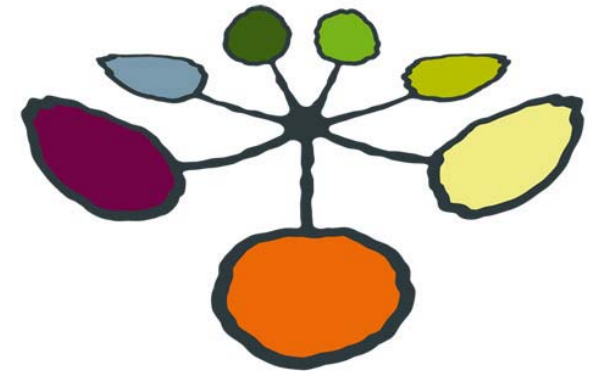




Future Café Climate Change

Michael Glotz-Richter,
Senior Project Manager „Sustainable Mobility“,
Free Hanseatic City of Bremen



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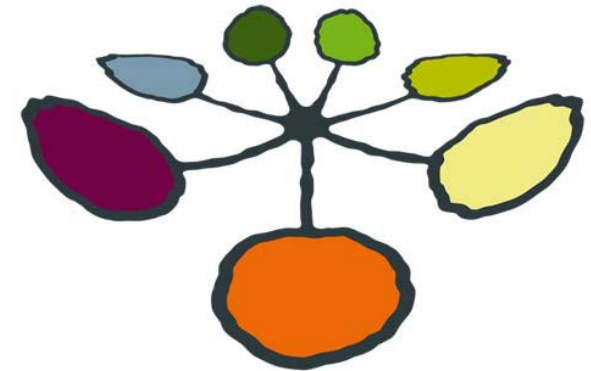
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The Interreg IVB
North Sea Region
Programme



...2 meters above sea level...



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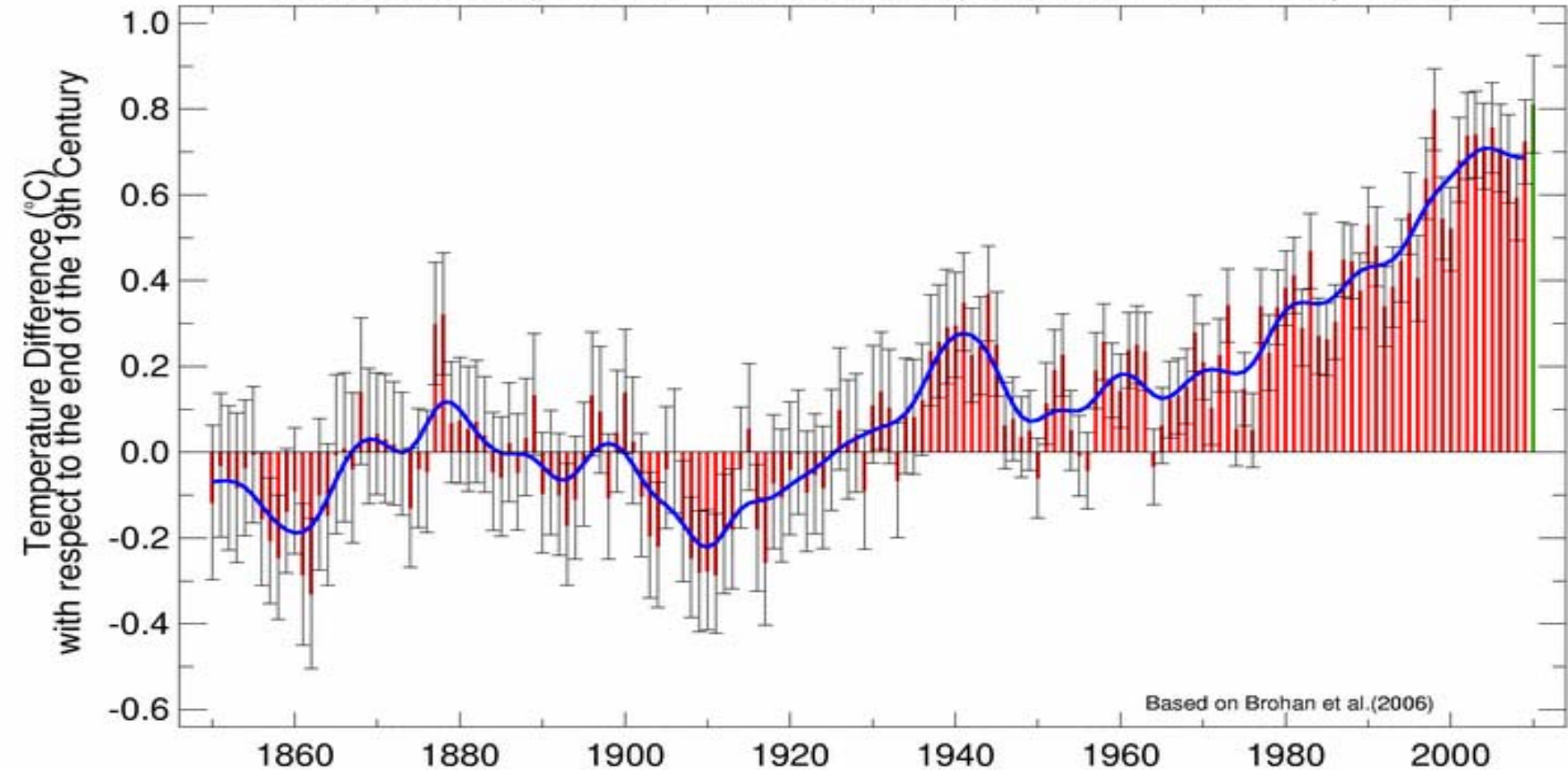
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Development of the global near-surface temperatures



Global Average Near-Surface Temperatures 1850-Sep 2010



Source: www.metoffice.gov.uk/climatechange/science/monitoring/indicators.html, (as from Dez. 2010)



Shrinking of the Trift-glacier (Alpes /CH)



1948



2002



2006

Quelle: www.gletscherarchiv.de/fotovergleiche/11-330036-triftgletscher, Abruf Dez. 2010



