

## Inequality and Democracy

### Author

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# How to foster public support for European climate policies: Evidence from the German population

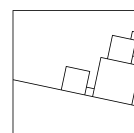
## Abstract

Europe's transition towards climate neutrality by 2050 requires major shifts in the structure of our economy and society — and wide societal backing. But how do citizens perceive climate change and what kind of EU climate policies do they support? New survey among German voters shows that Germans generally prefer policy packages that (1) target financial support within the renewable energy sector, (2) include social investment policies, (3) are financed by increasing taxes on the wealthy, and (4) distribute resources across EU member states based on population size. Based on these findings, this policy paper formulates recommendations for climate policy making — inter alia to — couple climate mitigation policies with social investment or compensatory measures for lower-income households.



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## Introduction

Climate change poses an urgent global challenge. By signing the 2015 Paris Agreement, the European Union committed to limiting global warming to below 2 degrees Celsius above pre-industrial levels and striving for 1.5 degrees Celsius. Moreover, the European Green Deal aims to transition Europe into becoming the first climate-neutral continent by 2050. As an intermediate goal, the EU aims to reduce greenhouse gas emissions by at least 55% below 1990 levels by 2030. However, achieving such a significant cut will require major shifts in the structure of the European economy. Nevertheless, the green transition may disproportionately impact individuals and countries, potentially exacerbating existing inequalities and giving rise to new distributive conflicts between winners and losers, both within and between countries. The Yellow Vest movement that began in France in 2018 against a carbon tax increase and Poland's opposition to committing to ambitious EU climate goals illustrate this growing conflict over the green transition.

EU political leaders have expressed concerns regarding the socio-economic consequences of transitioning to a climate-neutral economy, so the European Green Deal incorporates various policy initiatives to support EU member states in this venture. Moreover, an EU framework linking social and climate policies is gradually emerging. For example, the Just Transition Mechanism provides targeted support to regions, industries, and workers facing the greatest challenges. It anticipates mobilising around €55 billion between 2021 and 2027. Furthermore, a Social Climate Fund (SCF) has been established to provide direct income support for vulnerable households as part of the revision of the EU emissions trading system (EU ETS), thereby mitigating costs for those most vulnerable to fossil fuel price increases.<sup>1</sup> The SCF aims to provide temporary subsidies to citizens during the green transition. Additionally, the EU's post-pandemic recovery programme, NextGenerationEU, helps put the European Green Deal to work by allocating at least 37% of member state allocations from its Recovery and Resilience Facility (RRF) to climate action.<sup>2</sup> Member states are urged to consider the distributional effects of any green transition measures, aligning with European Pillar of Social Rights principles and justifying how their RRF plans will ensure a just transition.

Considering the case of Germany, the revised Building Energy Act (GEG), an element of Germany's renewable energy strategy, came into force on January 1, 2024. It aims to facilitate the transition towards climate-friendly heating systems and phase out the use of fossil fuels for heating in buildings by 2045. However, there was little consideration for any social impact in the original proposal, prompting a heated debate about the GEG and triggering heavy resistance against it. Only after another revision that met this concern by ensuring financial support to those affected, did the amendment pass. Notably, the basic subsidy of 30 percent, available for all private homeowners, can be topped up with an income-related bonus of 30 percent for homeowners with an annual taxable household income of up to 40,000 euros. Taking into account an additional climate speed bonus — to support an early switch to renewable energies by the end of 2028 — the total subsidy can amount to up to 70 percent.<sup>3</sup> These subsidies are funded through the Klima- und Transformationsfonds (KTF), which mainly consists of revenues from the EU Emissions Trading System (EU ETS) and national carbon pricing. Despite these adjustments, the overall attitude towards the GEG remains critical, reflecting the initial political and communication challenges.<sup>4</sup>

<sup>1</sup> European Parliament. (2023). Social climate fund: 'Fit for 55' package. Briefing: EU Legislation in progress. Retrieved from : [https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698777/EPRS\\_BRI\(2021\)698777\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698777/EPRS_BRI(2021)698777_EN.pdf)

<sup>2</sup> European Commission. (2021). Guidance to Member States Recovery and Resilience Plans', SWD, PART 1/2, SWD (2021) 12 final, 22 January 2021.

