

# Printing with a Future

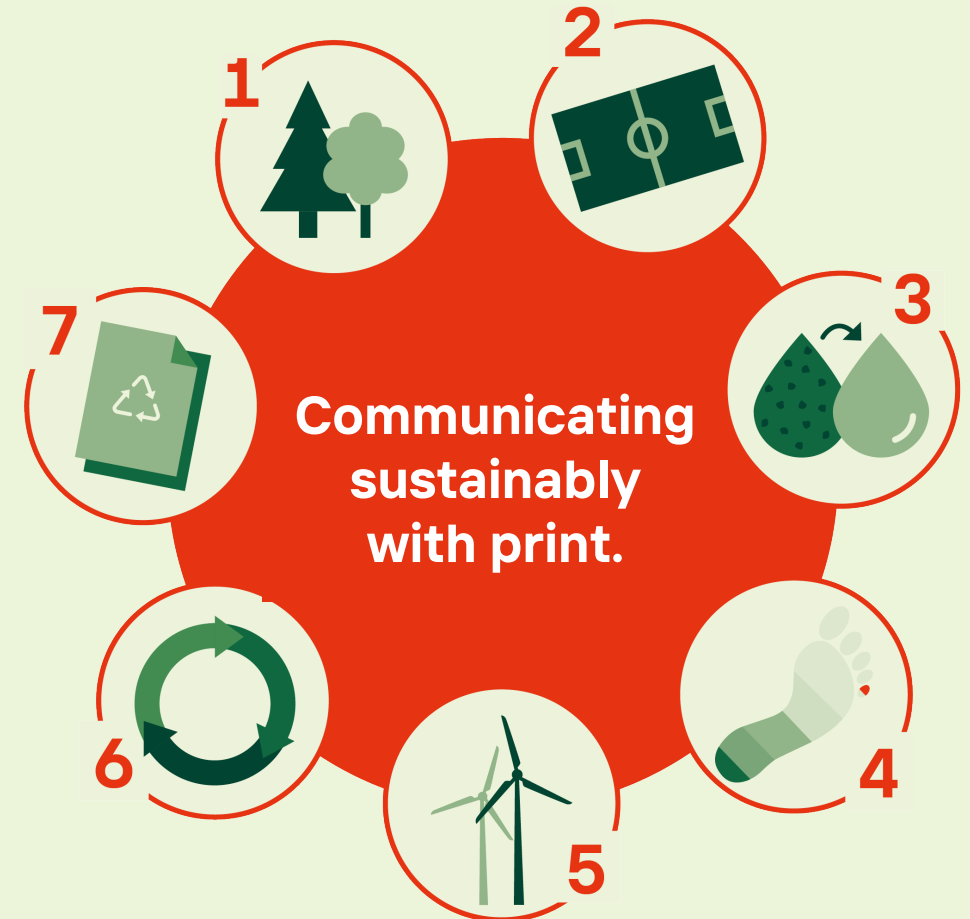
How the printing and media industry actively contributes to climate protection and dispels prejudices

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# Continuous change in the industry

- + German printing and media companies are among the most modern, high-performance and innovative in the world.
- + Especially in terms of sustainability, the printing and media industry has held a pioneering role in the German economy for many years.
- + The trend towards sustainable production is becoming increasingly seamless across the entire print value chain.



# Sustainable materials and high recycling rates

- Wood is a renewable raw material.
- Here, only wood fibers from sustainable forestry are used.
- The paper industry is mostly a secondary user of wood.
- With a recycled paper usage rate of 76 percent, Germany is a world leader.
- High share of renewable energy (60% of the energy used in EU paper mills).

# Miracle material paper

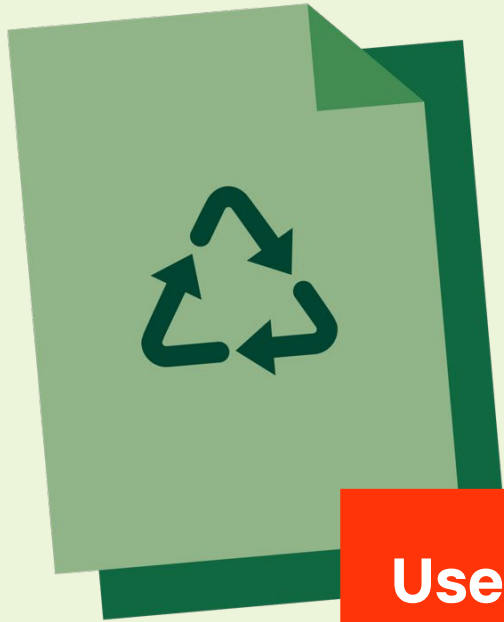
No natural forests are cleared to produce our printed products

The forest grows in europe.