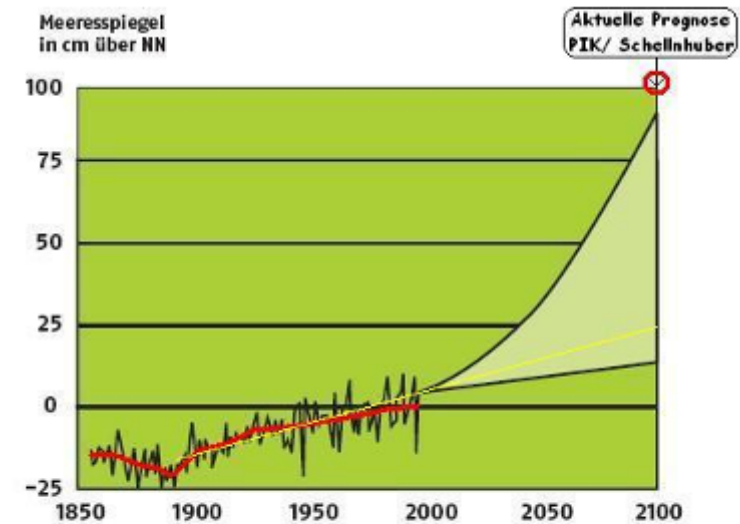
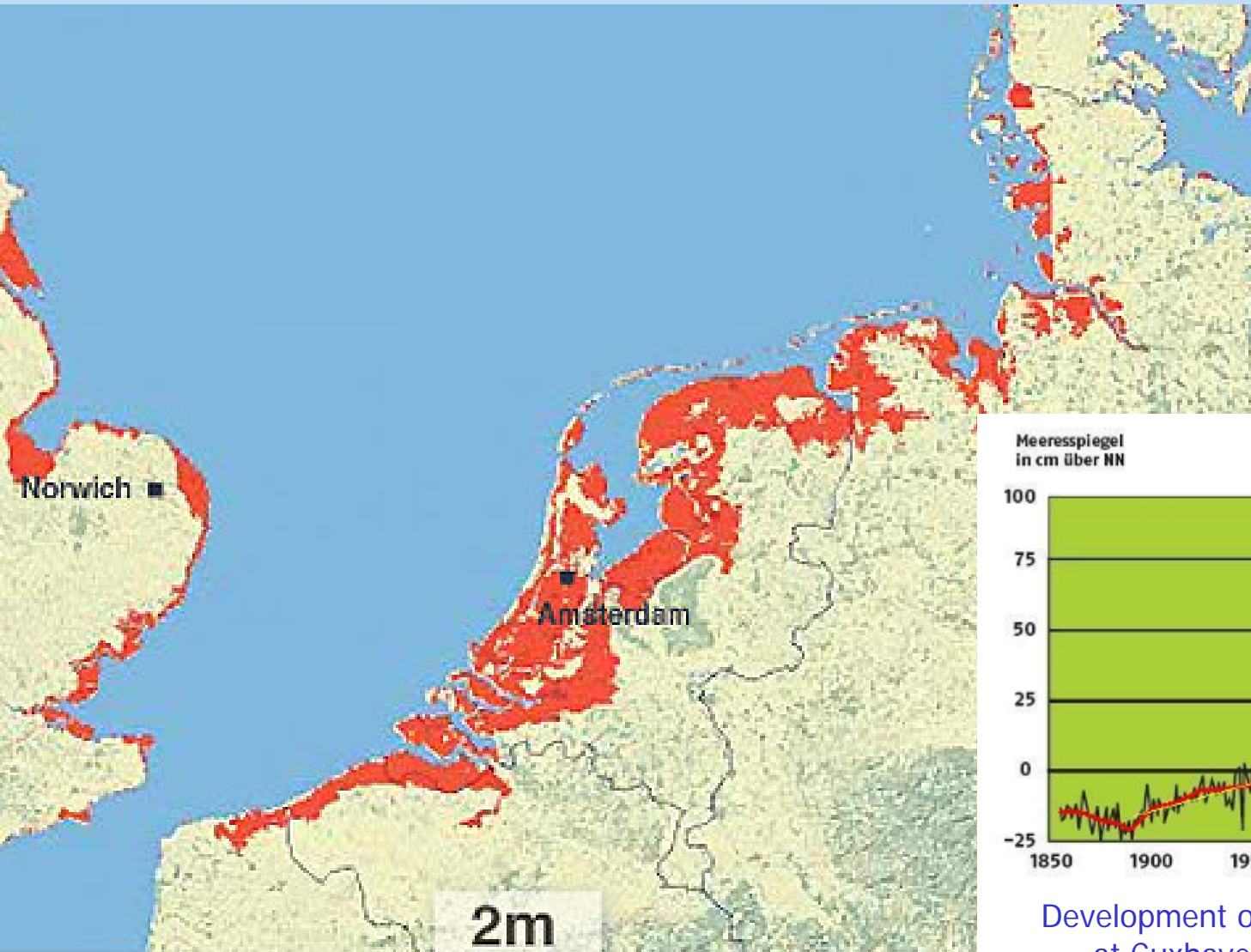
Arctic Ice-Cover, Sept. 1979 and Sept. 2007

Figure 2.2-2
Satellite images of Arctic ice cover
a) September 1979;
b) September 2007.
Source: NASA/Goddard Space Flight Center Scientific Visualization Studio, 2009



Source: WBGU: Solving the climate dilemma:
The budget approach, Berlin 2009, p.12;
cf. www.wbgu.de

Sea level risks / North Sea



Development of the North Sea level at Cuxhaven (cm above NN)

Source: Generalplan Küstenschutz Schleswig-Holstein

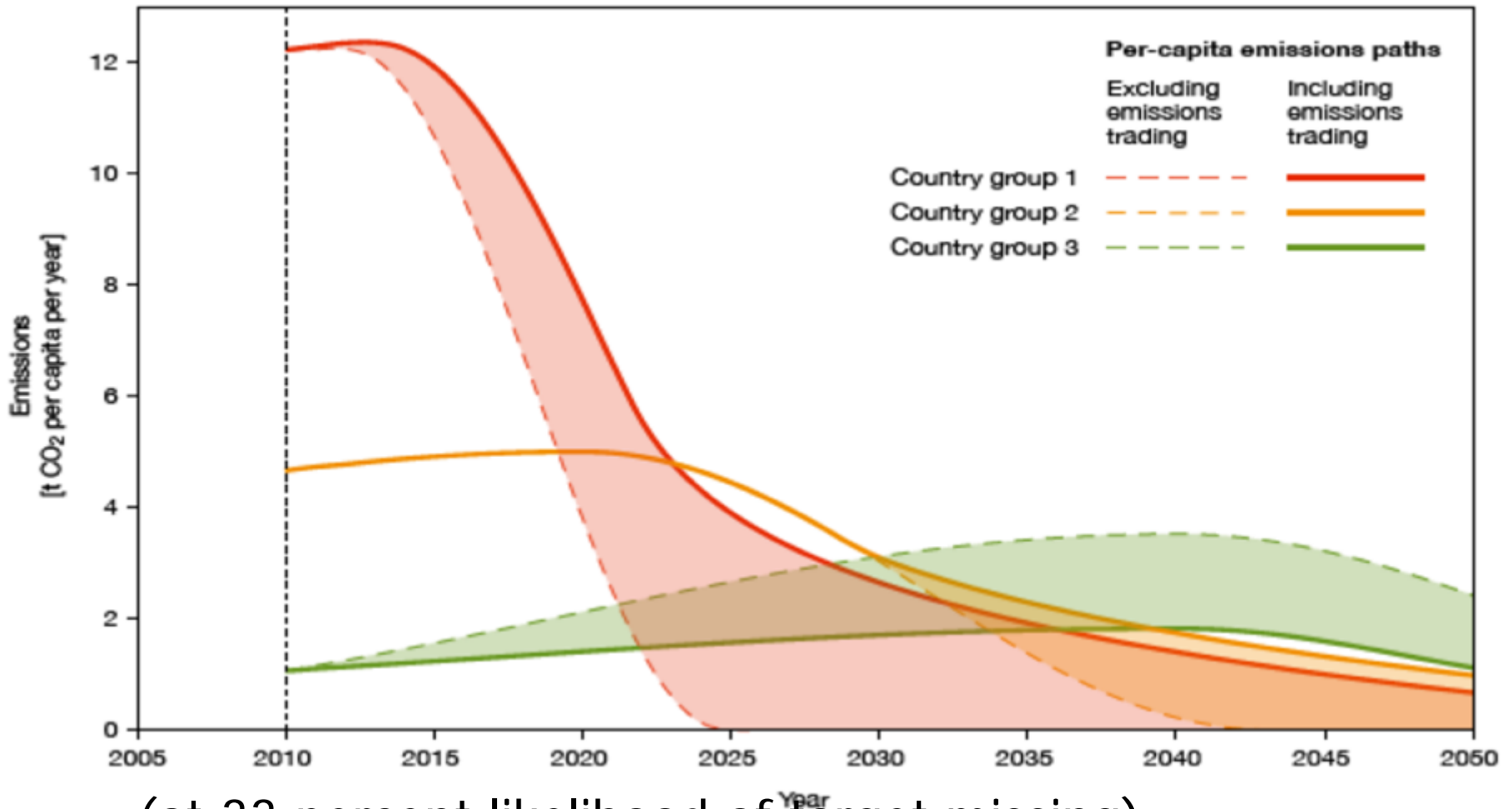


- „To prevent the most severe impacts of climate change, the scientific evidence shows that the world needs to limit global warming to no more than 2°C above the pre-industrial temperature. That is just 1.2°C above today's level.“