<sup>3</sup> It applies to residential as well as non-residential buildings for heating systems that fulfil the 65 percent requirement. For a detailed overview, see <https://www.bmwsb.bund.de/SharedDocs/topthemen/Webs/BMWSB/DE/GEG/GEG-Top-Thema-Artikel.html>

<sup>4</sup> Jost et al. (2024). See: <https://www.progressives-zentrum.org/publication/heizungsgesetz-2024-aufgeheizte-debatte>

**Survey data**

The data presented in this policy paper was collected in an online survey of the German adult resident population conducted by pollsters IPSOS between January 11 and 30, 2023. The sample consisted of 5,796 respondents. Quotas for age, gender, education, and region (including cross-quota between age and gender) ensured that the sample was representative of the demographic composition of the general population aged 18–75 years. For descriptive statistics in this policy paper (Figure 1–2), any remaining deviations are corrected through weighting.

These examples indicate that EU climate change mitigation policies can be designed in different ways. However, gaining citizens' support is crucial for the political feasibility of the European green transition. This policy paper reports key findings of a new survey of Germans' attitudes towards climate change and their support for diverse EU climate change mitigation packages.

**Attitudes towards climate change**

How does the German population perceive climate change? The survey included questions about citizens' beliefs regarding the causes and consequences of climate change. Respondents were asked whether they thought that climate change is caused by natural processes, human activity, or both. We observe that an overwhelming majority — 95 percent — believe it is at least partly driven by human activity. Figure 1 shows that the largest group (46 percent) thinks that climate change is mainly caused by human activity. Less than 4 percent believe that climate change is entirely caused by natural processes, while less than 2 percent think that climate change is not happening at all.

**Figure 1:** Belief whether climate change is caused by natural processes or human activity (weighted percentages).

- Entirely by natural processes
- Mainly by natural processes
- About equally by natural processes and human activity
- Mainly by human activity
- Entirely by human activity
- I don't think climate change is happening

