

**be green.**

The environmental initiative of Bertelsmann AG

Bertelsmann AG regards climate change and environmental protection as central issues in our business and in society today.

Therefore, in partnership with employees and stakeholders, we strive to reduce our direct and indirect greenhouse gas emissions as part of our overall drive to limit our environmental impact.

Our strategy will be subject to constant improvement.

Pursuant with our decentralized corporate philosophy, we expect our divisions to take responsibility for sustainable management contributing to climate and environmental protection.

[www.bertelsmann.com/environment](http://www.bertelsmann.com/environment)

# Bertelsmann's Carbon Footprint

Corporate responsibility is firmly anchored in Bertelsmann's company principles. The Bertelsmann Essentials obligate Bertelsmann's employees and companies to "act responsibly toward [...] the environment." Based upon this, Bertelsmann's Executive Board launched a climate protection strategy in August 2008. As the first pillar in this strategy, a Group-wide, international inventory of greenhouse gas emissions (the "carbon footprint") was drawn up in 2009.

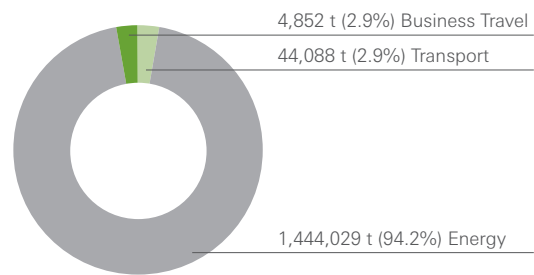
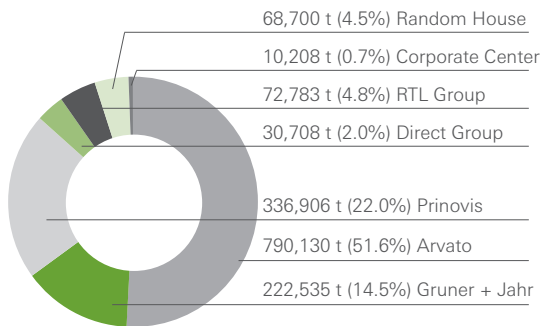
The IFEU Institute for Energy and Environmental Research in Heidelberg has calculated Bertelsmann's carbon footprint, which describes how much greenhouse gas (GHG) a business is responsible for emitting in a given period. Besides carbon dioxide (CO<sub>2</sub>), GHGs include other gases like methane and nitrous oxide. These gases are "converted" into carbon dioxide and shown as CO<sub>2</sub> equivalents. Therefore, the carbon footprint is measured in carbon dioxide equivalents (CO<sub>2</sub> eq), giving a

standard measurement by which the impact on climate change can be expressed.

To calculate our carbon footprint, the Group's consumption of electricity and fossil fuels (especially gas, heating oil, gasoline and diesel) as well the amount of business travel (flights, train journeys, etc.) was determined. The resulting greenhouse gas emissions are derived using conversion factors.

We commissioned the auditing firm PricewaterhouseCoopers (PwC) to certify the quality of our carbon footprint calculation. PwC assessed the data collection procedure at Group level and the methodology used to calculate the carbon footprint, for accuracy, reliability and pertinence. Through PwC, we have been able to verify that our approach conforms to current common, relevant standards and practices. At the same time, we also received recommendations for compiling future carbon footprints.

## Carbon Footprint of Bertelsmann AG in 2008: 1,531,969 t CO2 eq

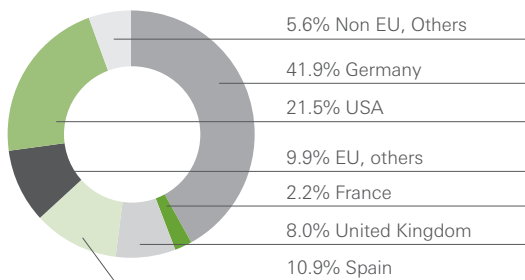


### Our carbon footprint

Bertelsmann's 2008 carbon footprint amounted to more than 1.5 million tons of CO2 equivalents. Most of our GHG emissions are caused by the printing plants in the Arvato and Gruner + Jahr divisions as well as Prinovis. Like many industrial plants, the printing machines need large amounts of electricity, natural gas and heat. This is reflected accordingly in the carbon footprint.

