

## **Citizen assemblies can enhance political feasibility of ambitious climate policies**

Authors: Lennart Kuntze<sup>1</sup>, Lukas Paul Fesenfeld\*<sup>2,3</sup>

Current affiliations: <sup>1</sup> Harvard University, United States; <sup>2</sup> ETH Zurich, Switzerland;

<sup>3</sup>University of Bern, Switzerland

\*Corresponding author: Lukas Paul Fesenfeld, [lukas.fesenfeld@gess.ethz.ch](mailto:lukas.fesenfeld@gess.ethz.ch), ETH Zürich, Haldeneggsteig 4, 8092, Switzerland

### **Abstract**

Public surveys suggest that the majority of citizens in most democratic countries is in favor of more ambitious action on climate change. Yet, policymakers still hesitate to propose ambitious but costly climate policies because they fear public backlash. Randomly sampled citizen assemblies are promoted as way to increase the political feasibility of ambitious but costly climate policies. To test this claim, we conducted a representative survey (n = 1,252), survey-embedded conjoint experiment (n = 624) and semi-structured interviews with a survey subsample (n = 41) in Germany. Our key finding is that, in Germany, a citizen assembly can increase public support for climate policies. However, this positive effect is strongly dependent on how the citizen assembly is designed and on the degree of public awareness and informedness about the assembly. We provide recommendations for informing about and designing citizen assemblies to enhance the political feasibility of ambitious climate policies.

## Introduction

The most recent IPCC report is unambiguous<sup>1</sup>: Ambitious climate policies are urgently needed for reaching the Paris climate targets and preventing the most devastating consequences of the climate crisis. Yet, implementation of such policies often comes with visible short-term costs and restrictions of personal liberties for citizens<sup>2-4</sup>. Many politicians in democracies fear that bold climate action will lead to salient protests, such as the *yellow vest* movement in France that erupted after President Macron's announcement of a gradually increased carbon tax in 2018<sup>5,6</sup>. Hence, policymakers perceive a small public appetite for ambitious climate policies and, as a result, propose less ambitious climate policies. In other words, policymakers face a perceived tradeoff between effective climate protection and political feasibility<sup>6,7</sup>. However, politicians (and citizens alike) demonstrably underestimate the true degree of public support for climate action in their constituencies<sup>8-10</sup>: public surveys suggest that the majority of citizens in most democratic countries is in favor of more ambitious action on climate change<sup>6,11,12</sup> and that protests against policies are either led by loud minority groups dominating the discourse or are, *per se*, about the policy process and design (rather than its goal/purpose)<sup>5,6,13</sup>.

Indeed, both how and by whom climate policies are proposed is crucial for their political feasibility. For example, Klenert et al.<sup>14</sup> found a significant link between citizens' trust in politicians and public support for a carbon tax. This suggests that citizens' trust in politicians shapes how they view the legitimacy of climate governance and the credibility of information provided by governments<sup>15</sup>. A lack of trust in government often results from a lack of representation, a populist critique of 'corrupt elites' and a perceived lack of options for citizens to participate in the policymaking process<sup>5</sup>. The perceived credibility of information, in turn, is especially crucial for climate policy, since the abstract (often 'invisible') and delayed nature of the human impact on the climate makes a high trust in the 'sender' of information (incl., scientists, policymakers, media outlets) and the proposer of climate policy vital<sup>5</sup>.

