



## ENJOYING RESPONSIBLY – CO<sub>2</sub> BALANCES AT BRITA GMBH

“I like my water best without carbonation. Plus, I don’t need to carry all those cases up to the third floor!” For several years now, Michaela Berger has been using a countertop water filtration system to treat her drinking water. She’s not only concerned with taste and convenience, but also with the environmental impact of her choice. “Even if refundable bottles are a step up compared to earlier systems – if you completely forgo the bottles, they won’t even be produced in the first place.”

For BRITA GmbH in Taunusstein, one of the world’s leading companies in the drinking water optimization and individualization industry, the ecological advantage of counter top filters over bottled water is one of the central arguments. “We do have to back up our arguments with relevant data, though. Otherwise they’ll be nothing more than a nice claim,” said Dr. Sabine Rohlff, head of corporate communications at BRITA GmbH. That’s why the company regularly publishes a sustainability report. The current report

focuses on the CO<sub>2</sub> balance in order to highlight environmental impact against a background of climate change and to also allow a comparison with alternatives.

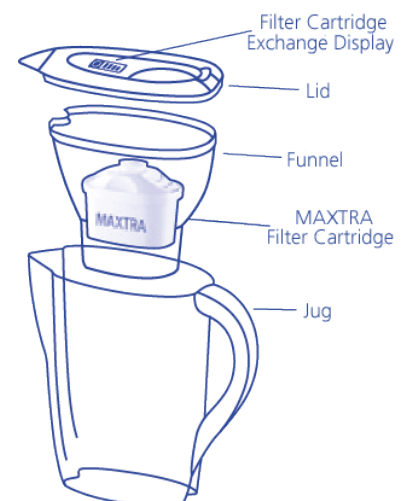


### “WE WANT TO KNOW EXACTLY WHAT’S GOING ON!”

BRITA GmbH has commissioned the Institute for Applied Material Flow Management (IfaS) at Trier University of Applied Sciences to compile a product carbon footprint (PCF) for one example of the BRITA countertop water filtration system, including the filter itself. Prof. Dr. Peter Heck, project manager and executive director of IfaS, explained that “each project begins with the most important question of them all: What exactly will be the subject of the eco-balancing process?” His advice to companies with a broad product range is to start by selecting a product that best reflects the typical production chain. In addition, you have to draw boundaries for the analysis in terms of geographical range and production techniques.

concerned with sustainability issues. That’s why we think it’s important to quantify the actual emissions from our production process as exactly as possible.” In order to gain a detailed analysis of the domestic market, the company limited the geographic boundary to its production in Germany for the initial eco-balance.

The underlying standards that form the basis for an eco-balance also play a vital role. Standards not only allow for greater transparency and comparisons, they also serve as a guide in the balancing process itself. For BRITA’s balance, the researchers chose the PAS 2050 standard from the UK, partly supplemented by DIN ISO 14067 and DIN ISO 14040ff in order to gain a more complete picture of the “cradle-to-grave” process. “If you don’t look at the entire value chain, from the raw materials to the product’s disposal or recycling, you really can’t make any cause-related assertions,” Prof. Dr. Heck said in regard to the importance of defining the analytic boundaries. Dr. Sabine Rohlff added: “As a company that deals with drinking water optimization, we are, of course, especially

