for paper increased as well (Table 4-9). Consequently, the positive trend of recent years has continued but reduction was significantly lower than in previous years.

The highest share of paper consumption lies at 60 % for advertising matters and publications, where demand compared to previous year rose marginally (2 %). Almost one third (31 %) of paper consumption is due to the use of copy paper, which was reduced by 10 %. Unlike in previous years, in 2010 and 2011 distinction between forms and copy paper were no longer made and both values were merged. Following a pronounced reduction in 2010 (-47 %), the use of letterhead and envelopes sharply increased again in 2011, caused by an increase in letterhead ordering (30 %) (Table 4-9). Due to the storage of some paper grades, the quantities bought do not correspond to the actual consumption in the respective time period.

After a significant reduction of paper consumption during recent years, values almost stagnated in the reporting year. However, the reduction in copy paper consumption combined with an increasing number of employees proves the success of the ambitious commitment of DekaBank and its staff, and the reduction in office paper indicates a sensitive utilisation of paper.

This is also confirmed by the specific consumption per employee, where copy paper was reduced by 15 %. Paper consumption per employee is 5 % below the 2010 figure (Table 4-10).



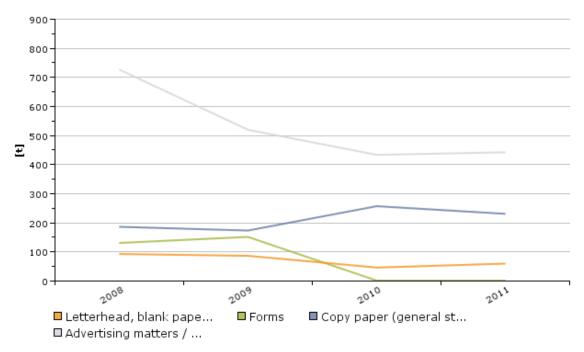




#### Table 4-9 Development of Total Paper Consumption by Categories

	Fiscal Year 2008		Fiscal Year 2009		Fiscal Year 2010		Fiscal Year 2011	
	t	Deviation to 2007	t	Deviation to 2008	t	Deviation to 2009	t	Deviation to 2010
Letterhead, blank paper, envelopes	91	119 %	85	-7 %	45	-47 %	58	30 %
Forms	129	159 %	150	16 %	*	*	*	*
Copy paper (general stationery)	185	-10 %	172	-7 %	256	49 %	229	-10 %
Advertising matters / publications	725	-33 %	518	-29 %	432	-17 %	441	2 %
Total	1,131	-18 %	926	-18 %	733	-21 %	729	-1 %

\* According to the competent department, forms are included in the copy paper category



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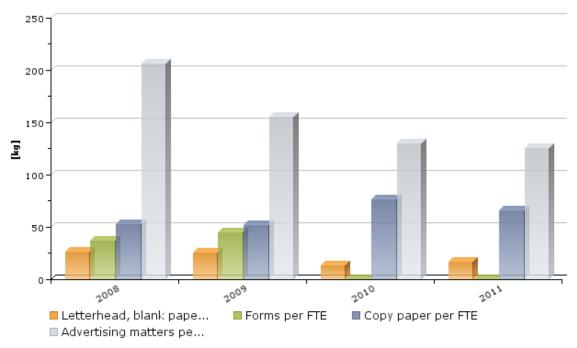




#### Table 4-10 Development of Paper Consumption per Employee by Categories

	Fiscal	Fiscal Year 2008		Fiscal Year 2009		Fiscal Year 2010		Fiscal Year 2011	
	kg/ empl.	Deviation to 2007	kg/ empl.	Deviation to 2008	kg/ empl.	Deviation to 2009	kg/ empl.	Deviation to 2010	
Letterhead, blank paper, envelopes	26	87 %	26	-1 %	13	-48 %	17	24 %	
Forms	37	121 %	45	23 %	*	*	*	*	
Copy paper	52	-23 %	52	-2 %	77	48 %	65	-15 %	
Advertising matters	206	-43 %	156	-24 %	130	-17 %	126	-3 %	
Total	321	-30%	278	-13%	220	-21%	208	-5%	

\* According to the competent department, forms are included in the copy paper category