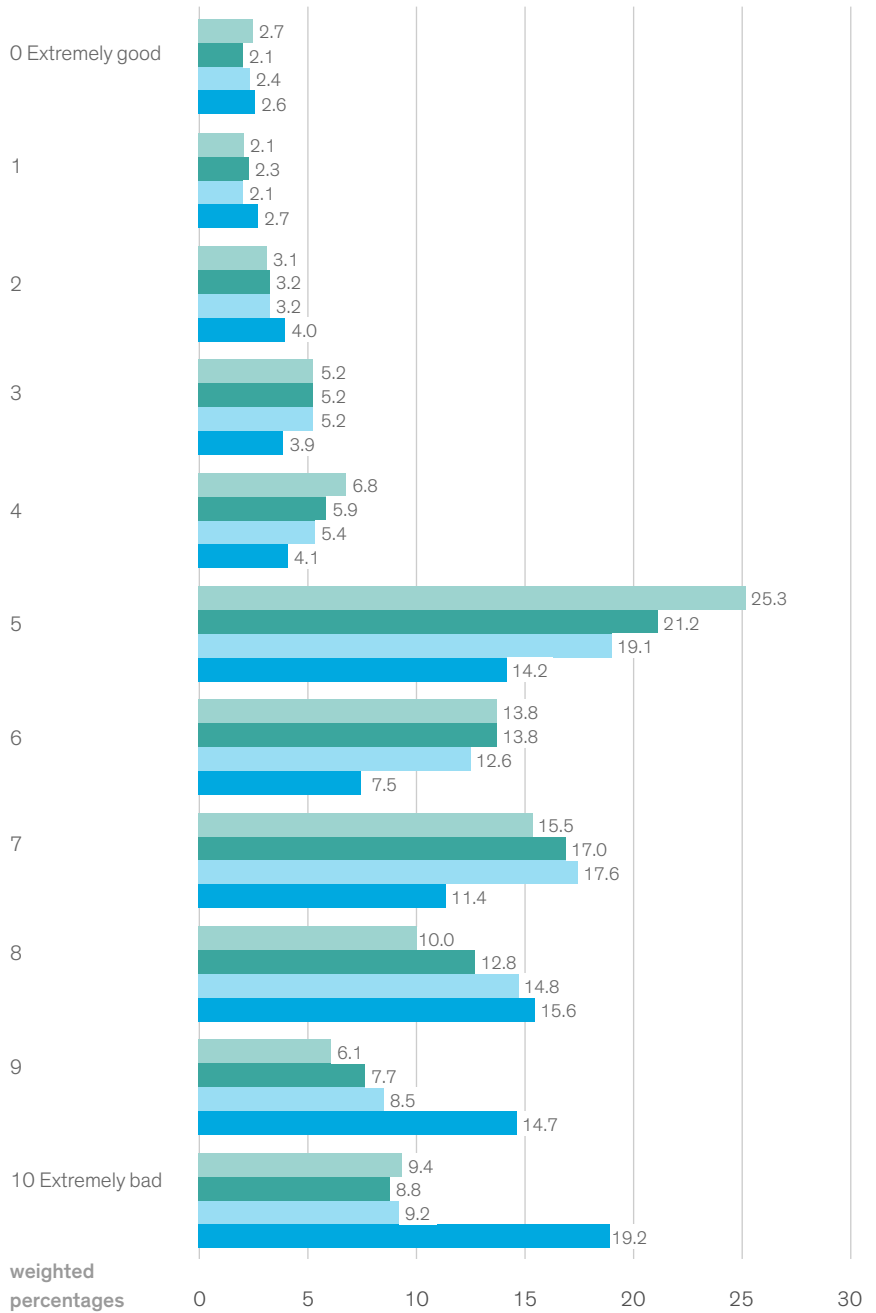


To gain a better understanding of citizens' perspective on climate change, it is important to know whether they have an optimistic or pessimistic outlook on this process. Therefore, respondents were asked about how good or bad they think the impact of climate change will be for different groups, including themselves. Some might have more optimistic outlooks as they may consider climate change as creating economic opportunities for certain sectors (such as renewable energy and climate adaptation technologies) or believe that certain groups will benefit from climate change, for instance through warmer temperatures that could improve living conditions in colder regions, enhance agricultural productivity, or reduce heating costs. Others, by contrast, might have more pessimistic views as they anticipate negative economic, environmental and social consequences as well as health risks for example. Their responses could range from 'extremely good' (0) to 'extremely bad' (10). Figure 2 displays the percentage of respondents in each category.

When it comes to the impact of climate change for themselves, the majority has a rather pessimistic outlook, with one in four respondents being indecisive (indicated by the popular midpoint of the scale). A similar picture appears when they consider people living in Germany as well as people living in the European Union. However, when they consider the impact of climate change on people in non-EU countries, perceptions are even more negative: about 19 percent think that the impact will be extremely bad for people in other regions of the world, compared to 9 percent for themselves, people in Germany or people in the European Union. Thus, the majority of respondents believe that the consequences of climate change will be bad on the whole.

**Figure 2:** Expected impact of climate change for different groups of people (weighted percentages).

- Yourself
- People in Germany
- People in the European Union
- People in other countries of the world (outside the EU)



### The impact of policy design

The great majority of respondents thinks that climate change is (partially) caused by human activity. That — combined with negative expectations about the consequences of climate change for humanity as a whole — suggests that citizens would welcome policy initiatives that speed up the green transition as a way to fight climate change. To gauge attitudes on this, a conjoint experiment was designed that allows us to test the causal effect of specific policy features on citizens’ levels of support for EU climate change mitigation policy.<sup>5</sup> Figure 3 illustrates how four policy dimensions shape citizens’ support for EU climate change mitigation; these relate to (1) the sectoral scope, (2) the role of social policy, (3) the financing structure, and (4) cross-country distribution of resources.

<sup>5</sup> In conjoint experiments, respondents compare bundles of policy measures. They do not evaluate each feature individually, but have to decide which is more important to them.

The first question pertains to which economic sectors should receive financial support to facilitate a rapid transition toward climate neutrality. All else being equal, packages providing financial support to all sectors for reducing greenhouse gas emissions are