A widespread argument is, thus, that public support for climate policies can increase as result of a more transparent and inclusive policymaking process<sup>5,16</sup>. To this end, randomly sampled citizen assemblies (also called 'mini-publics') are proposed as a way to increase the political feasibility of ambitious but costly climate policies<sup>16,17,18</sup>. A suite of good study has been done around citizen assemblies, including with regard to climate change – for example, an assessment of the link between deliberative democracy and climate governance<sup>16</sup>, a case study overview of national citizen climate assemblies<sup>10</sup>, and a survey of public opinion about the

proposals of the French Citizen Climate Assembly<sup>19</sup>. However, it has, to the best of our knowledge, not yet been systematically assessed if citizen assemblies truly increase public support for ambitious climate policies, compared to other forms of climate governance. To fill this gap, we conducted a representative survey (n = 1,252), survey-embedded conjoint experiment (n = 624) and semi-structured interviews with a survey sub-sample (n = 41) in Germany (see details in Methods section below and in the Appendix A). In this brief Comment, we present and analyze the key findings of our survey and the qualitative interviews, and derive related recommendations. Germany represents an important case study for investigating the effects of citizen assemblies on public support for ambitious climate policies. It is a key actor in global and European climate governance and represents a high-income, industrial democracy responsible for substantial CO<sub>2</sub> emissions<sup>6</sup>. Moreover, in April to June 2021, the first German national citizen climate assembly was held and supposedly, more such assemblies will be held in Germany and similar countries in the future.

#### **Citizen climate assemblies: a primer**

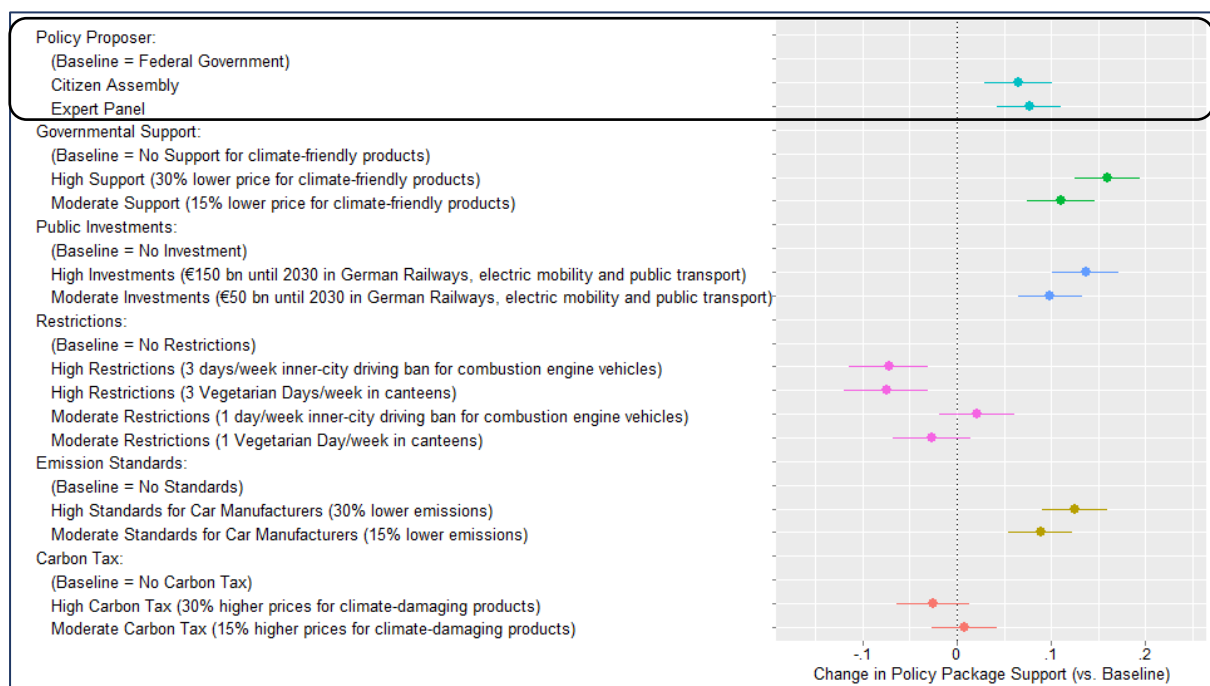
Citizen assemblies are ‘mini-publics’ of 100 – 200 people who are determined by lottery and representative of the population’s composition at large (in terms of a host of key parameters like gender, age, region, education, or political views). Generally, they are initiated by a civil society organization, the government or parliament. Typically, the assembly participants convene regularly over several months to (1) hear presentations from a variety of experts, (2) discuss and deliberate (in the plenum and in small groups) and (3) formulate, and vote on, climate policy recommendations, in order to respond to an overall policy question / prompt. The recommendations adopted by the group (generally, by majority vote rule) are presented to the government or parliament for consideration.