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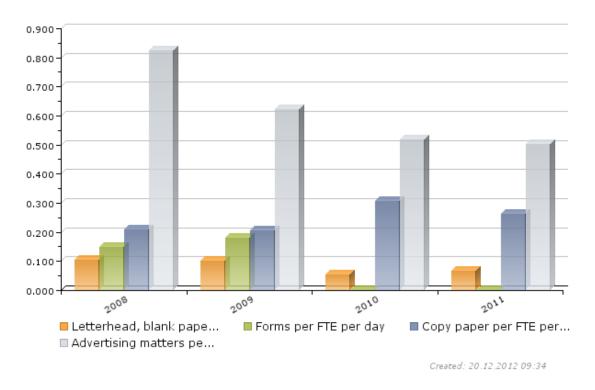






## Table 4-11Development of Paper Consumption per Employee and Day by<br/>Categories

	Fiscal Y	Fiscal Year 2008		Fiscal Year 2009		'ear 2010	Fiscal Year 2011		
Letterhead, blank paper, envelopes	0.104	kg/(empl.*d)	0.102	kg/(empl.*d)	0.054	kg/(empl.*d)	0.066	kg/(empl.*d)	
Forms	0.147	kg/(empl.*d)	0.180	kg/(empl.*d)	*	*	*	*	
Copy paper	0.210	kg/(empl.*d)	0.207	kg/(empl.*d)	0.307	kg/(empl.*d)	0.262	kg/(empl.*d)	
Advertising matters	0.824	kg/(empl.*d)	0.623	kg/(empl.*d)	0.518	kg/(empl.*d)	0.503	kg/(empl.*d)	
* According to the compet	tent depart	ment, forms ar	e include	d in the copy pa	aper cate	gory.		/	



#### 4.3.3 Recommendations

- Grammage of copy paper was already considerably reduced and is 70 g in 2011. A yearly revision of the grammage should also be established for all other paper grades. A guideline on grammage for new print jobs can be helpful in this respect.
- In addition to the continuation of efforts towards a paperless office, environmental impacts and CO<sub>2</sub> emissions from paper consumption can primarily be reduced by using more environmentally friendly paper. Some paper grades already fulfil the resource-saving FSC and PEFC standards.
- A further improvement of quality can be achieved by usage of 100 % recycled paper with the Blue Angel label, the highest eco-label in the German paper sector.





### 4.4 Water Consumption

Water is a scarce resource worldwide. Even though drinking water is still available in sufficient quantities in Germany, extreme weather conditions recently led to bottlenecks in Central Europe, with a negative impact on electricity production and crop yields. The supply of sufficient drinking water is a major challenge internationally. Existing scarceness of water in some regions is aggravated by increasing industrialisation, intensive land use and extreme weather conditions due to climate change.

A more economical use of water is therefore necessary and a significant factor for the future sustainability of a company. Financial service providers use water in their buildings primarily for sanitary installations, canteens and green areas. The discharge of wastewater by a financial institute can in most cases be ignored.

#### 4.4.1 Data Sources, Data Resolution and Corrections

The water consumption per employee per working day calculation was based on 250 working days per year.

#### 4.4.2 Results and Interpretation

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After water consumption had decreased by 22 per cent in 2010 and the reduction target of 5 % set in the environmental programme had been far exceeded, total water consumption in 2011 increased again slightly (2 %). This increase becomes more relative through a specific consideration of water consumption: merely in the Skyper building consumption per employee and per day increased from 23 to 24 litres, which still is a comparatively very low value. In the Trianon building, waterless urinals have been partially in use since the end of 2011. Reinforcement of such water-saving technologies could lead to a further reduction.