Potential paths to the 2°C-target

including emission trading

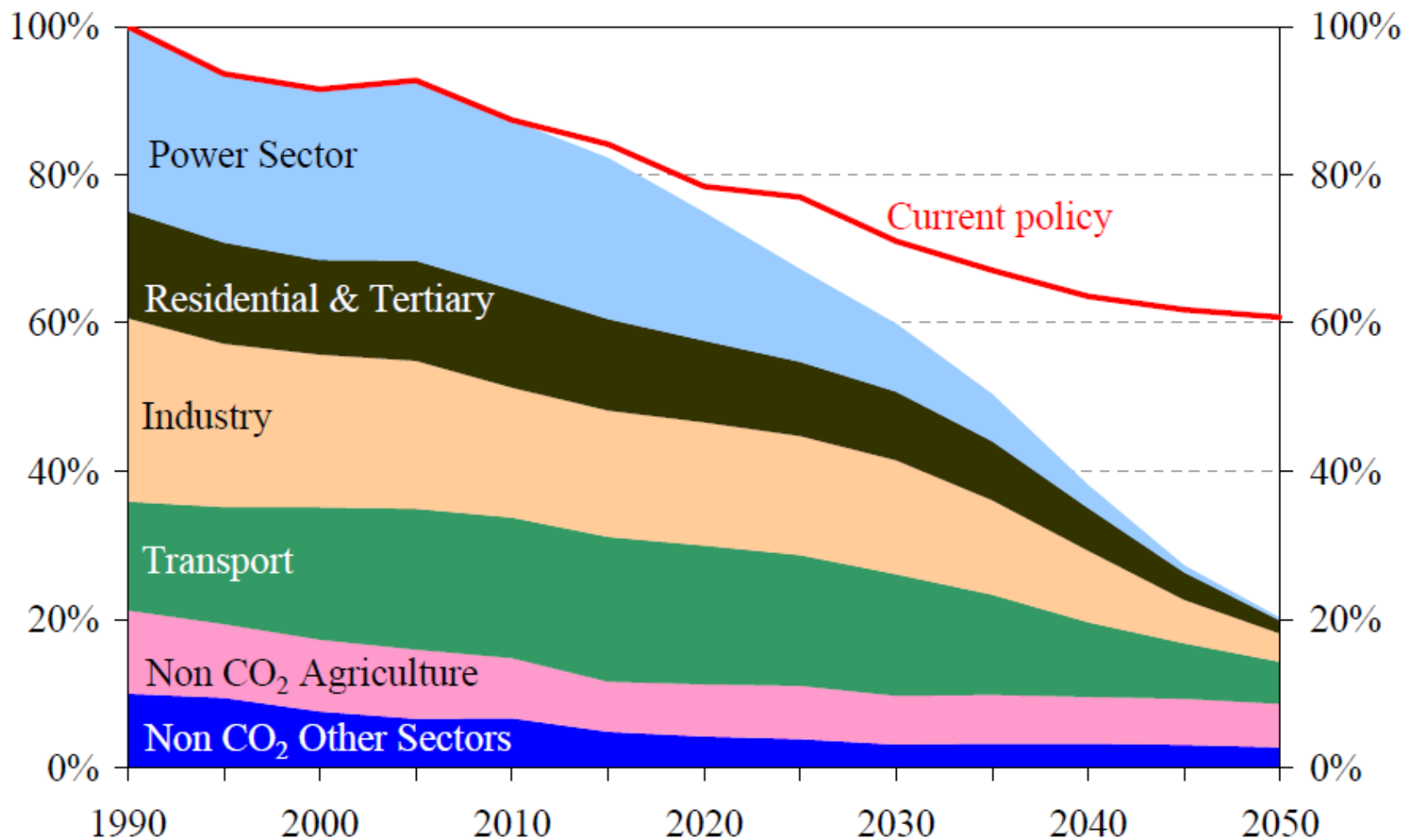


(at 33 percent likelihood of target missing)

Source: WBGU: Solving the climate dilemma: The budget approach, Berlin 2009, p.5; cf. www.wbgu.de



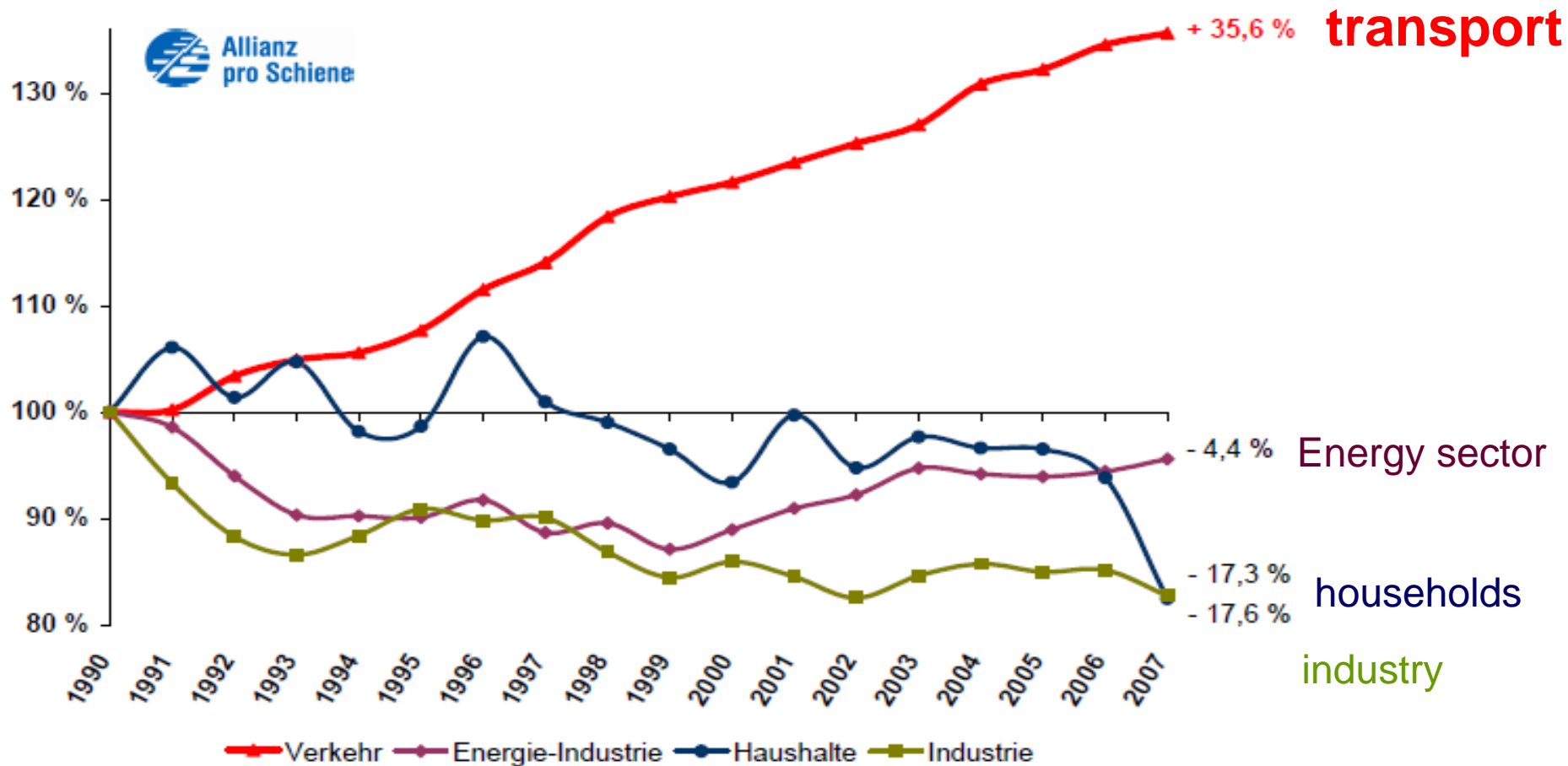
Figure 1: EU GHG emissions towards an 80% domestic reduction (100% =1990)



Source: A Roadmap for moving to a competitive low carbon economy in 2050 / EC COM(2011) 112 final 08.03.2011



CO₂-emissions by sectors (1990 – 2007)