Citizen climate assemblies have been held in various democratic contexts, including in Germany (2021), Ireland (2016), UK (2020) and France (2019). For example, in France, the group adopted 149 proposals that typically received 90% of votes. Initially, French President Macron agreed to put 146 of the measures before parliament (and rejected only 3). However, the ultimate degree of uptake of the proposals by government is to be seen.

#### **Climate citizen assemblies can increase public support**

Conjoint experiments offer a unique experimental setting for studying complex policy preferences under realistic choice conditions<sup>20</sup>. In our experiment, participants each completed four rounds where they indicated their choice between two alternative policy packages (see details in Methods section below). Each policy package consisted of six attributes, namely the policy proposer (i.e., who proposed the policy package – federal government, expert panel or citizen assembly) and five key climate policy levers (financial support, public investments,

regulations/restrictions, emission standards and carbon tax). We chose these five policy levers because they are the most prominent instruments in the international and German climate policy debate<sup>6,21,22</sup> and/or form part of existing climate policy legislations in Germany<sup>23</sup>. For each of the five policy levers, three clearly labelled degrees of policy stringency (i.e., level of policy ambition)<sup>6</sup> were randomly varied for each policy package: no (= baseline), moderate or high stringency. This experimental design allows us to estimate the effect of the policy proposer (and of the other five attributes) on the choice probability of differently designed, realistic policy packages. Figure 1 shows the results of the conjoint experiment.



**Figure 1:** Results of Conjoint Experiment in Germany (Choice Task, 4,902 observations).

*Note:* 624 respondents were given four consecutive rounds of choice tasks. 106 observations are missing due to occasional non-completion of single rounds by some respondents, resulting in a total of 4,902 observations.

*Note:* The point estimates represent the average marginal component effects (AMCEs) of each attribute value (compared to the baseline value) on the choice probability of a policy package. The lines represent 95% confidence intervals with standard errors clustered per respondent. For orientation, a score of +1.0 for citizen assembly would mean that, if one policy package featured citizen assembly as proposer, participants always automatically chose that policy package compared to a package that featured the baseline. See Appendix A, Table A4 for detailed regression results.

The key finding is that, in Germany, a citizen assembly has a positive effect on public support for climate policies. Specifically, we find that, compared to a policy proposal made by the federal government, the choice probability of a given policy package on average increases by around 6.5 percentage points if made by a citizen assembly. We find a similar positive effect for policy proposals made by expert panels (7.7 points). However, the effect on public support is less substantial than expected, and only marginal compared to the effects of some climate policy instruments. For example, increasing financial support for climate-friendly products to

lower their price by around 30 percent leads to around 16 percentage points higher choice probability, compared to a policy package not including any subsidies for climate-friendly products. Also, high public investments into clean infrastructures and technologies increase the choice probability by 13.7 percentage points. Interestingly, while moderate restrictions of personal liberties and a high carbon tax show a small negative effect on public support, this effect is not significant. Only high restrictions (in the form of veggie days and inner-city driving bans) significantly decrease support, by around 7-8 percentage points. On average, the positive support effects of a citizen assembly could compensate for the negative support effects of such undesired policy instruments and, thus, increase public support for ambitious climate policies.

### **Informing citizens about assemblies can further boost support and legitimacy**

The findings of the conjoint experiment were complemented by 41 semi-structured interviews, where we qualitatively explored participants' perceptions of citizen assemblies and policy preferences. Overall, four key insights emerge from our qualitative analysis.

