

# The Wuppertal Institute

Research for  
sustainable development

---

At a  
glance



Wuppertal  
Institut

# Who we Are

## About us

Since it was founded in 1991, the Wuppertal Institute has been an integral part of the national and international research landscape and a key player in shaping the debate on issues relating to climate, energy and resources.

The Wuppertal Institute is an implementation-oriented research institute with roots in the German federal state of North Rhine-Westphalia and a global horizon. Together with our stakeholders, we shape transformation processes towards a just, climate-positive and resource-light future within the planetary boundaries. Our vision is a sustainable world for all.

The German federal state of North Rhine-Westphalia (NRW) is the sole shareholder in the non-profit limited company (gGmbH).



# Transformative Science

## Research for the “Great Transformation”

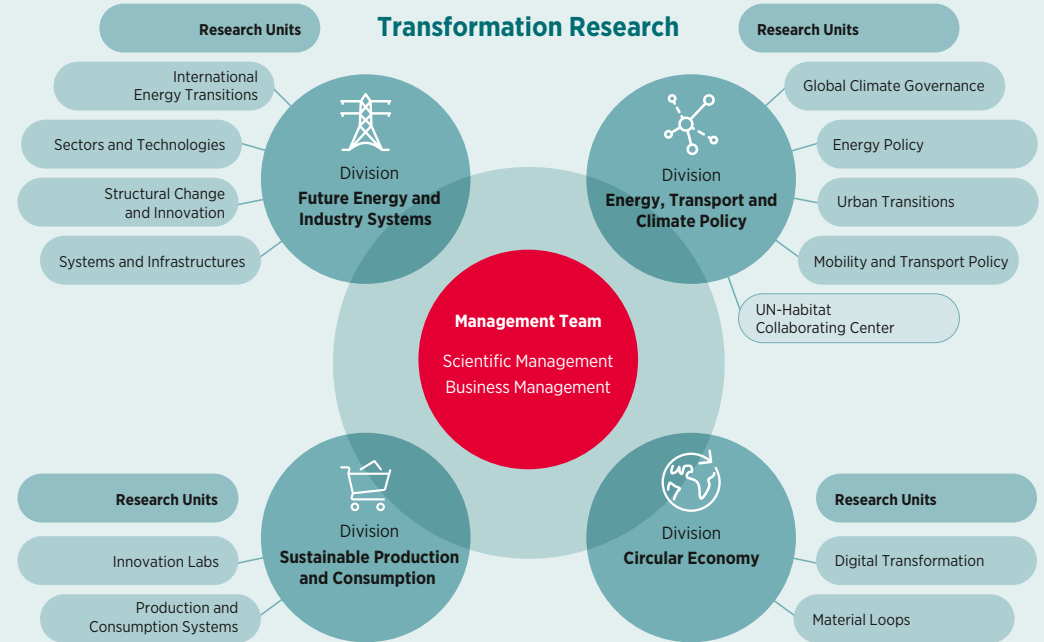
The research carried out by the Institute focuses on specific social problems with the aim of building a better understanding of change processes as well as generating target and system knowledge, thereby allowing the Institute to serve as a catalyst for transformation processes. The Wuppertal Institute refers to this three-pronged approach of target knowledge, system knowledge and transformation knowledge as “Zukunftswissen” (future knowledge). In many cases, viable concepts are developed in “real-world laboratories”. Research thus becomes part of the transformation process, in which solutions are developed, reviewed and, if necessary, adapted in collaboration with partners operating in practical settings.

## Arenas of transformation

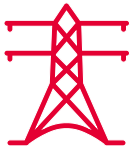
The Great Transformation towards sustainable development is taking place at many different levels. The research carried out by the Wuppertal Institute focuses on seven arenas of transformation, each of which has very specific constellations of stakeholders and underlying core research issues concerning the transition with regard to energy, resources, nutrition, urban areas, mobility and industrial activity, as well as prosperity and consumption. The theme that all of these areas of research have in common is the concept of managing structural change and digitalisation and, in particular, the question of the extent to which digitalisation can be put on a sustainable footing and support the implementation of transformation processes.

The Institute’s research is organised in line with these arenas and topic areas into 15 Research Units within four Divisions.

## Research Structure



# Core Research Issues



## Shaping the energy transition

How can we make a success of the shift towards an energy system based entirely on renewable energy sources? This goal can be achieved using an intelligent interplay between increasing energy efficiency, expanding the generation of renewables and developing new processes in the field of industrial production. To that end, the Wuppertal Institute develops robust, implementable solutions for decision makers in the worlds of politics and business.



## Climate-friendly primary industry

The energy-intensive industrial sector, above all the production of steel, basic chemicals, aluminium, glass, paper and cement, accounts for a large and steadily growing proportion of global greenhouse gas emissions. In addition to the introduction of new processes and, in some cases, disruptive technologies, the transition to greenhouse-gas-neutral production structures requires large amounts of green energy, alternative energy carriers and fuels, such as hydrogen. The restructuring of industrial systems and energy systems must therefore be jointly addressed and is an important social undertaking for business, policymakers and civil society. How this objective can be achieved, what changes will be required along the applicable value chains and how the specific innovation systems within the various sectors will need to be designed are key questions examined by the Wuppertal Institute.