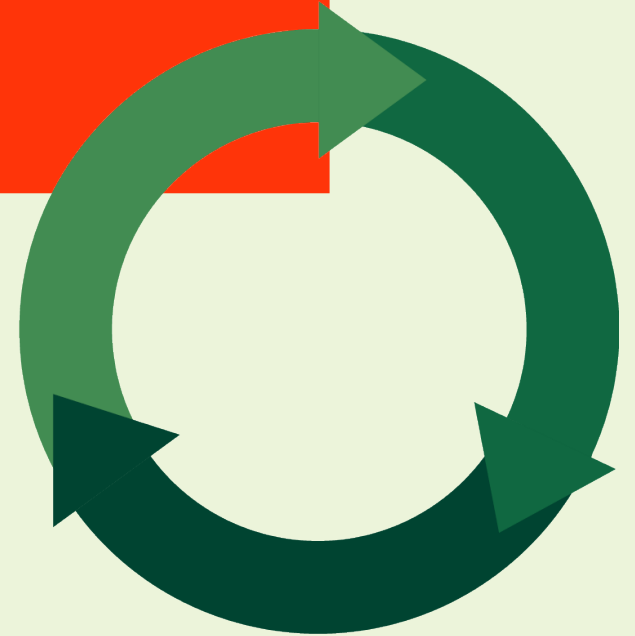
The Paper Industry Association, Bifa study "Sustainable Paper Cycle – a factual basis", Federal Ministry of Food and Agriculture, Forest Research Institute Baden-Württemberg

# Circular economy



**Used paper is not waste,  
it is a valuable raw  
material.**

**84 percent of graphic  
papers in Germany are  
recycled**



Sources  
Working Group for Graphic Papers (AGRAPA),  
Bifa study "Sustainable Paper Cycle – a factual basis",  
The Paper Industry Association

Federal Environment Agency,  
Federal Statistical Office

# Energy efficiency and renewable energies



Modern printing companies invest heavily in:

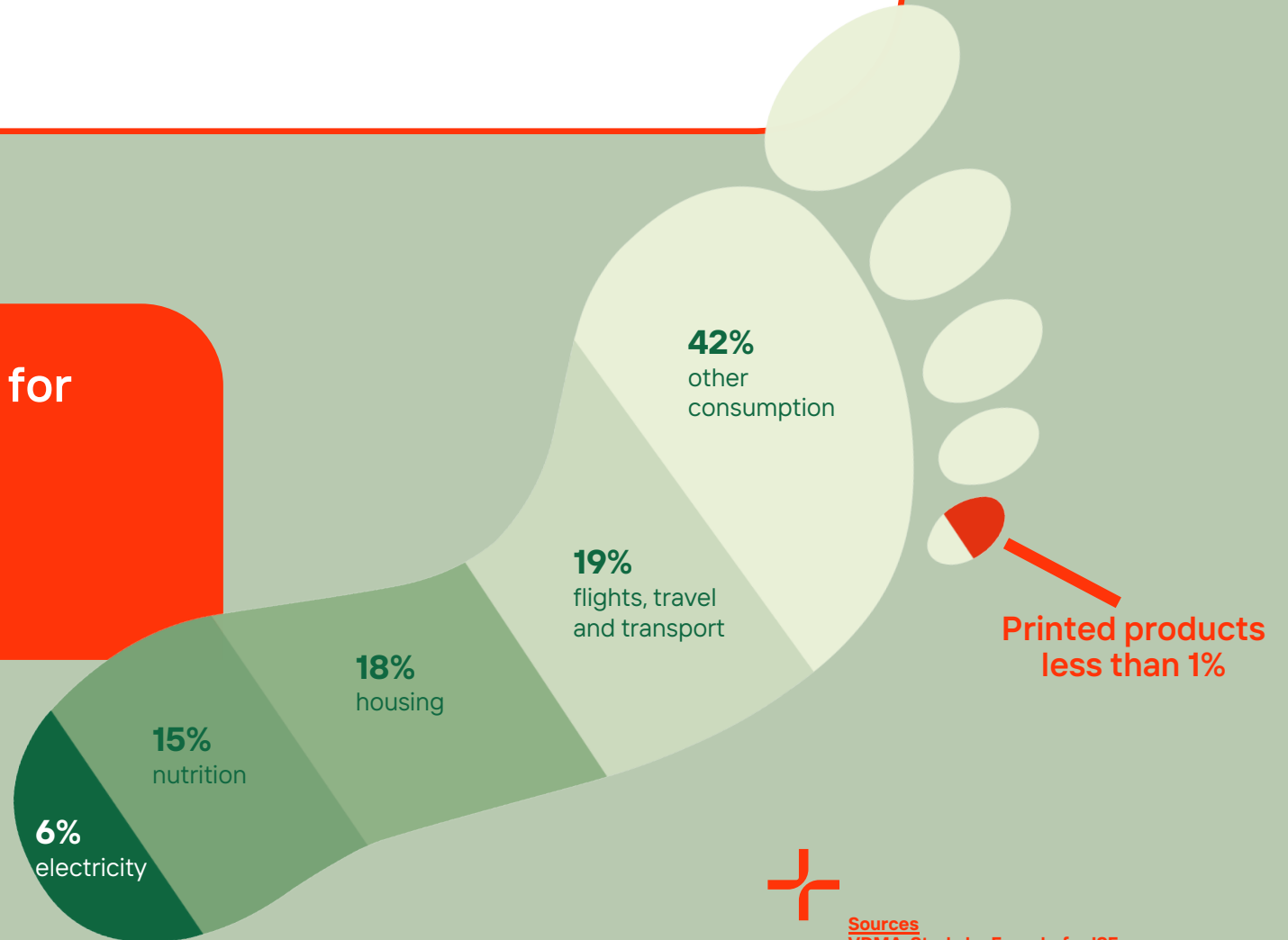
- Photovoltaic systems,
- Heat recovery systems,
- Energy-efficient machines,
- LED technologies,
- Intelligent production control.

→ Printing companies (NACE 18) invested over 10% in environmental protection measures in 2023.

The energy consumption of the printing and media industry has been decreasing for years.

# The carbon footprint of the printing and media industry

Printed products account for less than 1% of the CO<sub>2</sub> footprint per person in Germany.



#### Sources

VDMA; Study by Fraunhofer ISE,  
Federal Association Printing and Media e. V.  
<https://www.oeko.de/blog/der-co2-fussabdruck-unseres-digitalen-lebensstils>,



Can be read in brochure or on the website





# Digitalization as a partner – not as a replacement

Another misconception is: “Digital replaces print – and that is automatically more sustainable.”

→ Establish facts...

# Study design

## Method: Comparative Life Cycle Assessment (LCA)

- Compares two prototypical applications
- Creates the ecological footprint of print products and their digital equivalents
- Considers the service life and reach of the products



### Vergleichende Bewertung des Treibhausgaspotenzials von Printwerbung im Vergleich zu Online-Werbung

PCF-Vergleichsrechnung für Werbeanzeigen in gedruckter  
Form und Werbeanzeigen im Onlineformat im Auftrag von  
Austropaper, Bundesverband Druck und Medien e.V.,  
dpusuisse, Joricon b.v. (Niederlande) und Verband Druck  
Medien Österreich

Freiburg,  
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# Comparison for brochure advertising

[per 1 million impressions]

**PRINT-  
PROSPEKT**  
**642 kg CO<sub>2</sub>**



**ONLINE-  
PROSPEKT**  
**3360 kg CO<sub>2</sub>**

Einheit: Treibhauspotenzial (GWP in kg CO<sub>2</sub>/1 Mio. Impressionen)  
Quelle: Öko-Institut Freiburg: Studie „Vergleichende Bewertung  
des Treibhausgaspotenzials von Printwerbung im Vergleich zu  
Online-Werbung“, November 2025