First, the policy preferences of interview participants were, reportedly, often motivated by what they believe to be the majority view or social norm regarding an aspect of climate policy (this is also called “second-order belief” effect<sup>8</sup>). The examples of the French and German national climate citizen assemblies suggest that they can be a catalyst for raising citizens' awareness about the existing high levels of public support for far-reaching climate policies. Thus, the publicly salient climate policy proposals made by citizen assemblies might help to update people's potential misperceptions about the degree to which fellow citizens would accept ambitious but costly climate policies<sup>8</sup>. This might also help to moderate policymakers' concerns over a public backlash when proposing or adopting such climate policies<sup>6,9</sup>.

Second, in the interviews, people indicated that their level of support for a citizen assembly vitally depended on how representative the assembly is, how resilient it is to lobby influence, and to what degree the proposals are implemented by elected policymakers. These insights also correspond well with our survey results, which show that a majority of people demand more citizen influence in climate policymaking, while, however, fearing disproportionately large influence of unrepresentative and interest groups (respectively, 68% of respondents feel that “citizens should have more say in German climate policy” and that “businesses have too much influence and say in German climate policy”; in both cases, 21% of respondents have a neutral view. (See details in Appendix A, Table A3)).

Third, on average, the more informed interviewees were about the format and process of citizen assemblies, the more they viewed them as useful and effective part of climate policymaking. Specifically, in the interviews, we provided participants with neutral information about citizen assemblies, including to correct misperceptions (e.g., the perceptions that extreme political views are over-represented in citizen assemblies; that citizens deliberate solely on the basis of their pre-existing knowledge; that citizen assemblies replace the political process; or that citizen assembly proposals automatically become policy). Building interviewees' awareness and insight about citizen assemblies notably increased their positive effect on policy support.

Fourth, according to the interviews, a combination of a citizen assembly and an expert panel, that in tandem make proposals to the federal government, promises to boost public support for climate policy. Interviewees often indicated that they prefer this combination because citizens bring "real-world, local knowledge/experience" and experts bring "in-depth issue/solution knowledge". Another factor is that most interviewees are, to some degree, distrustful of all actors (government, experts, fellow citizens) and want there to be checks and balances in place.

### **Recommendations for designing climate citizen assemblies**

What are the key takeaways of our findings for the design of climate citizen assemblies? There are various notable parameters for the set-up and process of a citizen climate assembly that significantly impact people's view of such assemblies and their outputs. More specifically, from our findings and analysis, we can derive five key recommendations for designing citizen assemblies and increasing public support for ambitious climate policies.

First, given the fact that respondents in Germany generally showed a low level of awareness and knowledge about citizen assemblies, and that this negatively affected their views of such assemblies, organizers of climate citizen assemblies (mostly, government-mandated agencies) need to raise public awareness around the design and work of the assembly, and proactively address related misconceptions. Also, organizers of climate citizen assemblies need to pay careful attention that no interest groups can exert disproportional influence on its members.

Second, it is crucial that a citizen assembly is highly representative of the public at large (i.e., a true 'mini public') and that it receives a strong mandate from the government (incl., funding and a clear scope for deliberation), ample time, and administrative support. Government and organizers should provide transparent information about the impartiality of the citizen assembly to help build public trust in the representative, neutral structure of the assembly. To

this end, and to increase the public salience of the assemblies' proposals, the organizers could also encourage assembly participants to speak to the press and to their local communities (this was the case for the French CCC); yet, this could also be counterproductive if individual members feel uncomfortable to publicly speak out, become subject to assaults or targeted lobbying. During the process of deliberation, impartial facilitators should keep the group on track and ensure that all members' opinions are heard, and no individuals or sub-groups unduly dominate the discourse.