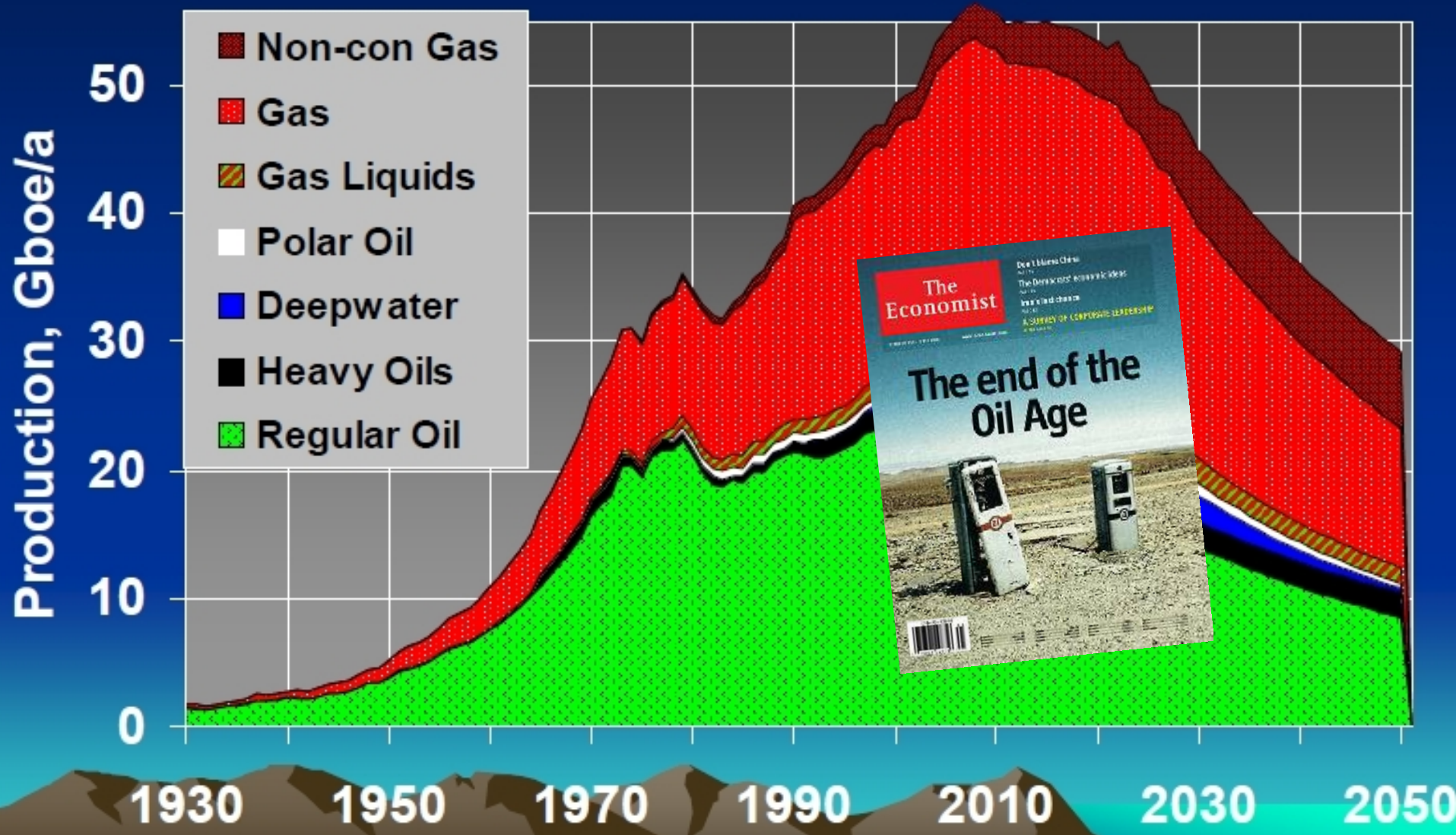


Quelle: Allianz pro Schiene, 4.12.2009 – Berechnungen auf Basis von bislang unveröffentlichten Zahlen der Europäischen Kommission. Verkehr inklusive Internationalem See- und Flugverkehr.



Towards post-fossil economy

Dependence on oil



Dependence on oil

Kraftstoffpreise

Super 156⁹

Super Plus 160⁹

ultimate 102 162⁹

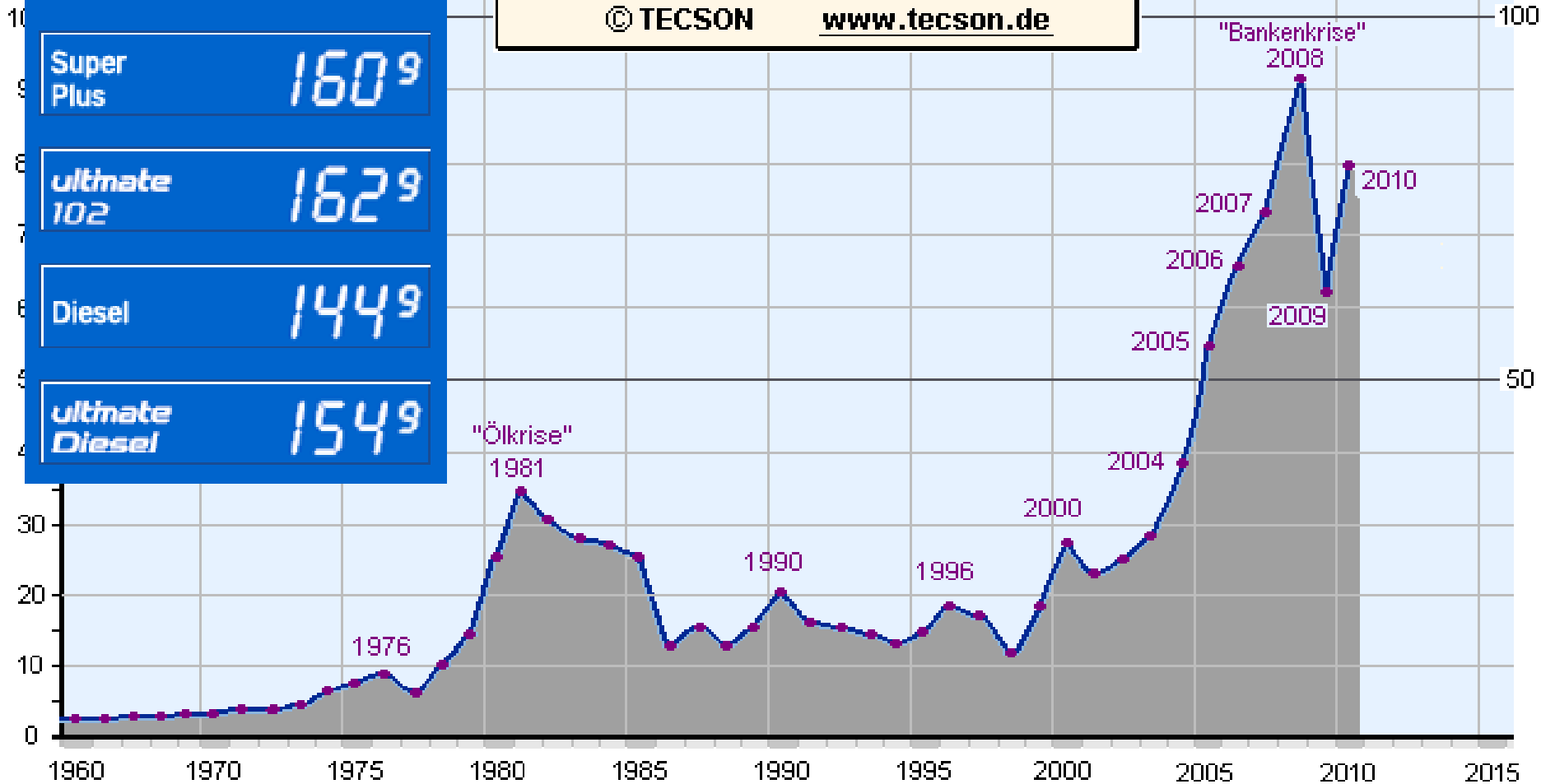
Diesel 144⁹

ultimate Diesel 154⁹

110,44 \$ / barrel
(21.06.11)