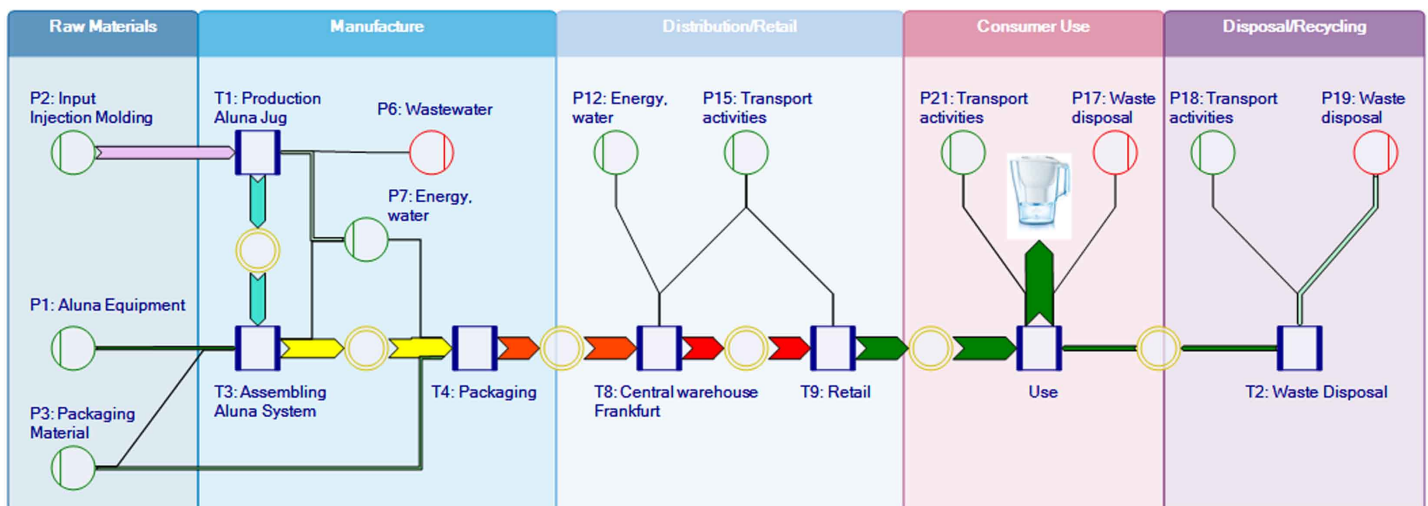


BRITA Counter Top Filter

Along with defining the boundaries for analyzing the system, the required data must also be identified. Primary data, i.e., data obtained through measurements of the production system itself, were collected in the production facility at the Taunusstein headquarters. Multiplied by a corresponding emissions factor, the data then provides information about the greenhouse gas emissions due to individual sub-processes. In addition, the primary data collection included production processes that are directly related to the end product in question. But, the more you penetrate the first stages of production, the more difficult data collection becomes. The upstream chain for the countertop filtration system could mostly be represented by data for greenhouse gas potential obtained from the "ecoinvent" data base. These were supplemented by data from other fundamental and individual research. "We

especially liked working with the Umberto for Carbon Footprint software during this process," Prof. Dr. Heck noted. "Not only does it contain a large amount of data on the climate impact of products and processes, but it also gives us the opportunity to enter our own data via a mask to fine-tune our calculations."

The software generates a visual model of the entire production process. The result is a map that not only shows the general process, but also the corresponding, quantity-based material and energy streams.



Sankey diagram of the carbon footprint of the Aluna countertop water filtration system made by BRITA GmbH

## “RESPONSIBILITY RESTS NOT ONLY AT THE COMPANY’S DOOR “

“The visual presentation, in particular, made sense for us. It helped to promote both a better understanding of the entire production process and made it a lot easier to find ways to reduce our emissions.” For Dr. Rohlf this, along with the communication of sustainability, is the second major argument for analyzing the CO<sub>2</sub> balance.

The resulting balance will be used to provide more transparency and measurability to consumers, distribution partners and retailers. To underscore this aspect, BRITA had the CO<sub>2</sub> balance certified by independent auditors at TÜV Rheinland.

The analysis shows that - compared to corresponding industry data on bottled water - the countertop water filtration system has a distinctly smaller CO<sub>2</sub> footprint. This is primarily due to the actual use of the filtration system itself, but also reflects BRITA GmbH's efforts to establish a more environmentally friendly production process. Take, for example, the company's reliance on the natural resource of water. It forms both the basis for the

company's entire business and also for its energy needs: at its Taunusstein headquarters, 100% certified green electricity from a hydroelectric power plant is used to cover all the energy demand for production and administration. The considerable CO<sub>2</sub> savings prove how closely the issue of CO<sub>2</sub> balance is related to energy management as a whole.

For BRITA, the CO<sub>2</sub> foot print is not just a validation of their past endeavors, but also a key guideline in their efforts to lighten the environmental impact of their products even more. Michaela Berger sees her point of view as having been confirmed: “The countertop water filtration system allows me to combine a pleasurable drinking water experience with my role as a responsible consumer. After all, the responsibility for a product doesn't stop at the factory gate.”

BRITA GmbH's sustainability report can be viewed online at [http://www.brita.de/medias/sys\\_brita/8470523513113280.pdf](http://www.brita.de/medias/sys_brita/8470523513113280.pdf)