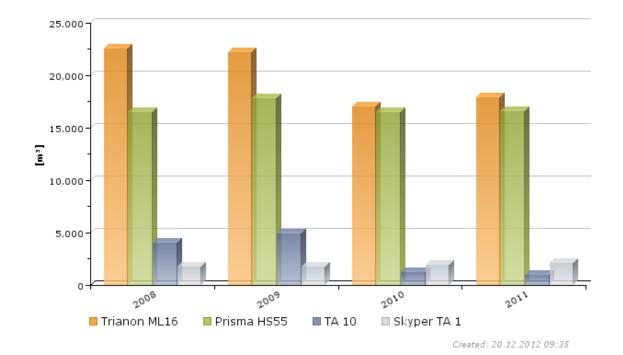






	able 4-12 Development of Total Drinking Water Consumption										
	Fiscal Year 2008		Fiscal Year 2009		Fiscal Year 2010		Fiscal Year 2011				
	m³	Deviation to 2007	m³	Deviation to 2008	m³	Deviation to 2009	m³	Deviation to 2010			
Trianon ML16	22,535	-18 %	22,218	-1 %	17,011	-23 %	17,891	5 %			
Prisma HS55	16,465	5 %	17,830	8 %	16,462	-8 %	16,565	1 %			
TA 10	4,002	10 %	4,936	23 %	1,221	-75 %	950	-22 %			
Skyper TA 1	1,771	9 %	1,745	-1 %	1,942	11 %	2,071	7 %			
Total	44.773	-7 %	46.729	4 %	36.636	-22 %	37.477	2 %			

#### Table 4-12 Development of Total Drinking Water Consumption

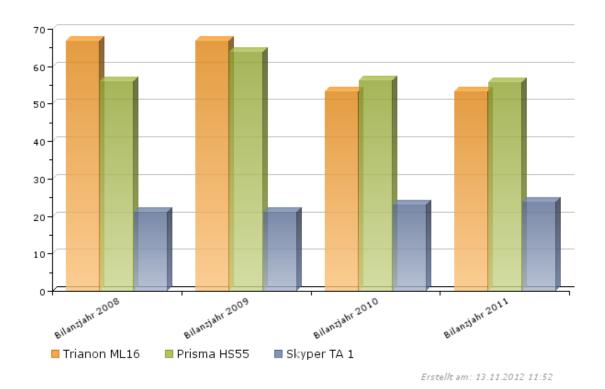






#### Table 4-13 Development of Specific Drinking Water Consumption per Employee per Day

	Fiscal Year 2008		Fiscal Year 2009		Fiscal Year 2010		Fiscal Year 2011	
Trianon ML16	67	l/(empl.*d)	67	l/(empl.*d)	53	l/(empl.*d)	53	l/(empl.*d)
Prisma HS55	56	l/(empl.*d)	64	l/(empl.*d)	56	l/(empl.*d)	56	l/(empl.*d)
Skyper TA 1	21	l/(empl.*d)	21	l/(empl.*d)	23	l/(empl.*d)	24	l/(empl.*d)



#### 4.4.3 Recommendations

- Substitute drinking water with rain water. For irrigation of green areas or cleaning of outdoor spaces and circulation areas this is relatively easy to implement. Substituting drinking water with natural water in toilets requires specific hardware and plumbing fixtures and is therefore more complex. However, in the case of building renovations where new hardware installations are required, this substitution would be decisive.
- Use water-saving supplementary technology, such as flow restrictors; this is a costsaving and immediate measure.
- Greater use of water-saving sanitation when remodelling sanitary facilities, kitchens and canteens (e.g. waterless urinals).







### 4.5 Wastes

In terms of waste, DekaBank follows the principle "Avoid-Recycle-Dispose". The quantity and nature of the waste are determined and, in the context of a waste management concept, appropriate measures based on this principle are implemented. Avoiding waste is economically advantageous, since costs can be reduced in two ways—through the provision of resources and in their subsequent disposal. Financial service providers primarily generate office waste, such as paper. A reasonable waste management concept does therefore not apply to end-of-pipe measures but is integrated into other business processes. Thus, the targeted continuous reduction of paper consumption is interconnected with the reduction of waste.

#### 4.5.1 Data Sources, Data Resolution and Corrections

This report evaluates waste data in the categories of recycling, waste disposal/landfill and waste incineration.