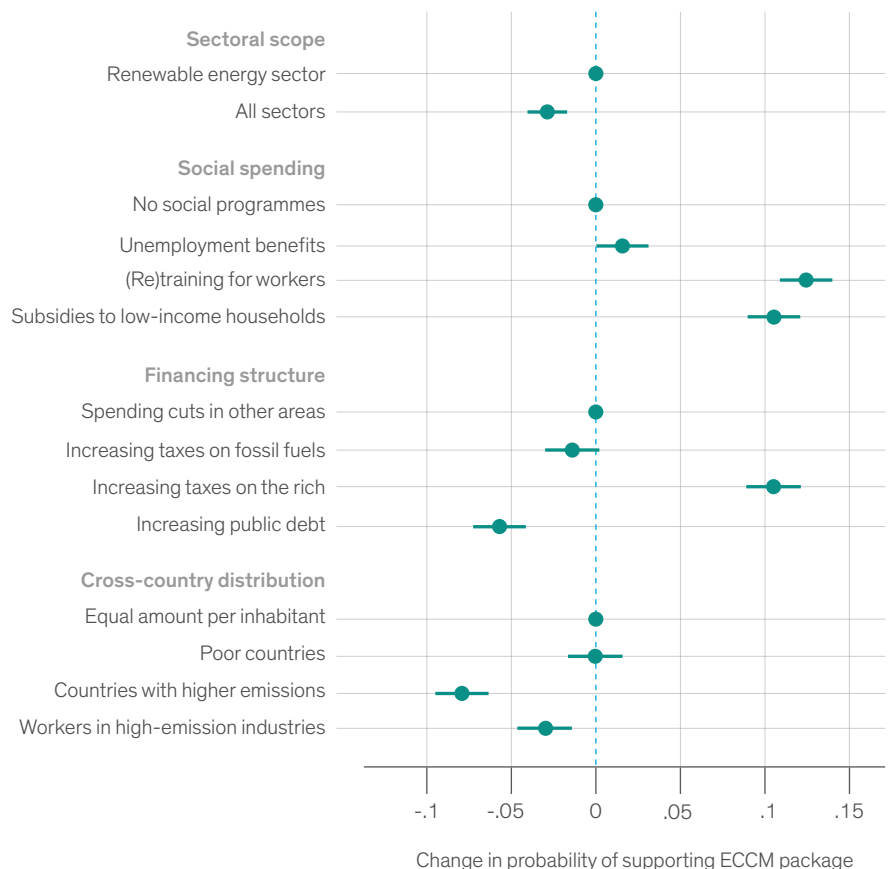
3 percentage points less likely to be supported than those exclusively targeting the renewable energy sector (see figure 3). The second crucial consideration concerns the role of social policies in the transition towards climate-neutral economies. The impact of social programmes depends on the nature of social spending: Social investment policies supporting the (re)training of workers are the most favoured, increasing the likelihood to support a package by 13 percentage points.

A closely related question is how the green transition should be financed. By far the most popular option is a package that is financed by raising taxes on the wealthy, increasing the likelihood that a package is favoured by 11 percentage points compared to those that implement budget cuts in other areas of the public budget. Increasing public debt is the least favoured financing option among respondents.

Furthermore, the distribution of financial resources for EU climate-mitigation policies across member states has been the subject of intense debate. This is also reflected in the survey results: Policy packages that allocate more resources to countries with higher levels of emissions are disliked the most, followed by packages that provide more generous support to countries with a larger number of workers employed in high-emission industries (see figure 3). By contrast, packages that distribute funds on the basis of population size or redistribute from richer towards poorer EU member states are equally supported.

**Figure 3:** Differences in the likelihood of support for EU climate protection policy (ECCM, support package) depending on other policy attributes.

Note: Shown are Average Marginal Component Effects (AMCEs) as results from a statistical model. Horizontal bars indicate 95% confidence intervals; points without bars represent the reference category for each policy dimension. Example: Policies that include (re)training for workers are more likely to be supported than those with no social programmes.