## Assumptions for the functional unit:

### Printed brochure:

Area: 1,282 cm<sup>2</sup>

Reach: 1.9

### Online brochure:

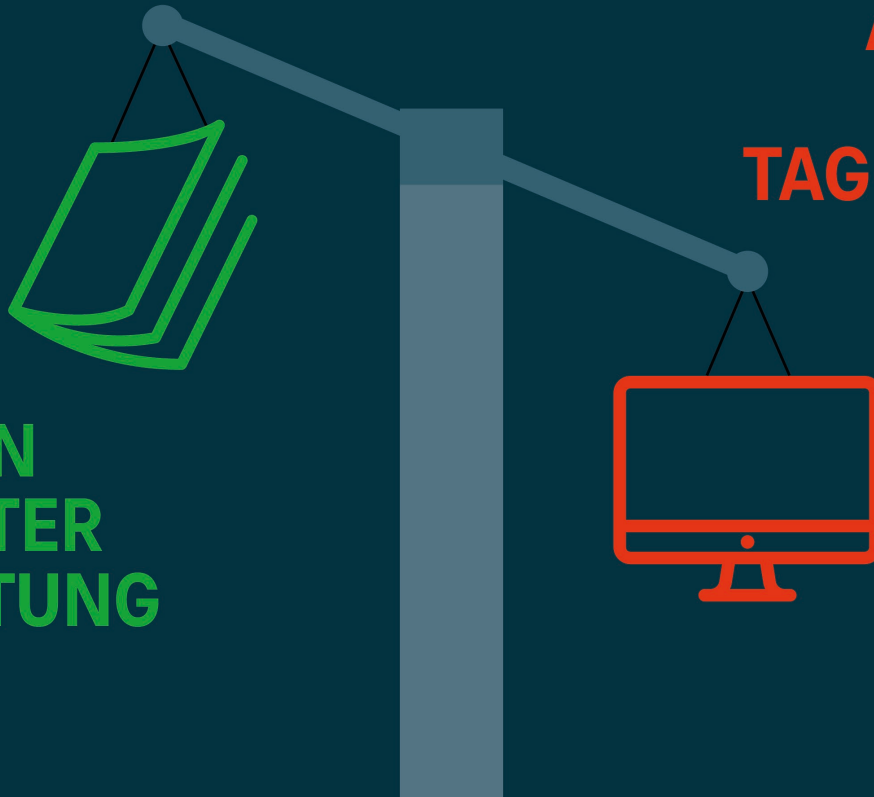
PDF: 40 MB

Reach: 1

# Comparison for display advertising

[per 1 million impressions]

**ANZEIGE IN  
GEDRUCKTER  
TAGESZEITUNG**  
**67 kg CO<sub>2</sub>**



**ANZEIGE IN  
DIGITALER  
TAGESZEITUNG**  
**102 kg CO<sub>2</sub>**

## Assumptions for the functional unit:

### Print newspaper:

Area: 179 cm<sup>2</sup>

Reach: 2.72

### Advertising banner:

Viewing time: 2.4 s

Data volume: 300 kB

Reach: 1

# Climate initiative of the printing and media associations



Klimainitiative  
der Druck- und  
Medienverbände

## Three-stage climate protection model

### Determine CO<sub>2</sub> emissions

- + Creating a comprehensive corporate profile (Corporate Carbon Footprint) in the BVDM climate calculator.
- + High-quality standards in the methodological assessment of influencing factors.
- + Determining the CO<sub>2</sub> footprint that arises from producing the print product (Product Carbon Footprint).