#### 4.5.2 Results and Interpretation

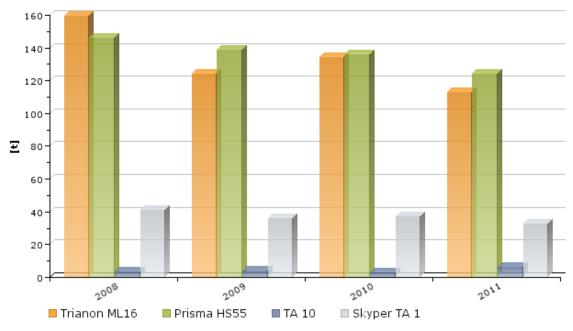
Waste generation was considerably reduced since 2006. For the first time in years, in 2010 waste accumulation slightly increased (2.4 %), but in 2011 waste reduction was further continued and reached 11 % (Table 4-14). In the Trianon building, for example, the paper towel dispensers were substituted by environmentally friendly cloth towel dispensers, which does not only save resources for paper production but also significantly reduces waste accumulation. When examining the figures for the individual buildings, it is notable that they vary widely. The increase in the TA 10 is due to the substantial increase in the number of employees in this building. However, specific waste accumulation per employee is significantly lower at DekaBank compared to other financial institutions. Consequently, waste management is still not a priority for future environmental goals and measures.





#### Table 4-14 Development of Total Waste Accumulation

	Fiscal Year 2008		Fiscal Year 2009		Fiscal Year 2010		Fiscal Year 2011	
	t	Deviation to 2007	t	Deviation to 2008	t	Deviation to 2009	t	Deviation to 2010
Trianon ML16	159.7	8.3 %	124.0	-22.3 %	134.1	8.1 %	112.9	-15.8 %
Prisma HS55	146.0	18.8 %	138.5	-5.1 %	135.8	-2.0 %	124.1	-8.6 %
TA 10	3.6	-92.3 %	4.0	10.6 %	2.8	-30.8 %	6.2	123.0 %
Skyper TA 1	40.8	3.7 %	36.0	-11.7 %	37.2	3.5 %	32.8	-11.9 %
Total	350.0	-2.0 %	302.5	-13.6 %	309.9	2.4 %	276.0	-10.9 %



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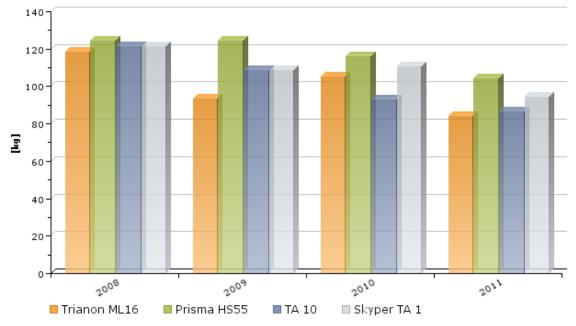
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Table 4-15	Development of Specific Waste Accumulation per Employee
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	Fiscal Year 2008		Fiscal Year 2009		Fiscal Year 2010		Fiscal Year 2011	
	kg/ empl.	Deviation to 2007	kg/ empl.	Deviation to 2008	kg/ empl.	Deviation to 2009	kg/ empl.	Deviation to 2010
Trianon ML16	118	-28 %	93	-21 %	105	13 %	84	-20 %
Prisma HS55	124	-9 %	124	-0 %	116	-7 %	104	-10 %
TA 10	121	-19 %	109	-10 %	93	-15 %	86	-7 %
Skyper TA 1	121	-19 %	109	-10 %	111	2 %	94	-15 %



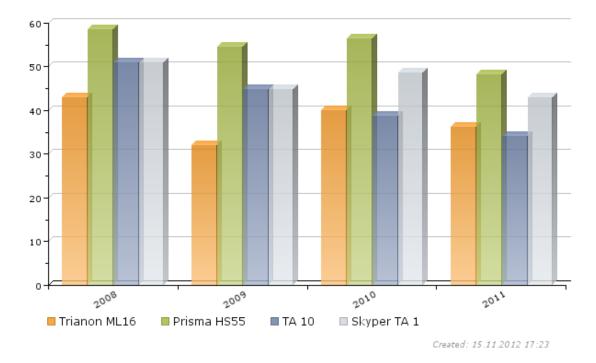
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Table 4-16	Development of Recycling Quota

	Fiscal Year 2008	Fiscal Year 2009	Fiscal Year 2010	Fiscal Year 2011
Trianon ML16	43 %	32 %	40 %	36 %
Prisma HS55	59 %	55 %	56 %	48 %
TA 10	51 %	45 %	39 %	34 %
Skyper TA 1	51 %	45 %	49 %	43 %



#### 4.5.3 Recommendations

- Carry out audits at the contracted waste management companies.
- Analyse the decreasing recycling quota.
- Evaluate the relevance of the waste types rather than merely the amount generated.