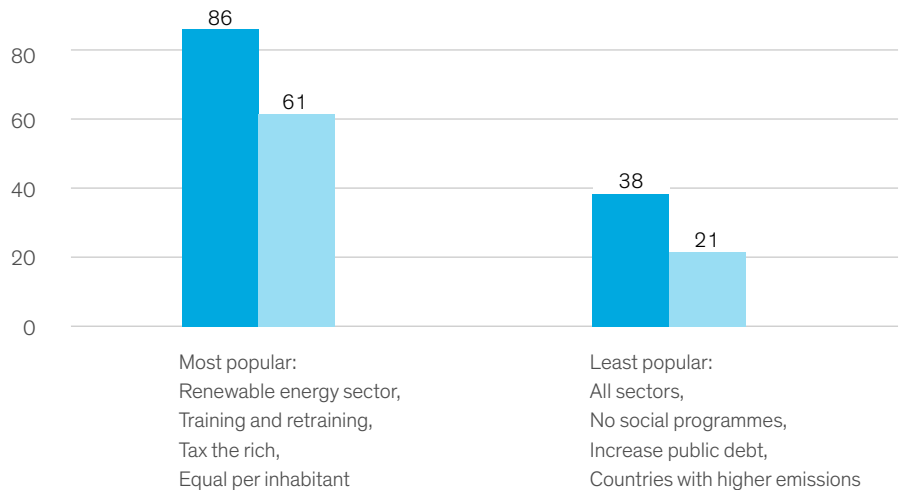


So far these findings clarify which policy features affect citizens' support for EU climate change mitigation policy. An equally interesting question is to look at support levels for policy packages that combine certain attributes related the sectoral scope, social spending, financing structure and cross-country distribution. The survey's experimental design allows one to predict the levels of support for specific policy packages as if a vote had been cast.

The importance of policy design for shaping public opinion can be derived from figure 4 displaying predicted voter support for the most and the least popular policy packages.<sup>6</sup> It shows that the most popular package receives majority support and combines financial support for the renewable energy sector, (re)training of workers, tax increases for the wealthy, and distribution based on the same amount per inhabitant for all EU countries (supported by 86% of the sample; even if assuming that all neutrals would vote against the package, it still receives support from 61% of the sample). The least popular package — providing support to all sectors while excluding social programmes, increasing public debt and allocating resources based on emissions — does not receive majority support in either the high (38%) or low (21%) estimate predictions.

**Figure 4:** Predicted vote for the most and least popular EU climate change mitigation packages (rounded percentage).

- Share of respondents who support, excluding neutral responses
- Share of respondents who support, counting all responses



### Diverging preferences by income group

Furthermore, policy designs that prove most effective in fighting climate change while minimising political and social conflict are of particular interest. As such, there is a need to better understand how public concerns about increasing costs resulting from the European green transition can be overcome. Citizens might be less supportive of policies perceived to be costly since one of the more effective measures for reducing emissions — increasing taxes on fossil fuels — is viewed less favourably than raising taxes on the wealthy (see figure 3). Therefore, one can explore whether the unpopular tax increase on fossil fuels, designed to create greater incentives for adjusting behaviour, can be offset by social programmes supporting those workers and households most adversely affected by the green transition.

To this end, different packages are presented that combine specific policy design elements. Figure 5 displays support levels for low and high income groups separately.<sup>7</sup> Package 1 is financed by a tax hike for the wealthy while excluding social programmes and is only meant to be a baseline to which other packages can be compared. Clearly, when introducing a fossil fuel tax increase (instead of on the wealthy), support levels drop substantially among both groups of respondents (package 2). Moreover, the gap in support between the high and low income groups becomes bigger, only to be expected given the concerns of, say, the Yellow Vest movement or the case of the GEG. But how can one restore support levels among both groups? Packages 3 to 5 present the support levels for low and high income groups when social policies are added to the mix. When the package includes support for social investment policies (through (re)training) or subsidies to low-income households, support levels recover to a level similar to the reference package consisting of the popular wealth tax without social programmes.