Entwicklung der Rohölpreise: 1960 - 2010

© TECSON www.tecson.de

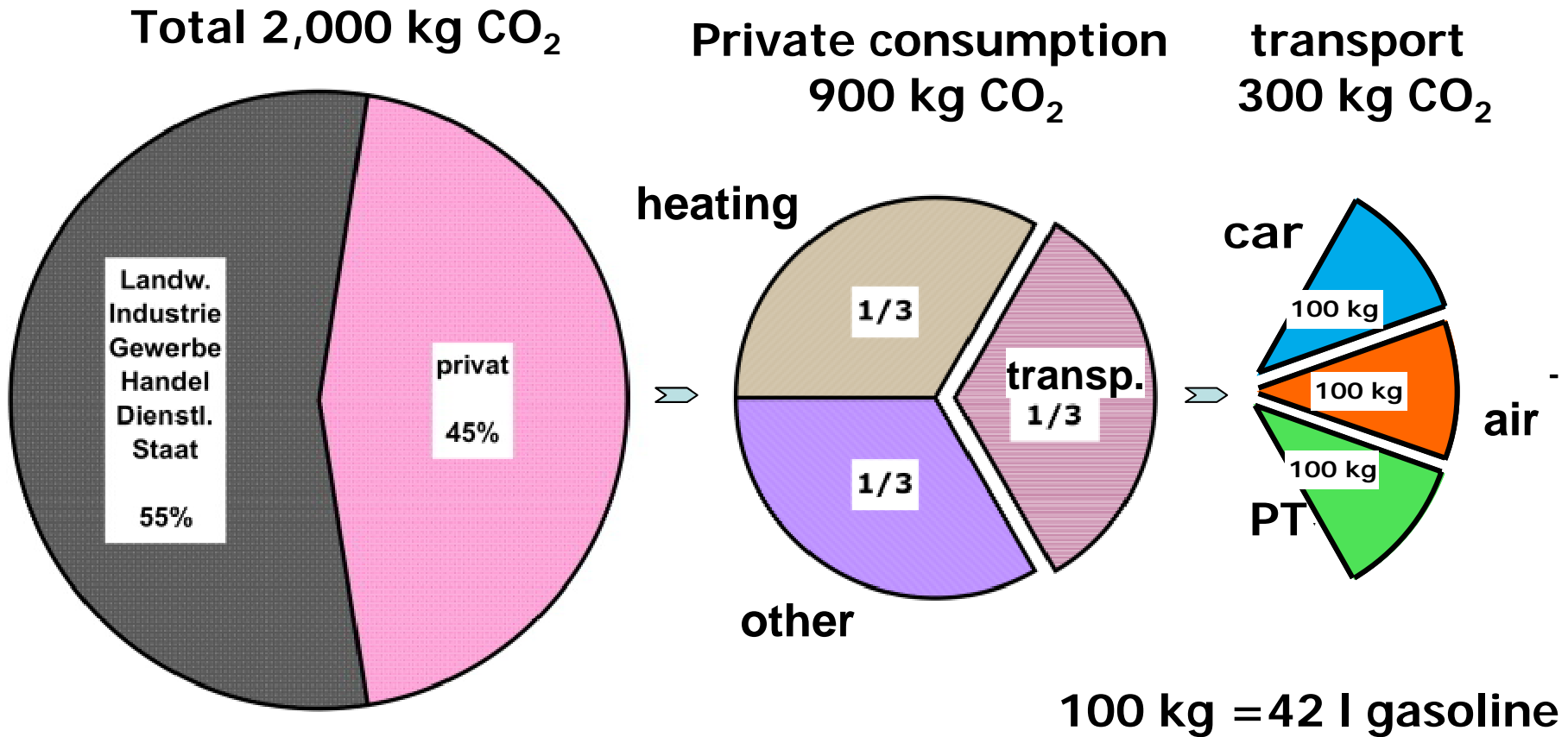


2050:

2 tons CO₂ per capita
world-wide



The climate challenge 2050



Source: Schallaböck:/ WBGU

Nach aktuellen WBGU-Daten stehen weltweit pro Kopf und Jahr im Zeitraum 2010 -2050 etwa 2.000 kg CO₂ zur Verfügung, sowie im Zeitraum 2051 -2100 etwa 300 kg, oder im Gesamtzeitraum 2010 -2100 rd. 1.000 kg, um das 2 °C-Klimaziel zu halten.

Zum Vergleich: 1 l Benzin entspricht etwa 2,37 kg CO₂, 1 l Diese l, Kerosin oder Heizöl etwa 2,65 kg CO₂.

Conclusions / Questions

Challenge and chance !

- Export of products and ideas
- Sharpening the profile of NSR as innovation region

Car-Sharing on EXPO 2010 Shanghai



e.g. offshore wind energy



- Are we moving the deck-chairs on the Titanic?
- How much greenwashing do we have ?
- Does the NSR program set the appropriate priorities?



- Mandatory (+ independent)
„Climate Impact Check“ necessary for
NSR Interreg proposals

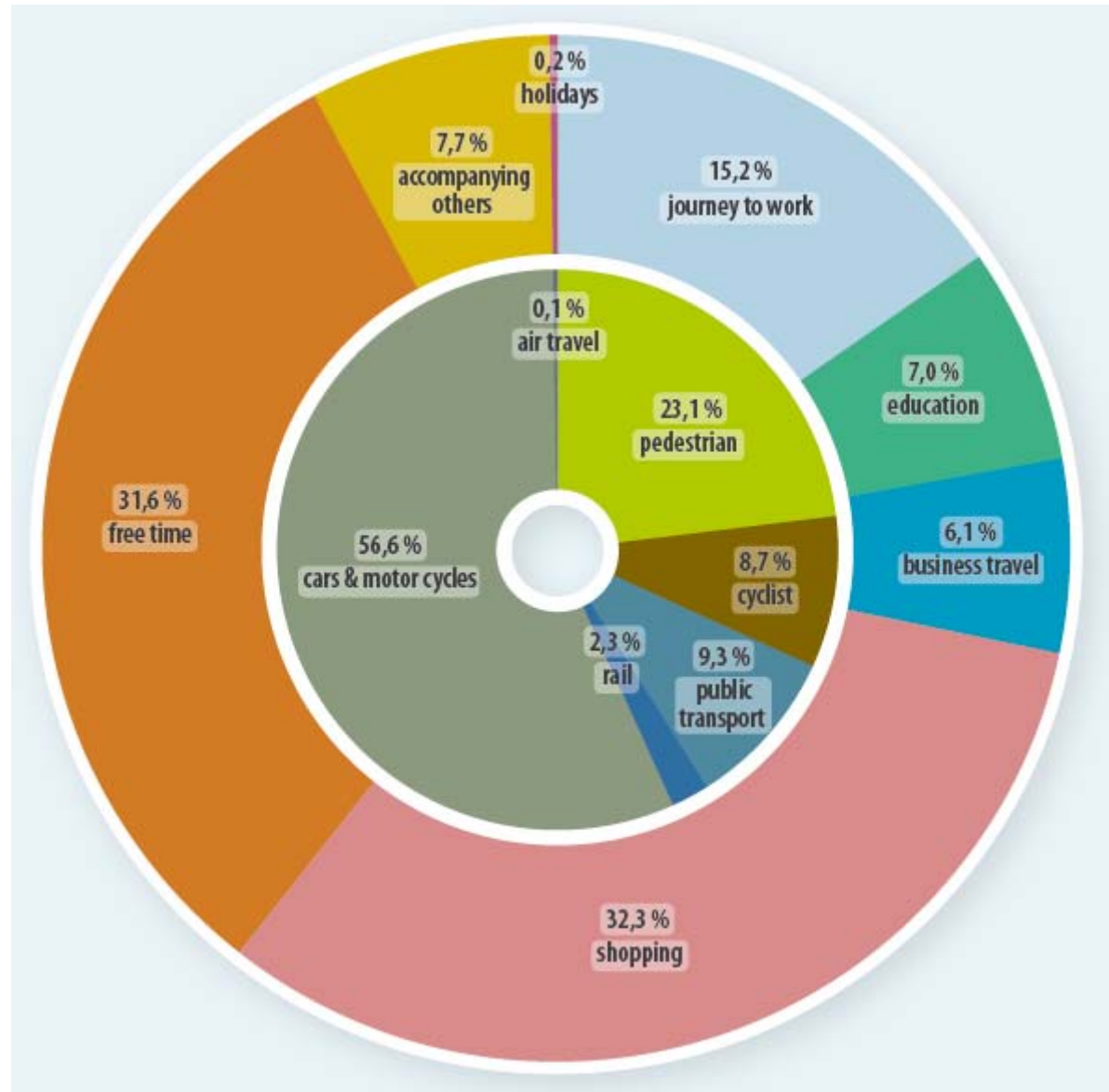
Thanks for your attention



Number of trips: purpose and mode

Trips by
- purpose
- mode

(number of trips)