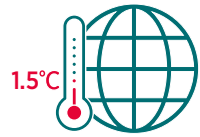
## Keeping resources in circulation

Every year, Germany alone produces over 400 million tonnes of waste. Germany and the European Union have set themselves the goal of realising a comprehensive transformation towards a functioning circular economy. Waste must therefore be prevented as far as possible, products and components used for as long as possible and all waste that does arise treated as a potential resource. The associated challenges and issues are among the Wuppertal Institute's core areas of research.



## Rethinking mobility

In addition to the risks of accidents, the impacts of transport on climate change, air pollution and land consumption are widespread. However, there are other ways to keep people mobile and transport goods. Key building blocks in the transition of the transport and mobility system are, above all, a reduction in private car usage, intelligent public transport options, attractive infrastructure for cyclists and pedestrians, economical/efficient modes of transport, as well as climate-friendly and non-polluting fuels. The Wuppertal Institute's researchers are therefore engaged in analysing how systems can be changed successfully without giving rise to new problems and what national and global policy frameworks will be needed to achieve this. Through its work, the Institute is helping municipalities and cities around the world to rethink mobility.



## Limiting climate change

Ending the fossil era, keeping global warming below 1.5°C and launching a climate-friendly, fair and sustainable economic system are objectives that call for the involvement of many stakeholders at municipal, national and international level. With that in mind, the Wuppertal Institute analyses policy instruments and develops integrated strategies for business, politics and civil society.



## Digital transformation

Digital technologies are opening up a wealth of new opportunities for sustainable development. On the other hand, their use is also a source of environmental concern due to the increasing consumption of energy and natural resources by electronic devices and infrastructure. That is why it is important for the digital transformation to be actively and intelligently managed so that it can contribute to a sustainable future without giving rise to new problems. Through its research, the Wuppertal Institute seeks to play a role in steering the ongoing digital transformation in the direction of a sustainable form of social, economic and political development. For that purpose, it evaluates digital technologies and product developments, infrastructure and solutions with regard to their functions and interactions from a holistic perspective.



## Prosperity, consumption and lifestyles

Improved efficiency and the switch to renewable energies alone are not enough to establish a pathway towards sustainable development. These actions must be accompanied by new consumption patterns and sustainable lifestyles embedded in intelligent business models, which help to decouple the development of prosperity from resource consumption. The Wuppertal Institute is particularly interested in investigating ways in which products and services need to be designed so that they deliver a higher quality of life and can be produced sustainably, as well as socio-technical innovations as a promising route to sustainable change.



## Changing cities and urbanity

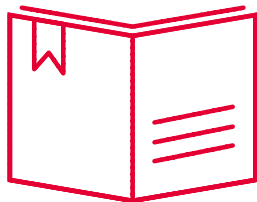
More than 70 per cent of global anthropogenic greenhouse gases are emitted in towns and cities. Most of the planet's resources are used in urban areas, because they are home to around half of the world's population. These locations are focal points for the transformation as well as being the launch pad for social changes. For this reason, they require support by means of appropriate policy frameworks at European, national and municipal level. The Wuppertal Institute researches what is important in the transition to environmentally sustainable cities that are fit for the future.

# The Wuppertal Institute in Figures\*



**40**  
current  
dissertation  
projects

**about  
350**  
publications



**around  
4.000**  
media reports

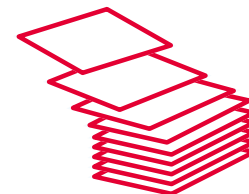


**6.000**  
citations\*\*\*

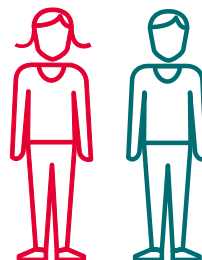
**around  
450**  
talks delivered to  
audiences from the  
worlds of politics,  
business, science  
and civil society



Revenue of  
**about  
€21 million\*\***



**150**  
projects in over  
50 countries  
worldwide



**320**  
employees,  
over 50 per  
cent of whom  
are women

**20**  
lectures and  
seminars



\* All figures rounded or given as an annual average per year (2023)

\*\* Figure rounded or given as an annual average per year (2022)

\*\*\* Institute's top ten researchers according to Google Scholar

**Wuppertal Institut für Klima,  
Umwelt, Energie gGmbH**

Döppersberg 19  
42103 Wuppertal  
Tel: +49 202 2492 -0  
info@wupperinst.org

**Berlin Office**

Located in the Stiftung Mercator  
ProjektZentrum Berlin  
Neue Promenade 6  
10178 Berlin · Germany  
Tel: +49 30 28 87 458 -10  
buero.berlin@wupperinst.org  
**wupperinst.org**

**Responsible for content:**

Prof. Dr.-Ing. Manfred Fischeck,  
President and Scientific  
Managing Director

**Text and editing:**

Christin Hasken, Anna Riesenweber

**Wuppertal, March 2024**

**You can also find us here:**



WK9

Dieses Druckerzeugnis wurde mit  
dem Blauen Engel ausgezeichnet

[www.blauer-engel.de/uz195](http://www.blauer-engel.de/uz195)