

ENVIRONMENT

Bertelsmann is primarily active in the production and sale of books, magazines, digital storage media, in television and film production as well as in media and communication services.

Against this background, we see our key environmental challenges in the area of paper and climate protection. Therefore, environmental management in printing plants and in CD and DVD production as well as the responsible use of paper are core to our environmental effort. The basic goals we pursue are manifested in the Bertelsmann Environmental Policy and in the Bertelsmann Paper Policy. They have been applied throughout the Group since 2004 and 2005. The policies can be found at www.bertelsmann.com/environment

Bertelsmann AG considers climate change to be one of the central challenges of the 21st century. In 2008, the Bertelsmann Executive Board initiated the corporate-wide environmental and climate protection strategy, “be green.” A central pillar of the “be green” strategy is the regular compilation of a corporate carbon footprint and the collection of other relevant key environmental indicators. The aim of Bertelsmann’s environmental and climate protection efforts is to reduce emissions of greenhouse gases (GHG) and to minimize the overall environmental impact of its business activity.

As part of the “be green” strategy, the risks due to climate change for Bertelsmann AG were assessed. They can be categorized as follows: financial risks (such as rising costs for energy and emission trading), reputational risks (e.g. loss of trust among stakeholders and diminishing appeal as an employer), regulatory risks

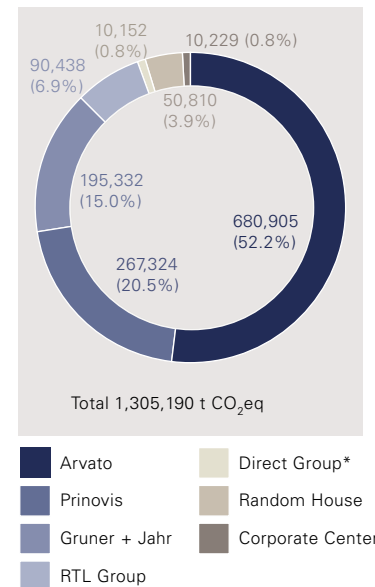
(such as tightened efficiency standards), and physical risks (damages due to natural disasters). By counteracting these risks early on, for example, by increasing energy and resource efficiency, negative consequences are sought to be diminished. At the same time, environmental and climate protection can open up new opportunities for the corporation, such as new green business models in the media and service sectors (e.g. CO₂ emission compensating printing and climate-neutral logistics).

For the fiscal year 2010, other environmental indicators relevant to the operations of Bertelsmann AG were collated for the first time, in addition to the carbon footprint. The Institute for Energy and Environmental Research (IFEU) in Heidelberg, Germany, supported us in the collection of environmental data. PricewaterhouseCoopers conducted an audit in order to give a limited assurance on the environmental indicators. Information audited by PricewaterhouseCoopers is marked by “✓”.

The carbon footprint describes which greenhouse gas emissions can be ascribed to business activities in a given period. Besides carbon dioxide (CO₂), other greenhouse gases such as methane (CH₄) were taken into account and assessed according to their climate effectiveness. Therefore, the carbon footprint is reported in CO₂ equivalents (CO₂eq).

In 2010, Bertelsmann’s total GHG emissions amounted to around 1.3 million metric tons CO₂eq. The greatest share of greenhouse gas emissions were emitted by the Arvato and Gruner + Jahr divisions, as well as by Prinovis. The printing units and other production facilities in these divisions use a lot of electricity, gas and heat, which

Carbon footprint 2010 ✓



* The Direct Group businesses were transferred to Corporate Investments with effect from June 30, 2011.

becomes apparent in the carbon footprint. In comparison to the carbon footprint of 2008 (1.475 million t CO₂eq)¹, around 11.5 percent less greenhouse gas emissions were emitted. The reduction can partly be ascribed to our reduction measures and partly to changes in the corporate structure. Changes in the corporate structure also include, in particular, the gradual sale of Direct Group’s² international businesses since 2008. Therefore, the comparability of the figures of 2008 versus 2010 is limited.

GHG emissions by scope

By far the largest share of GHG emissions can be attributed to the provision of heat and electricity. Bertelsmann’s direct emissions result from the use of fuels such as gas and domestic fuel oil in our heating systems

and in some of our production assisting equipment. Regarding electricity, we took into account our proportionate share of CO₂ emissions at our electricity suppliers' power stations, including the provision of combustible material they use.

At the printing plants, electricity consumption has a huge impact on the overall amount of emissions. At our offices and administration buildings, however, most emissions originate from the heating system.