Source: Schallaböck (Wuppertal Institute) / DIW



CO2 impacts

example 1: air travel

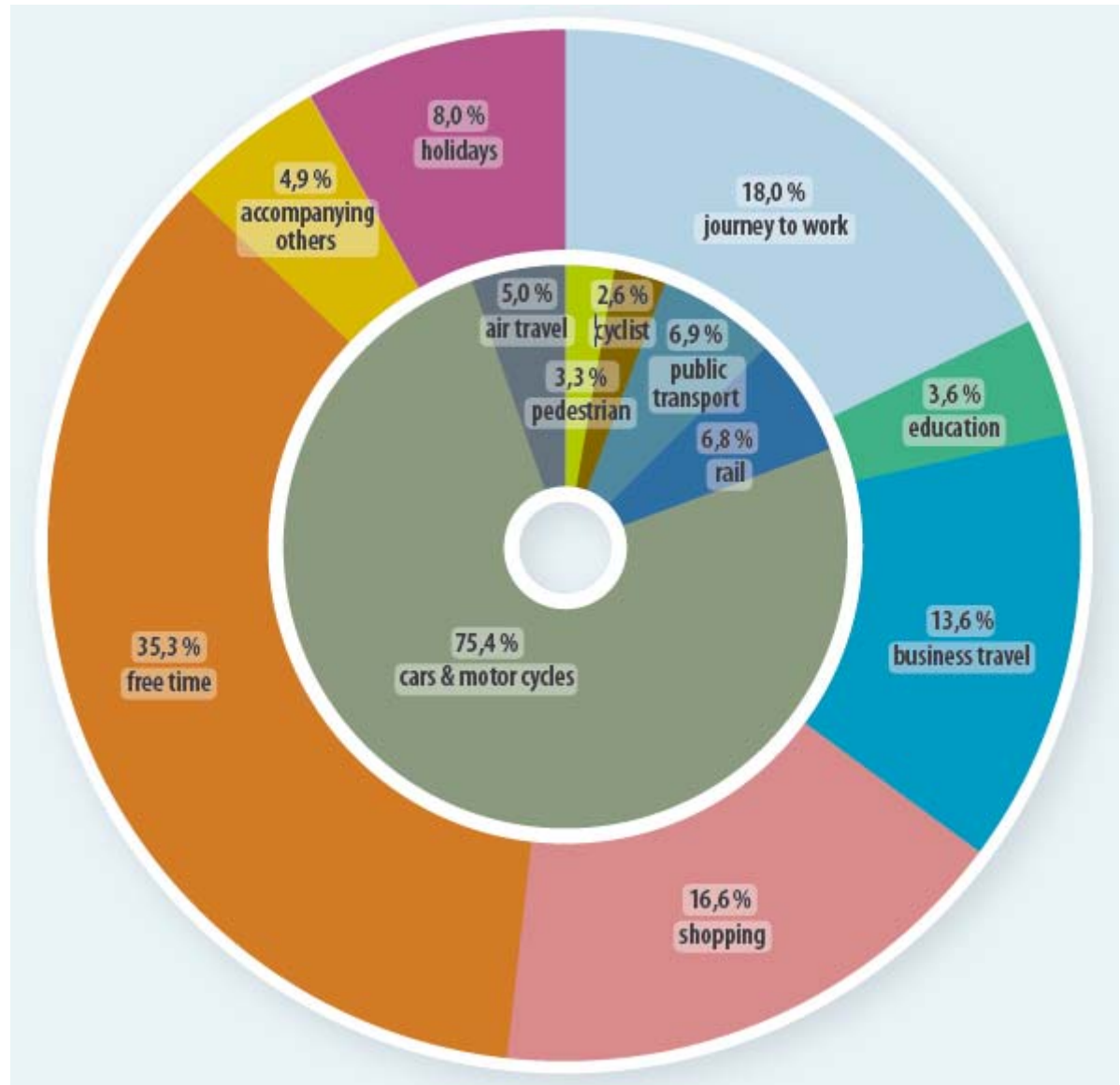
(Germany - all passenger transport)



Mileage travelled: purpose and mode

Trips by
- purpose
- mode

(mileage travelled
- domestic)



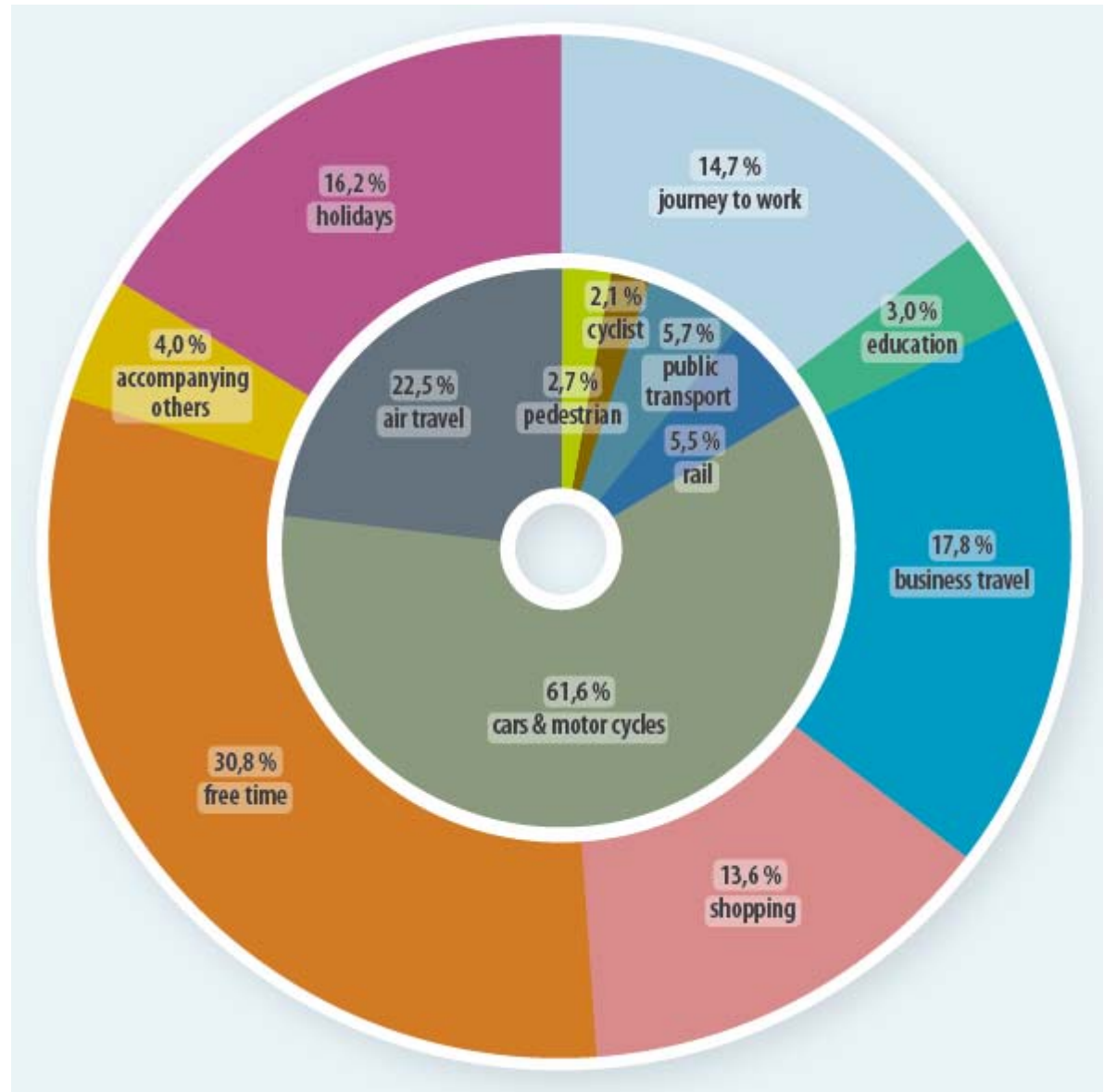
Source: Schallaböck (Wuppertal Institute) / DIW