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# Environmental Impact – CO<sub>2</sub> Emissions

### 5.1 Direct and Indirect GHG Emissions

The calculations and descriptions of  $CO_2$  emissions are in accordance with the Greenhouse Gas Protocol of WBCSD/WRI (2004)<sup>5</sup>.

Accordingly, emissions of CO<sub>2</sub> are assigned to three different categories (Scope 1-3) depending on their origin. "Direct emissions" (Scope 1) originate from sources that are owned or controlled by the company, such as emissions from production or combustion processes. In the case of the DekaBank, only emissions from the diesel emergency generator and the company's fleet fall into this category. Emissions from the generation of purchased energy, such as electricity and district heating, which do not occur within the company's boundaries, are defined as "indirect emissions" (Scope 2). "Other indirect emissions" (Scope 3) include all further emissions resulting from the activities of the company but occurring in upstream and downstream processes within other companies (e.g. from the production of purchased paper or from means of transport used for business travel). Scope 3 emissions of DekaBank consequently include emissions from busines travel, paper and water consumption and the supply of fuels (for vehicle fleet and emergency generator).

Emissions resulting from waste disposal are not considered here because adequate emission factors for the comprehensive VfU waste categories are not available, but rather only for the disposal methods. Including these emissions would require gathering waste data broken down by categories and emission factors for each category. Such a detailed calculation of emissions from waste disposal would not be appropriately related to its very low share of the total emissions from a financial service provider.

The factors for the calculation of emissions come from the 2007 VfU guidelines and the 2010 update (see Appendix A). All emissions presented in the years 2008 to 2011 were calculated based on the three emissions categories and the emission factors indicated in Appendix A.

### 5.2 DekaBank's CO<sub>2</sub> Emissions

Efforts were made in 2009 to expand data collection to include more DekaBank locations in the calculation of  $CO_2$  emissions. For sites in Luxembourg, actual consumption values were available. For other smaller locations in Switzerland and Germany, values have been extrapolated based on the number of employees. This starting situation was identical in 2011.

<sup>5</sup> According to GHG-Protocol, five further significant climate relevant gases in addition to CO<sub>2</sub> are understood under the term CO2-equivalent (CO2e): methane (CH4), nitrous oxide (N2O), sulphur-hexafluoride (SF6) and two groups of fluoride-hydro carbons (PFCs and HFCs). Calculations in this report are based on CO2-equivalents.





Since 2009, the DekaBank environmental programme aims at an annual reduction in  $CO_2$  emissions by 5 % compared to the previous year. The  $CO_2$  emissions were calculated for different system boundaries and the carbon footprints of the locations in Frankfurt, DekaBank Germany and also the entire DekaBank AöR are disclosed.

### 5.3 Data Sources, Data Resolution and Corrections

The emission factors for electricity from the VfU guidelines are based on country-specific national grid mixes. According to the DekaBank locations, grid mixes in Switzerland, Luxembourg and Germany were applied. For all other environmental impact categories and consumption figures only global emission factors by VfU were available. Due to VfU's update of the emission factors (version April 2011), most factors used for calculation were also adjusted for the previous years; for instance those factors where expanded system boundaries (supplier chain) were included in the modelling. In some cases improved data were available, which also made retrospective adjustment reasonable. Some factors were not retrospectively adjusted, e. g. the district heating factor which decreases due to increasingly efficient production and/or increased use of renewable energy power stations. This also applies to the electricity mix factor. Here, an adjustment was necessary because the new factors considered expanded system boundaries. This approach allows for comparability in the timelines. The factors used for calculations in this report are listed in appendix A per period.

#### 5.3.1 Carbon Footprint of the Frankfurt Site

Exact consumption figures for energy and water were available for all buildings. Data on paper consumption were only available for DekaBank Germany, data on business travel only for the entire DekaBank AöR. Values for the Frankfurt site were projected based on the number of employees. As expected, the amount of business travel differs substantially depending on the different site locations.