Business travel includes those GHG emissions caused by air or rail travel and the use of rental cars. Business travel accounts for 3.4 percent of the overall emissions of Bertelsmann AG. The transport segment reflects the emissions of our various in-house vehicle fleets, which cause 1.9 percent of emissions.

Use of resources

Overall, Bertelsmann strives for an efficient and responsible use of resources in all divi-

sions. An overview of input and waste can be found at the end of this section. Paper is a particularly important resource for us as a media company with its own publishing and printing plants – paper accounts for 96.6 percent of all raw materials used in the group. We committed ourselves in our Paper Policy to increasing the use of recycled paper. The share of recycled paper in the overall use of paper amounts to 13 percent in total.

Furthermore, we give preference to the use of paper which stems from certified sustainable forestry. For example, already 98.5 percent of paper used at Gruner + Jahr is FSC- or PEFC-certified. Random House Germany uses exclusively FSC-certified paper. Besides the use of certified paper, it is also possible to certify businesses for the correct handling of FSC or PEFC⁴ papers. Random House UK is FSC-certified for its own direct paper purchases. In total, 80 percent of Bertelsmann's printing plants are certified for processing and distributing FSC

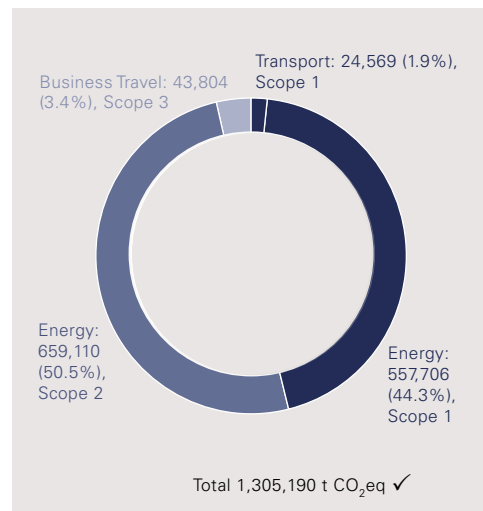
products. Over half of all printing plants are PEFC-certified. Another important resource for Bertelsmann is fresh water. In 2010, total water consumption amounted to 4.5 million cubic meters. In addition to the consumption of water for daily use in offices and production buildings, the largest share is incurred at the printing plants.

For instance, in rotogravure printing, a lot of steam is needed to adsorb the solvent toluene from the exhaust fumes through activated carbon filters, a procedure used to recover solvents from the print cycle.

Biodiversity

Bertelsmann's main impact on biodiversity results from the use of paper. By procuring and using paper responsibly, as laid down in our Paper Policy, we aim to contribute to the protection of forests and the conservation of biodiversity. In addition, we review the impact of our business activities on adjacent nature conservation areas. At

GHG emissions by scope 2010 ✓



Calculating greenhouse gas emissions according to the Greenhouse Gas Protocol (GHG Protocol)³

Bertelsmann calculates its greenhouse gas emissions in accordance with the guidelines of the Greenhouse Gas Protocol (GHG Protocol). The GHG Protocol is the world's most widely used standard for determining GHG emissions and is published by the World Resources Institute and World Business Council for Sustainable Development. Of particular significance for the determination of organization-wide GHG emissions under the GHG Protocol is their division into three "Scopes": Scope 1 denotes all emissions generated directly by production or combustion in the company's own facilities (e.g. domestic fuel oil in heating systems, in-house block heating plants). Scope 2 accounts for all emissions associated with electricity and district heating). Scope 3 includes all other indirect emissions, such as emissions associated with business travel or paper manufacturing, for example.

The Bertelsmann AG carbon footprint includes all Scope 1 and Scope 2 emissions and some Scope 3 emissions (business travel). Those emission factors applied for the calculation of Scope 2 emissions take into account climate gas emissions associated with the extraction and transport of energy sources. Those additional Scope 3 emissions which originate from the use of raw, auxiliary and operating materials (predominantly paper, plastics, ink and packaging material) as well as those emissions caused by the distribution of our products, were not included. With over 1,000 single companies in around 50 countries, the benefits would be outweighed and stand in no reasonable relation to the efforts required for collating the data of these emissions.

Itzehoe (Schleswig-Holstein, Germany), Prinovis operates a rotogravure printing site (204,750 m²) adjacent to a flora-fauna habitat along the river Stör. However, the activities on site have no relevant impact on the nature conservation area.