Mileage travelled: purpose and mode

Trips by
- purpose
- mode

(mileage travelled
- incl
international travel)



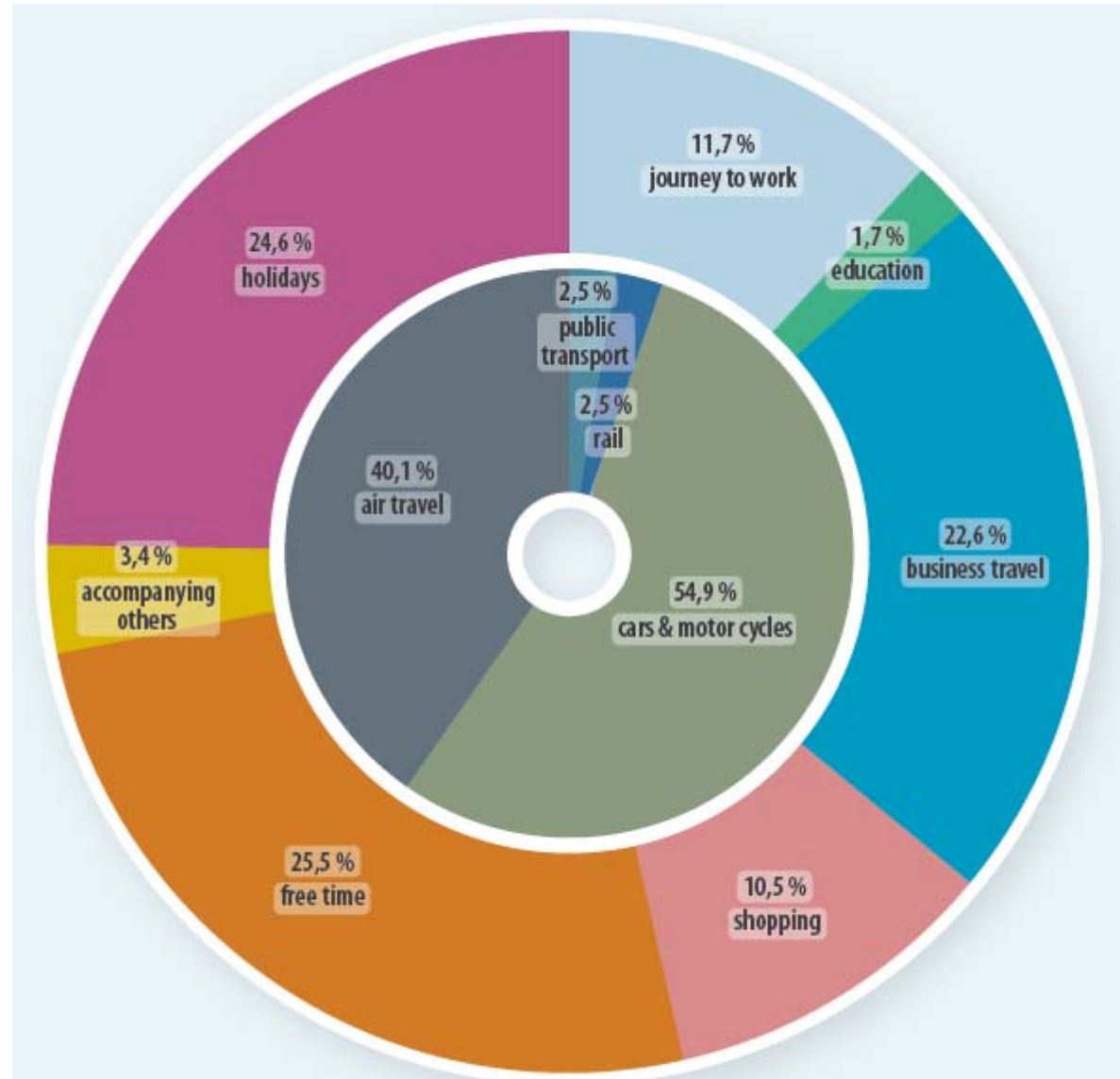
Source: Schallaböck (Wuppertal Institute) / DIW



CO2-emission: purpose and mode

Trips by
- purpose
- mode

(CO2
impacts)



Source: Schallaböck (Wuppertal Institute) / DIW



CO2 impacts

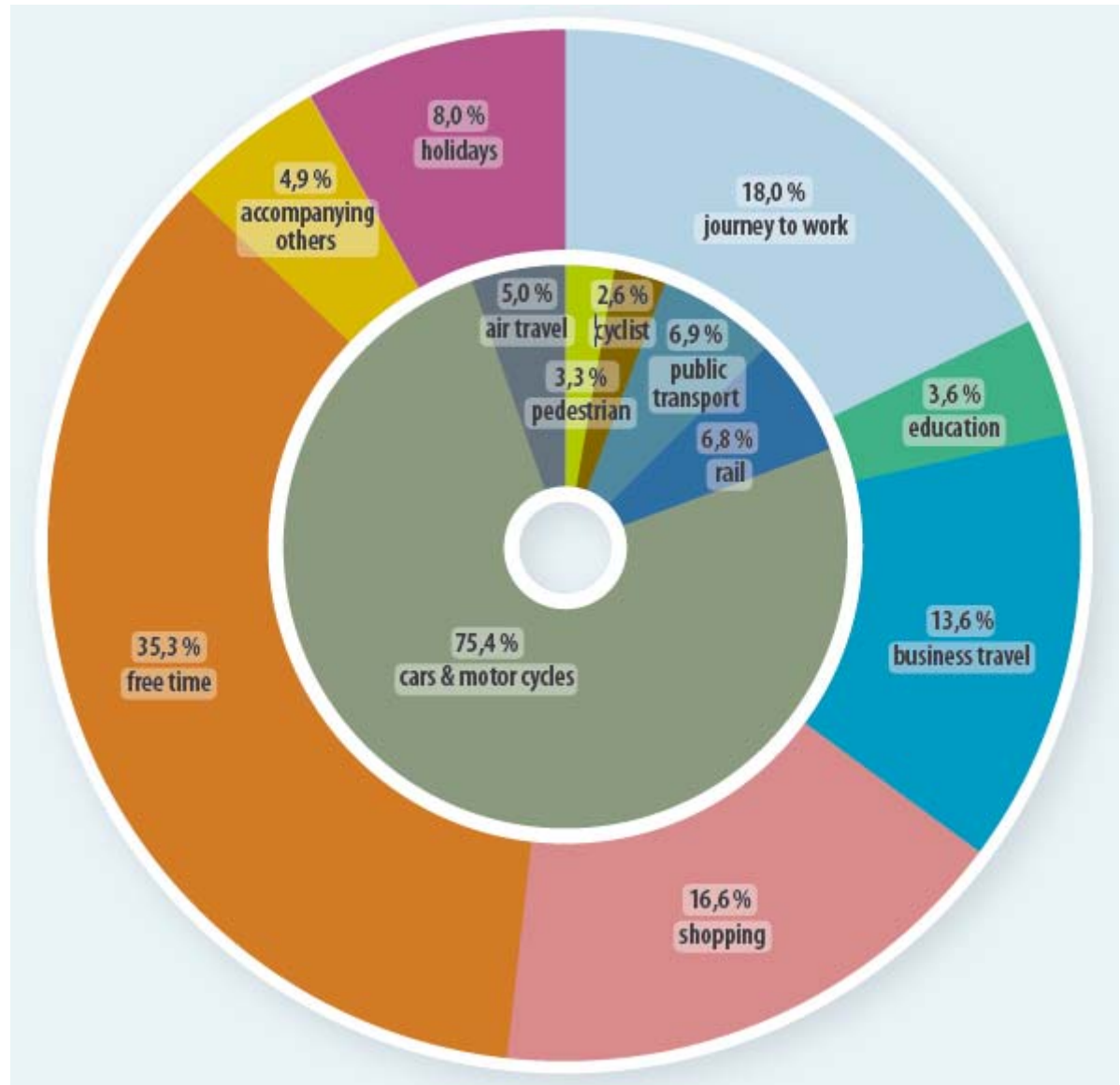
example 2: walking

(Germany - all passenger transport)