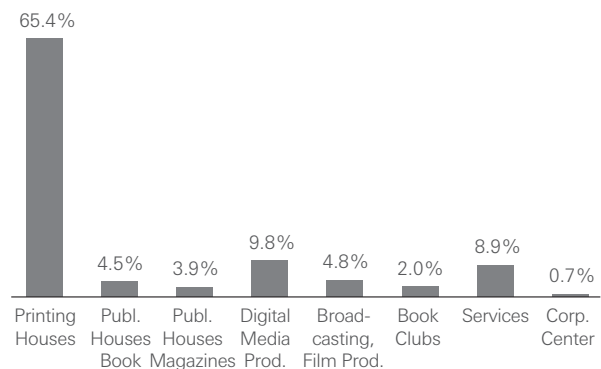
### How emissions are caused

By far the largest proportion of GHG emissions is caused by the provision of energy in the form of electricity and heat. Bertelsmann's direct emissions result from the use of fuels such as gas and heating oil in our heating systems and at our production facilities. In the case of electricity, our proportionate share of CO2 emissions at the power stations of our electricity suppliers and in the provision of fuels is taken into account. At the printing plants, electricity consumption is a key factor in the carbon footprint because, all over the world, much of the electricity is generated by burning coal, oil or gas in power stations. In offices the ratio is somewhat reversed, with heating generally having the biggest impact on climate. Business travel includes the GHG emissions caused by air and rail travel and the use of rental cars. The transport segment represents the emissions from our various company-owned fleets of vehicles.



## Greenhouse gas emissions by market

In terms of revenues our main markets are Germany, France, USA, Britain and Spain. With one exception, most of the GHG emissions also occur here. Because we have no printing plants in France, our footprint there is significantly smaller. Besides, the type of power station used to produce electricity in France generates few greenhouse gases. Overall, almost three-quarters of our carbon footprint from GHG emissions come from within the EU.



## Greenhouse gas emissions by line of business

Production is often the biggest factor in a company's carbon footprint. This is also evident at Bertelsmann. Nearly two thirds of our GHG emissions (65.4%) are caused by the production of books, newspapers, magazines and other printed matter. Editorial operations and the distribution of media require significantly less use of energy. The production and replication of digital media such as CDs, DVDs and BluRay discs account for 9.8% of Bertelsmann's GHG emissions. The services sector – which combines our call centers, distribution, warehousing, order processing and other services – accounted for nearly nine percent (8.9%) of all GHG emissions. Here, the number of employees – approximately 37,000 – is a crucial factor in the size of the footprint.

## Details of how Bertelsmann's carbon footprint is calculated

**Emissions taken into account:** The carbon footprint takes into account direct greenhouse gas emissions from in-house production facilities and vehicles, as well as indirect GHG emissions from electricity generation and business travel (air, rail, car rentals, etc.). The associated combustion processes release greenhouse gases – mainly carbon dioxide (CO<sub>2</sub>) and methane (CH<sub>4</sub>) (resulting from power line losses, incomplete combustion, etc.). Accordingly, CO<sub>2</sub> and CH<sub>4</sub> are accounted for in the carbon footprint.

We are aware that the production of raw materials, supplies and consumables that we use (mainly paper, plastics, printing inks, packaging), as well as the distribution of our products, are also associated with greenhouse gas emissions. As long as these materials were not manufactured by Bertelsmann companies, their emissions are not included in the calculations as we have no direct impact on their production. In accordance with our Paper Policy, however, we are in an ongoing dialog about environmental issues with our suppliers and major paper manufacturers.

**Scope of the calculation:** The calculation included all companies in which Bertelsmann and its groups of companies (RTL Group, Random House, Gruner + Jahr, Arvato, Direct Group, Prinovis) own a more than 50 percent stake. Emissions from majority shareholdings were not proportionately considered, but were fully included.

**Calculations and factors:** Greenhouse gas emissions were calculated. The baseline for direct CO<sub>2</sub> and methane emissions was the annual consumption of natural gas, heating oil, fuels, etc. for 2008. Among others, GEMIS factors were used to calculate the emissions. The conversion factors of the Intergovernmental Panel on Climate Change (IPCC) (2007) were used to convert the global warming potential of methane into CO<sub>2</sub> equivalents: 1 t CO<sub>2</sub> = 1 t CO<sub>2</sub> eq; 1 t methane = 25 t CO<sub>2</sub> eq.

The respective national energy mix was taken into account in calculating indirect GHG emissions from electricity consumption, using internationally recognized emission factors.

To determine the degree to which business travel impacts the climate, kilometers differentiated by air, rail and car were calculated; derived from travel expenses. Information from the databases of EcoPassenger, TREMOD and the Federal Environment Agency were used as emission factors for company cars and business travel.