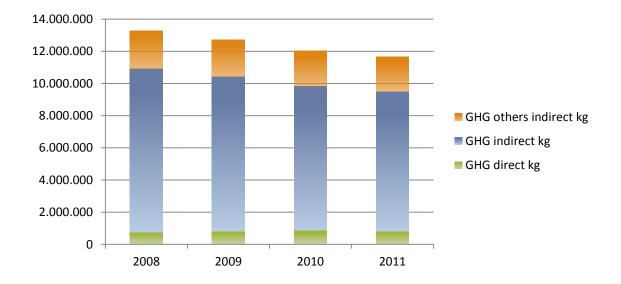
Year	GHG direct	GHG indirect	GHG others indirect	Total
	kg	kg	kg	kg
2008	1,067,048.93	13,724,233.55	3,286,377.71	18,077,660.19
2009	1,077,254.60	12,619,590.83	3,150,672.52	16,847,517.95
2010	1,151,556.48	11,796,663.06	3,063,142.73	16,011,362.27
2011	1,123,890.36	11,383,431.94	2,967,243.08	15,474,565.38

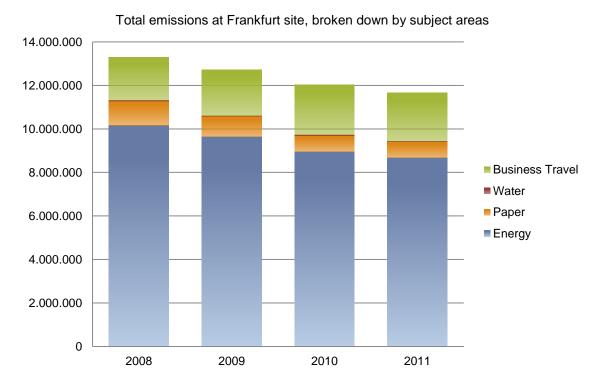
Table 5-1 Time Series Analysis of GHG Emissions of Sites in Frankfurt











#### 5.3.2 Carbon Footprint of DekaBank Germany

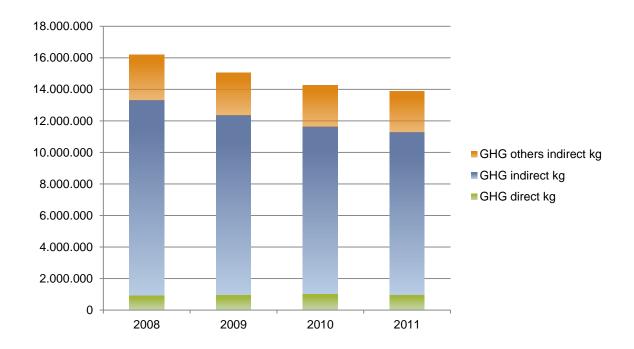
In addition to the four buildings in Frankfurt, all other locations in Germany were taken into account. The average consumption figures for Frankfurt were extrapolated based on the number of employees.





#### Table 5-2 Time Series Analysis of GHG Emissions of DekaBank Germany

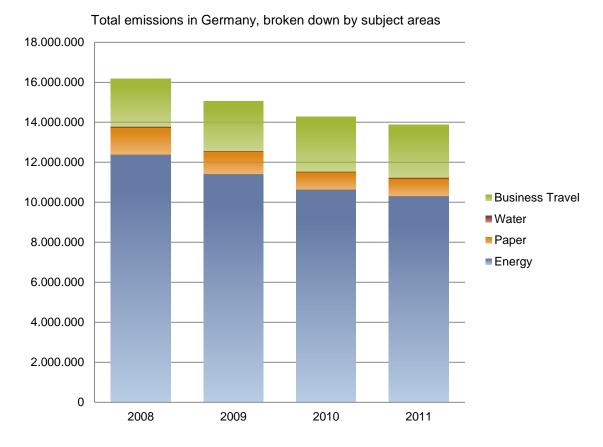
Year	GHG direct	GHG indirect	GHG others indirect	Total
	kg	kg	kg	kg
2008	940,498.71	12,357,201.27	2,887,262.25	16,184,962.23
2009	961,542.97	11,388,135.18	2,700,515.71	15,050,193.85
2010	1,032,077.13	10,608,951.96	2,625,470.46	14,266,499.55
2009	987,084.38	10,300,933.26	2,587,666.68	13,875,684.32