Mileage travelled: purpose and mode

Trips by
- purpose
- mode

(mileage travelled
- domestic)



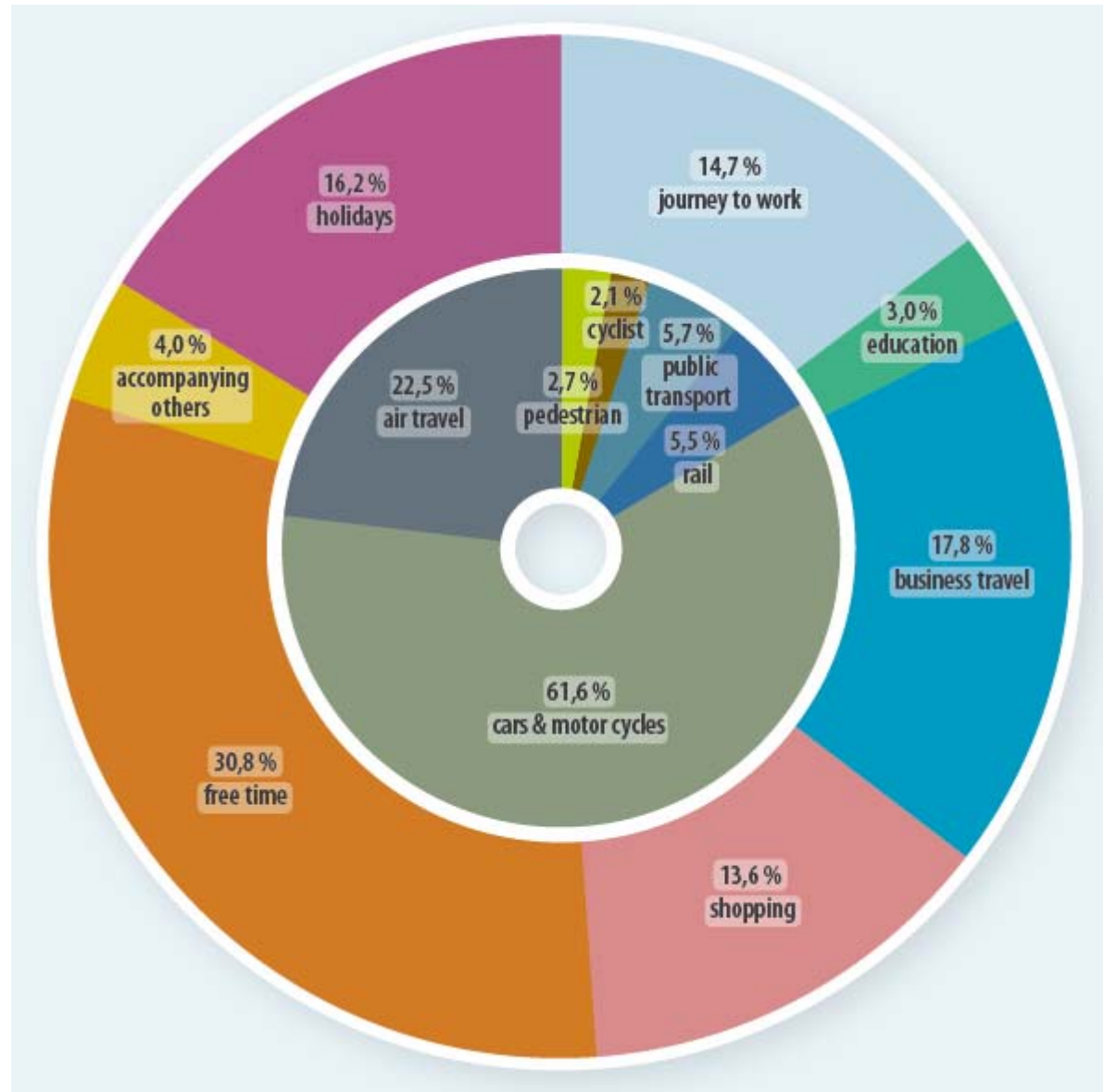
Source: Schallaböck (Wuppertal Institute) / DIW



Mileage travelled: purpose and mode

Trips by
- purpose
- mode

(mileage travelled
- incl
international travel)



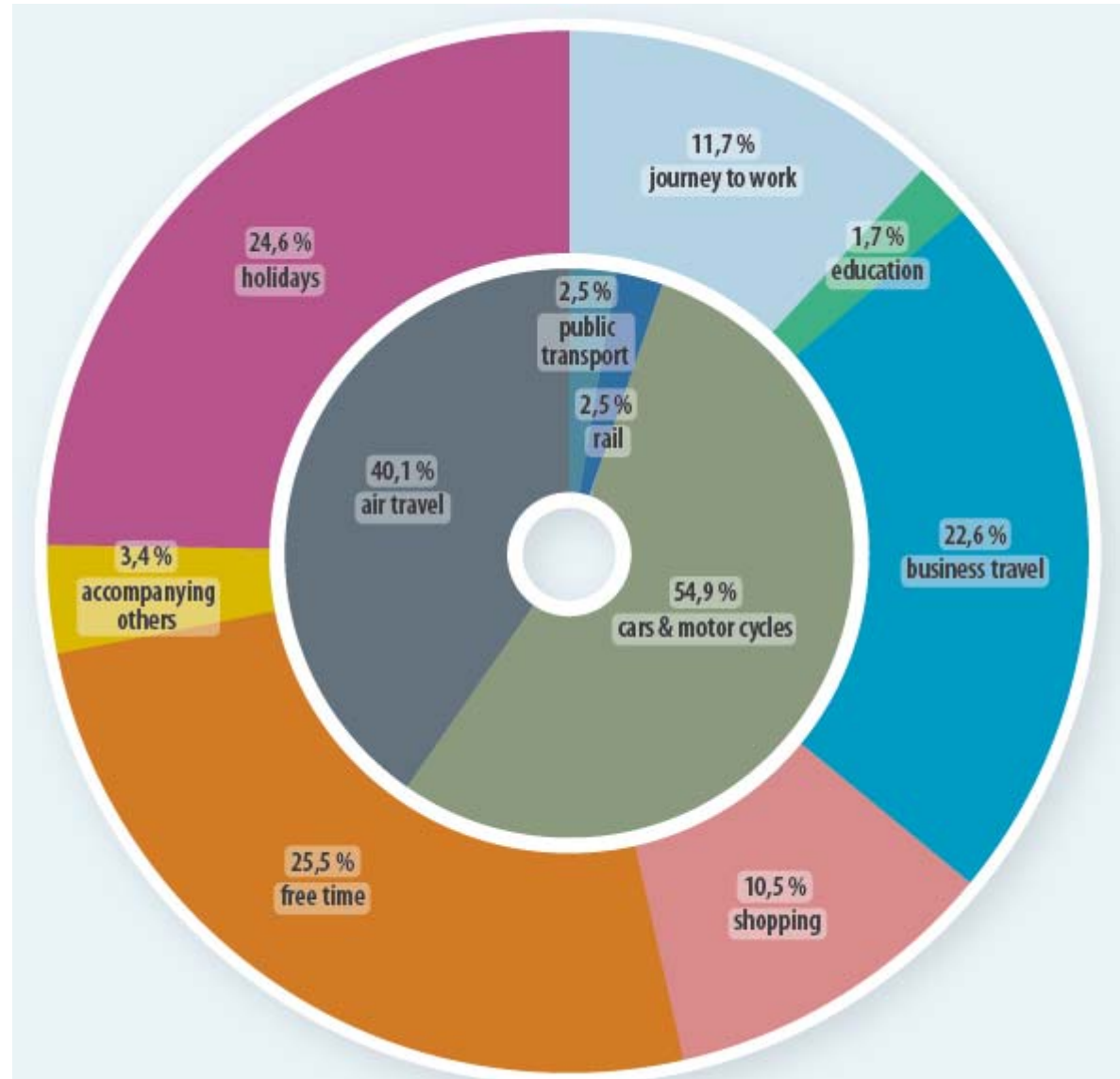
Source: Schallaböck (Wuppertal Institute) / DIW



CO2-emission: purpose and mode

Trips by
- purpose
- mode

(CO2
impacts)



Source: Schallaböck (Wuppertal Institute) / DIW