Third, inputs from a group of diverse experts and stand-by fact checkers should allow for informed debates that are grounded in science. This could, *inter alia*, increase the public support for the work of citizen assemblies. Indeed, 81% of our respondents trust the information provided by climate scientists (see details in Appendix A, Table A3) and the conjoint experiment shows that policy proposals made by expert panels increase public support for ambitious climate policies. Notably, many interviewees prefer a combination of citizen assemblies and expert panels – policy proposals jointly made by experts and citizens could most strongly increase public support for ambitious climate policies. Thus, one option could be creating an expert panel that complements, and works in tandem with, the citizen assembly.

Fourth, the effects of citizen assemblies on public support for ambitious climate policies might also depend on how policymakers 'use' the assemblies' proposals as basis for policymaking. Hence, before the work of a citizen assembly begins, it is vital to set clear rules for the uptake of assembly proposals by policymakers. For example, Renn<sup>24</sup> suggested that governments should commit to providing a public explanation for each proposal that is not adopted by policymakers. Such commitment could mitigate widespread concern with regard to citizen assemblies, namely that they are a mere 'tool' for policymakers to create positive publicity, cherry-pick proposals and shift blame to the citizen assembly, where needed.

Lastly, a citizen climate assembly should only be the starting point for a continuous collaborative effort between government, experts and citizens. This can, for example, be fostered through local citizen consultations where climate policy proposals are discussed with representative groups of people, accompanied by a fact checker and a scientific advisor. Such formats can further spark a public discourse and enhance citizens' role in the democratic process.

## **Open questions and further research**

We find that citizen climate assemblies can be a key tool for enhancing public dialogue around, and support for, ambitious climate action. Yet, there are several limitations of our analysis and a number of open questions that merit further exploration.

First, we assume that increased awareness and positive experiences of people with citizen assemblies – a relatively new concept in most countries – could increase people’s trust over time and, thereby, the positive effects on policy support. Yet, to test this, we need longitudinal studies to monitor how much real assemblies affect public opinion over time. Further, qualitative process-tracing, field and natural experimental studies could help to increase the external validity of our results. For example, media reporting and public discourse around citizen assemblies, their proposals and the political uptake, could be key determinants of public support opinion. Thus, comparative studies of real-world effects of climate citizen assemblies on public opinion and policymaking, over time, are an important avenue for further research.

Second, our respondents indicated a clear preference for a combination of citizen assembly and expert panel. Further work needs to assess how to ideally mix both formats together, and potentially also combine them with other forms of direct democratic decision-making (e.g., it could be tested combining citizen and expert panels with direct democratic referenda, whereby all voters (instead of elected politicians) directly vote on the proposals jointly made by a combined citizen assembly and expert panel). A core consideration in this regard must be to assess to what degree interest groups could influence the policymaking process – especially, in comparison to existing processes of climate policymaking in representative democracies.

Third, to increase trust and awareness around citizen assemblies, communication strategies must be designed to reach a broad audience, including those who do not trust government and/or channels. Thus, further research is necessary to assess why this awareness and information effect exists with regard to citizen assemblies and to investigate how to better inform the broader public about the existence, functioning and rationale of citizen assemblies.

Overall, citizen assemblies offer a significant opportunity to increase policy legitimacy and public support. However, they are no panacea. Careful climate policy design and communication work still play a crucial role to increase the political feasibility of ambitious climate policies.



## **Methods**

The research design for our study relies on the combination of a conjoint experiment<sup>1</sup> (n = 1252) and semi-structured qualitative interviews (n = 41). The conjoint experiment was embedded in a population-representative survey that was implemented in Germany from August 21 - 28, 2020. The interview partners were sampled from the group of respondents that completed the survey. All interviewees conducted another preparatory survey ahead of the interview. The interviews were conducted, via video conference software, from December 7 - 18, 2020. Data and replication code to reproduce the analyses presented in this study will be made available upon publication in the Harvard Dataverse public repository.