# 5.3.3 Carbon Footprint of DekaBank AöR (Germany, Luxembourg and Switzerland)

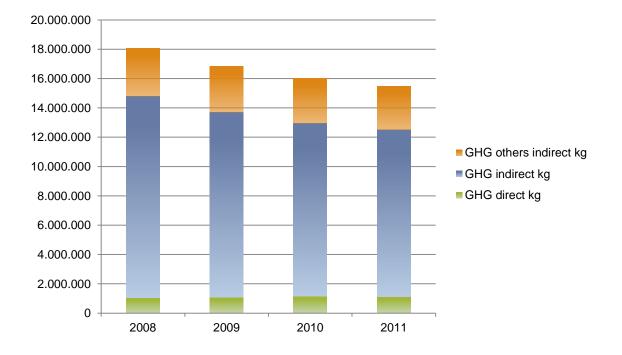
The Luxembourg site was taken into account with real consumption figures. The values for the location in Switzerland were extrapolated based on the number of employees (58).

Year	GHG direct	GHG indirect	GHG others indirect	Total
	kg	kg	kg	kg
2008	1,067,048.93	13,724,233.55	3,286,377.71	18,077,660.19
2009	1,077,254.60	12,619,590.83	3,150,672.52	16,847,517.95
2010	1,151,556.48	11,796,663.06	3,063,142.73	16,011,362.27
2009	1,123,890.36	11,383,431.94	2,967,243.08	15,474,565.38

 Table 5-3
 Time Series Analysis of GHG Emissions of DekaBank AöR







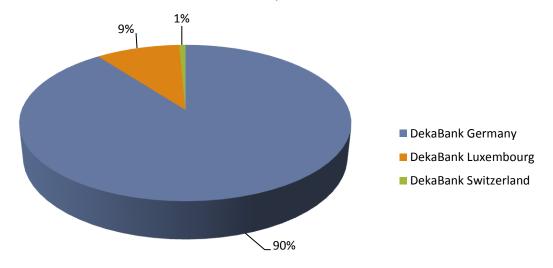
Total emissions for DekaBank AöR, broken down by subject areas 20.000.000 18.000.000 16.000.000 14.000.000 12.000.000 Business Travel Water 10.000.000 Paper 8.000.000 Energy 6.000.000 4.000.000 2.000.000 0 2008 2009 2010 2011







Total emissions for DekaBank AöR, broken down by countries



### 5.4 Results and Interpretation

In April 2011, the VfU factors for the calculation of greenhouse gas emissions were updated. In this report, the greenhouse gas emissions for the years 2008-2011 were recalculated on the basis of the new emission factors. As a consequence, the data deviate from the environmental reports of recent years but comparability in the timelines is ensured.

In 2010, CO<sub>2</sub> savings at the Frankfurt site were 5.4 % and thus slightly exceeded the targets of the environmental programme to reduce CO<sub>2</sub> emissions by 5 % per year. In 2011, this target was not achieved. Although there was a reduction of CO<sub>2</sub> emissions, it was just in the range of 3 % (Table 5—1). Also DekaBank Germany and entire DekaBank AöR did not fully achieve the targets of 2011's environmental programme. With CO<sub>2</sub> savings of 2.7 % (DekaBank Germany, Table 5-1) and 3.4 % (DekaBank AöR, Table 5-3), \ DekaBank stayed below the reduction target on its superior level as well. It should be noted that the number of employees increased in 2011 and thus, for example, absolute energy consumption. By purchasing 25 % of its total consumption in the form of electricity from green power sources, DekaBank will be able to achieve the reduction target of 5 % of overall emissions not later than 2013. The course has already been set.