Reporting boundaries

The carbon footprint and the environmental indicators relate to all companies in which Bertelsmann AG and its divisions (RTL Group, Random House, Gruner + Jahr, Arvato) hold a share of greater than 50 percent. In the case of these majority shareholdings, total rather than proportional volumes were taken into account.

For non-producing sites, energy consumption, business travel and a smaller set of relevant input and output streams were considered. These include office paper, printer cartridges and toner as well as detergent and relevant waste.

In collaboration with the IFEU institute, a guideline for measuring the indicators was developed. It comprises specifications on

responsibilities, the collation process and the reporting boundaries.

Details on the calculation of GHG emissions

Emissions taken into account: The carbon footprint takes into account direct GHG emissions from in-house production facilities and vehicles, as well as indirect GHG emissions from generating electricity and business travel (air, rail, car rentals, etc.).

Calculations and factors: The baseline for direct GHG emissions was the 2010 annual consumption of natural gas, domestic fuel oil, fuels, etc. The resultant emissions were calculated using, among others, the factors of IFEU 2010, and those in accordance with GEMIS. The conversion factors of the Intergovernmental Panel on Climate Change (IPCC) 2007, were applied to convert the global warming potential into CO₂ equivalents.

The respective national energy mix is taken into account by calculating indirect greenhouse gas emissions from electricity consumption, using internationally recog-

nized emission factors (IFEU 2010, based on GEMIS, assessed in accordance with national IEA data).

To determine the proportionate climate impact of business travel, kilometers traveled were taken from bills of travel expenses and broken down into air, rail and car rental. Information from the databases of EcoPassenger, UIC (International Union of Railways), TREMOD (IFEU) and the German Federal Environment Agency were used as emission factors for company-owned cars and business travel.

¹The overall figure of greenhouse gas emissions in 2008 was revised downward. The reason for this deviation in comparison to the originally released carbon footprint 2008 are corrections in the figures reported for Prinovis, which were rechecked (corrected figure for Prinovis in 2008: 279,808.12 t CO₂eq instead of 336,906.0 t CO₂eq).

²Since the collection of data for the carbon footprint 2008, most of Direct Group's international businesses have been gradually sold. With effect from June 30, 2011, Direct Group is no longer a division of Bertelsmann. The Clubs and Direct Marketing remaining within Bertelsmann in Germany, Austria and Switzerland as well as Spain are administrated under Corporate Investments.

³The Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard. Revised edition (2004). <http://www.ghgprotocol.org/standards/corporate-standard>

⁴The Forest Stewardship Council (FSC) as well as the Program for the Endorsement of Forest Certification Schemes (PEFC) have both developed a certification system respectively. According to these systems, sustainably managed forests and products, whose raw materials originate from these forests, can be certified and labeled.

Certifications and indicators in relation to papers at Bertelsmann AG printing plants (2010)

Printing plants

Division/Company	Number	FSC-certified ✓	PEFC-certified ✓	Paper use ✓	Recycled paper	
Arvato	16	12	5	2,380,348 t	190,428 t	8%
Gruner + Jahr (print)	4	3	3	345,355 t	27,628 t	8%
Prinovis	5	5	5	1,073,768 t	257,704 t	24%
Printing plants total	25	20	13	3,799,471 t	475,760 t	
Share in relation to total number of printing plants		80%	52%		Total share of recycled paper at printing plants	12.5%

Other key indicators ✓

Input streams	2010	Units
Raw materials, total	3,972,696	t
from printing/office paper	3,837,232	t
from plastic materials	31,664	t
from ink & varnish	70,181	t
Auxiliary materials	102,399	t
Operating materials	10,204	t
Water, total	4,448,879	m³
Water, own wells	2,517,679	m ³
Water, public supply	1,931,201	m ³
Energy used		
Heat and combustible materials	3,230,125,252	MJ
Electricity	1,435,000	MWh
Fuels	246,002,753	MJ
Business travel total	198,258,885	km
Air travel	149,447,920	km
Rail travel	28,730,245	km
Car rental	20,080,720	km
Output streams	2010	Units
Waste, total	525,876	t
Waste for deposit	16,259	t
of which industrial waste	13,214	t
of which hazardous waste	3,045	t
Waste for recycling	509,617	t
of which plastics	162	t
of which paper	213,677	t
Wastewater (sewage disposal)	1,940,323	m³
NO_x total	2,567	t
Sulfur dioxide total	1,209	t