### ***Data collection***

An internet panel from a commercial provider of sampling services (Kantar Group, Munich, Germany) was used to recruit the study participants. The recruits were not given any information about the topic of the study. They received a small financial reward for their participation. Quota sampling was used based on interlocked quotas on gender and age, as well as non-interlocked quotas on education and region, in Germany. For data collection, participants who were younger than 18 years old and/or who are not allowed to vote in German federal elections were screened out from the survey before/right at the start, as their answers would be less relevant for the policy-related questions. In addition, participants who indicated to not believe in the existence of climate change were screened out, since their support for any climate policy is generally in question. To ensure high response quality we set a speeder limit (< 40% of median response time = < 8 minutes) and screened out respondents falling below this threshold. We predominantly used forced-choice questions to prevent missing values.

The final survey sample consisted of n = 1,252 participants. Survey participants were randomly assigned into two conditions, of which one condition was the completion of the survey-embedded conjoint experiment. In total, 624 participants conducted the conjoint experiment; they were given four consecutive rounds of choice tasks (note: 106 observations are missing due to occasional non-completion of single rounds by some respondents, resulting in a total of 4,902 observations). The sample distribution of both the overall survey sample and the conjoint experiment sub-sample closely follow the national population statistics for the 18+ voting age population of German citizens (see Appendix A table A1).

The semi-structured interviews (ca. 30 minutes each) were conducted with a sub-sample of 41 participants, that were sampled in a three-stage process: 1. At the end of the survey, respondents were asked to indicate their willingness to participate in an interview and, if so, provide their email address – 223 participants indicated a willingness to participate; 2. Out of the total number, 70 people were selected based on the quotas and a random number generator, and contacted for an interview (the aim for the interviews was  $n = 45$ ); 3. we re-sampled, as necessary, to arrive at a representative sample of 45 interview participants. Four participants did not show up to their respective interview (i.e., final  $n = 41$ ). The final interview sample quota is roughly in line with the national population statistics for gender and age. Notably, for age, the young are under-represented and the mid-aged over-represented. Regarding region, Eastern German states are under-represented, while the South-West and North of Germany are notably over-represented. Regarding education level, the sample has an under-representation of low education and significant over-representation of highly educated people. (see Appendix A, Table A1 for details).

## ***Research design***

### ***Conjoint experiment***

In the conjoint experiment, participants responded to four choice tasks. In each task, they had to indicate their preference between two alternative national climate policy packages (A and B) for Germany. Policy packages A and B, respectively, consisted of the 6 policy attributes that were displayed in a fully randomized way and combination, from the full set of levels.

This configuration of the conjoint experiment allows us to estimate the effects of the policy proposer on public support for climate policies compared to the effects of other policy design features, namely the five most prominent climate policy instruments in the international and German debate. We selected these instruments based on the climate policy literature<sup>2,3</sup> and interviews with experts conducted by Fesenfeld<sup>4</sup>. Some of these instruments are also already implemented into national legislation in Germany<sup>5</sup> and, thus, enjoy a high external validity.