CO<sub>2</sub> emissions from the consumption of electricity and district heating, i.e. indirect emissions (Scope 2), are by far responsible for the major part of DekaBank's carbon footprint. Other indirect emissions (Scope 3), in particular emissions from business travel and paper consumption, also contribute decisively to the carbon footprint, although much less than the Scope 2 emissions. Direct emissions (Scope 1) from the use of the company's vehicle fleet and the diesel emergency generator only play a subordinate role.





When considering  $CO_2$  emissions by subject area, it becomes apparent that energy consumption and business travel are the main areas responsible for the carbon footprint. The share of paper consumption is small and water consumption is insignificant for the carbon footprint.

### 5.5 Evaluation and Recommendations

Following the individual sections, many recommendations and actions were already mentioned. Implementation of those recommendations and actions will reduce resource consumption and therefore greenhouse gas emissions. Emissions from energy consumption generally make up the largest share of  $CO_2$  emissions in the carbon footprint, hence stressing the importance of reduction measures or other alternatives such as electricity from green power sources. By 2013, a quarter of the electricity demand will be met by renewable energies, which will cause a significant reduction of  $CO_2$  emissions. Building efficiency, of course, still remains another priority area in this context.

In order to significantly reduce emissions in the future, there should be a closer focus on the ever-increasing air travel.



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## 6 Conclusion

The current environmental balance in this 2011 Environmental Report allows not only the verification of the level of effectiveness of the measures from the environmental programme, but also the identification of trends in the individual subject areas since the implementation of the ISO 14001 certified environmental management system. Improving availability of data in certain areas—especially business travel and paper consumption—can help to align future measures of the environmental programme more precisely to requirements. In addition, development of the environmental data serves for evaluating the effectiveness of single targeted measures in the long term and can also be used as a basis for further measures and for identifying optimisation potentials.

This 2011 Environmental Report clearly shows that the successes of the environmental programme, in principle, continued and that improvements in many areas were continuously achieved. The increase of consumption in some areas has to be considered on the basis of the growth in 2011. A specific consideration per employee shows that in all relevant areas a reduction was achieved. Measures for sustainable procurement were established through the compliance and environmental requirements of the group-wide sustainability strategy. The measures implemented through the introduction of the procurement requirements should be included in the future environmental reporting.

This report is largely based on guidance from VfU and GRI concerning environmental reporting. Since 2009, social aspects as required by the GRI are extensively mentioned in the sustainability report.

PE INTERNATIONAL AG, Markus Michalzik





# 7 Reference list

GHG PROTOCOL 2004	World Business Council for Sustainable Development (WBCSD) and World Resources Institute (WRI) ed, (2004). The Greenhouse Gas Protocol. A Corporate Accounting and Reporting Standard. Revised edition.
GRI 2011	GRI Sustainability Reporting Guidelines 3.1. Global Reporting Initiative
VFU INDICATORS	Schmid-Schönbein, O., Oetterli, G. and Furter, S. (2005): Internal Environmental Performance Indicators for the Financial Industry. Update of the 2007 and 2010 indicators.







## Appendix - Conversion factors

### A. Factors used for the Calculation of Greenhouse Gas Emissions (CO<sub>2</sub>e)

	Unit	Direct emissions (Scope1)		Indirect emissions (Scope2)		Other indirect emissions (Scope3)	
		before 2011	as from 2011	before 2011	as from 2011	before 2011	as from 2011
Emergency power diesel	kg/GJ	74.722	74.722			13.889	13.889
District heating	kg/GJ			44.758	27.333		
Rail traffic	kg/km					0.055	0.0478
Car traffic (own fleet)	kg/km	0.196	0.196			0.089	0.089
Car traffic (staff cars)	kg/km					0.285	0.285
Air traffic (short distance)	kg/km					0.1953	0.1953
Air traffic (long distance)	kg/km					0.1085	0.1085
Paper (chlorine- free)	kg/kg					1.203	1.203
Drinking water	kg/m³					0.749	0.749
Grid-mix (DE)	kg/GJ			168.056	168.056		
Grid-mix (LU)	kg/GJ			90.556	90.556		
Grid-mix (CH)	kg/GJ			37.222	37,222		

Calculation of CO2 equivalents (CO2e) according to the GHG-Protocol.

Resource: VfU Indicators Update 2007 and Update 2010 (version April 2011).