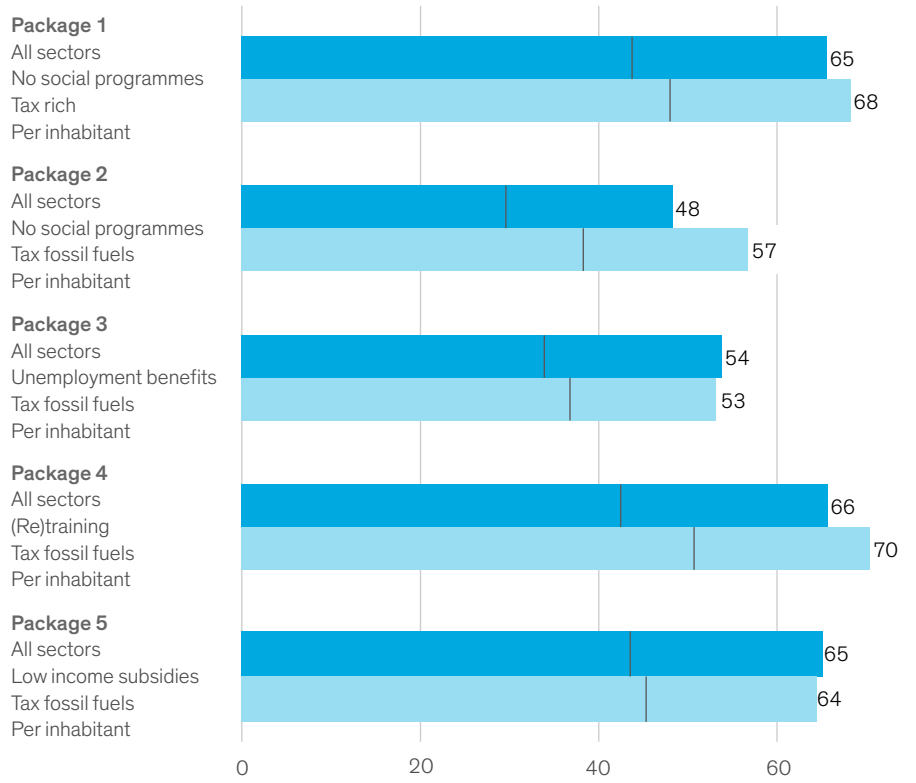
<sup>6</sup> The dark bars display the share of respondents who somewhat or strongly support the package while disregarding neutral responses (assuming they can be evenly divided between supporters and opponents). The light bars account for the potential influence of neutrals, illustrating the outcome if all neutrals voted against the package. While this second scenario is rather pessimistic, it indicates a lower bound.

<sup>7</sup> The dark bars represent the low-income group, comprising respondents with a household income up to the median in the sample, whereas the light bars represent the high-income group, including all respondents with a household income above the median.

Thus, when thinking about how to gain broad support for climate policies, increasing taxes on fossil fuels is not necessarily the least favourable policy choice. The decisive factor is whether and how this tax is complemented by social policies, as these can substantially increase support for the policy package.

**Figure 5:** Support for selected policy packages by income group. Low estimates are indicated as a vertical line within the bars for high estimates (rounded percentage).

- High estimates
- Low income (<= Median)
- High income (> Median)



## Policy Implications and Recommendations

The aim of this report is not to debate the benefits and pitfalls of EU-level climate change mitigation policies and the pros and cons of specific design features. Instead, I focus on what they mean for public support and how the German population relates to them. This research nevertheless leads to some indications for policymaking:

- An overwhelming majority of respondents acknowledge that climate change is a process that is at least partially caused by humans. They tend to expect rather negative consequences from climate change, even more so for people living in other regions of the world. This means: Even amidst the current crises that often serve to argue against the importance or even reasonableness of climate policies, there is leeway for policymakers to implement climate policies that help reach the EU's goals.
- German citizens are sensitive to the design of EU-level climate change mitigation policy. They generally prefer packages that target financial support towards the renewable energy sector, include social investment policies, are financed by increasing taxes on the wealthy, and distribute resources across EU member states based on population size.
- Support for EU climate change mitigation policies appears to grow among both low- and high-income groups when these initiatives are coupled with social investment or compensatory measures for lower-income households.
- Policymakers might care to consider that, especially for low-income groups, the negative effect of introducing a tax increase on fossil fuels can be compensated by an explicit social policy dimension.
- The relatively unpopular cross-country distribution principles based on greenhouse gas emissions and employment in polluting industries indicate public concerns about moral hazard. Citizens may well fear that this would reward polluting EU member states for their inaction on climate change and enable them to profit from EU funding without making any efforts to decarbonise. This highlights a challenge for the EU in designing effective policies for the green transition as it suggests that moral hazard concerns outweigh collective interests.
- Citizens' concerns and expectations need to be taken seriously. Failing to do so may erode the political basis of the green transition in the EU.

### Note

Further information about the study can be found in the version published in the → [Journal of European Public Policy](#).

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## Imprint

### The Politics of Inequality Perceptions, Participation and Policies

is an interdisciplinary Cluster of Excellence at the University of Konstanz within the framework of the Excellence Strategy of the federal and state governments. The gap separating the poor from the rich, the worldwide rise of populism, the division of burdens in the fight against climate change, unfairly distributed access to education — many current debates are as much about inequality as they are about other issues. These topics pose highly complex questions, yet scientifically grounded answers are still few and far between. This is where we come in to investigate “The Politics of Inequality”: the political causes and consequences of inequality.

– [inequality.uni.kn](https://inequality.uni.kn)

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