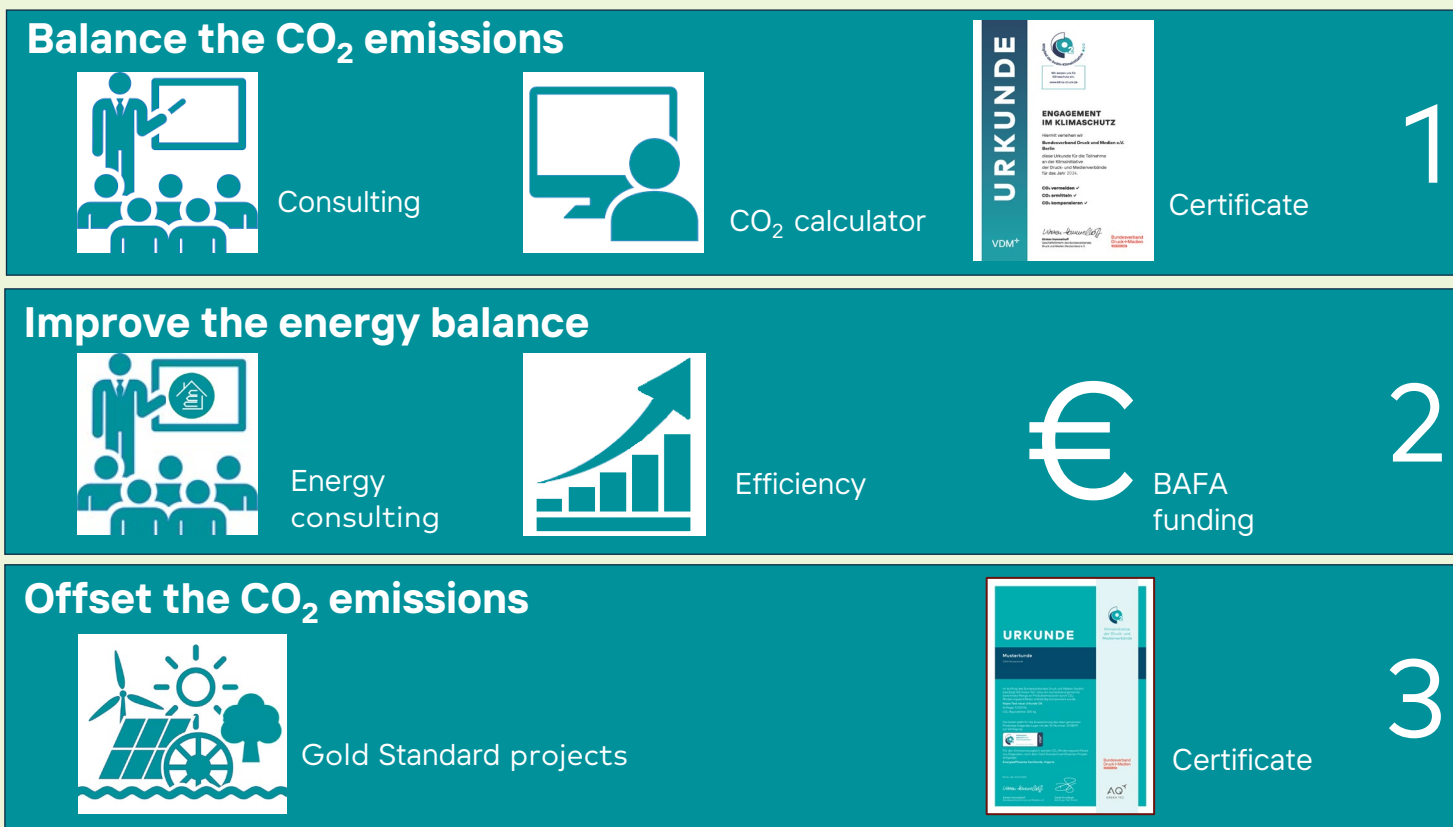
### Avoid/reduce CO<sub>2</sub> emissions"

- + Identification of opportunities to avoid or reduce CO<sub>2</sub> emissions along the production process.
- + Individual action package, e.g. more efficient work processes, increased use of electric mobility, optimized selection of suppliers/materials, and the use of renewable energy.

### Offset CO<sub>2</sub> emissions

- + Unavoidable CO<sub>2</sub> emissions can be offset by purchasing CO<sub>2</sub> certificates.
- + These offsets support high-quality, internationally recognized climate-protection projects certified to the 'Gold Standard.'

# BVDM climate protection model



# Dispelling prejudices – what the industry really achieves?

Today it applies:

- Print is not automatically worse than digital.
- Paper is a sustainable raw material.
- The industry operates highly energy-efficiently.
- Chemicals are largely harmless today.
- Printing companies are pioneers in circular economy.

→ Numerous facts prove that the printing industry is by no means a phase-out model – it is a modern, innovative and climate-conscious industrial sector.

# Why print will remain important in the future

Printed information is better remembered.

Haptics create trust.

Print is barrier-free and independent of electricity and devices.

Print is therefore not only sustainable – print is also culturally and socially relevant.

Books and magazines are used multiple times.



Thank you for your attention!

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