*Table M1: Overview of conjoint experimental treatment attributes and values*

<b>Attribute (Instrument)</b>	<b>Attribute level</b>
<b>1. Policy Proposer</b>	<ol style="list-style-type: none"> <li>1. Federal Government</li> <li>2. Expert Panel</li> <li>3. Citizen Assembly</li> </ol>
<b>2. Government financial support for climate-friendly products</b>	<ol style="list-style-type: none"> <li>1. No Support for climate-friendly products</li> <li>2. Moderate Support (15% lower price for climate-friendly products)</li> <li>3. High Support (30% lower price for climate-friendly products)</li> </ol>
<b>3. Public investments in low-carbon infrastructure</b>	<ol style="list-style-type: none"> <li>1. No Investment</li> <li>2. Moderate Investments (€50 bn until 2030 in German Railways, electric mobility and public transport)</li> <li>3. High Investments (€150 bn until 2030 in German Railways, electric mobility and public transport)</li> </ol>
<b>4. Emission standard for producers (proxy: car manufacturers)</b>	<ol style="list-style-type: none"> <li>1. No Standards</li> <li>2. Moderate Standards for Car Manufacturers (15% lower emissions)</li> <li>3. High Standards for Car Manufacturers (30% lower emissions)</li> </ol>
<b>5. Carbon tax level</b>	<ol style="list-style-type: none"> <li>1. No Carbon Tax</li> <li>2. Moderate Carbon Tax (15% higher prices for climate-damaging products)</li> <li>3. High Carbon Tax (30% higher prices for climate-damaging products)</li> </ol>
<b>6. Restrictions / Regulations</b>	<ol style="list-style-type: none"> <li>1. No Restrictions</li> <li>2. Moderate Restrictions (1 day/week inner-city driving ban for combustion engine vehicles)</li> <li>3. Moderate Restrictions (1 Vegetarian Day/week in canteens)</li> <li>4. High Restrictions (3 days/week inner-city driving ban for combustion engine vehicles)</li> <li>5. High Restrictions (3 Vegetarian Days/week in canteens)</li> </ol>

### ***Estimation strategy***

We analyzed the data collected in the conjoint experiment based on average marginal component effects (AMCEs, see Hainmueller et al.<sup>1</sup>) for the binary choice outcome. Following the standard nonparametric estimation approach proposed by Hainmueller et al. (2014), the average marginal component effects were estimated by least squares regressions, wherein the

proposal attributes were entered as a series of dummy variables. Standard errors were clustered by respondent to account for autocorrelation<sup>1</sup>.

### *Semi-structured interviews*

The semi-structured interviews served to qualitatively explore participants' perceptions of climate citizen assemblies and the underlying aspects shaping their policy preferences. More specifically, in preparation for each interview, we reviewed the participant's responses from the main survey and the shorter preparatory survey and identified key themes. In the interview (ca. 30 minutes each; all interviews were conducted in German and virtual), we then asked participants to explain their particular choices and asked follow-up questions, as relevant, to understand key determinants for people's preferences.

We also asked a suite of fixed questions to each interviewee, including the following questions related to how and by whom climate policy is made:

- Which of the three forms of climate policy proposal – government, expert panel, citizen assembly – do you prefer? Why? In your view, what are the key differences between these forms of policy proposal, that significantly shape your preferences?
- What do you know about citizen climate assemblies? How do you feel about them? Do you feel that a citizen assembly would give the German climate policy a higher legitimacy?
- Broadly speaking, do you feel that citizens in Germany have enough opportunity to become involved and participate in climate policymaking? Why/why not?
- What are your ideas for improving citizen involvement in climate policymaking? Do you feel that most citizens would make use of more opportunities for becoming involved?

The interviews were recorded and afterwards transcribed in written. Key themes in the interview responses were collected for the analysis (see above). The interviews form a crucial part of the analysis by providing qualitative insight into why people have certain preferences (incl., their needs and concerns) and how citizen assemblies could help build public support.

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## Appendix:

### “Citizen assemblies can enhance political feasibility of ambitious climate policies”

Authors:

Lennart Kuntze, Harvard University, Kennedy School of Government  
Dr. Lukas Paul Fesenfeld (corresponding author), Bern University/Oeschger Centre for  
Climate Change Research & ETH Zurich, [lukas.fesenfeld@gess.ethz.ch](mailto:lukas.fesenfeld@gess.ethz.ch)

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**Appendix A, Table A1: Quota, Survey and Interview Sample Statistics**

	National Representative Quota (Germany)	Overall Survey (n=1,252)	Conjoint Experiment (n=624)	Interviews (n=41)
<b>Gender</b>				
male	50%	50%	50%	54%
female	50%	50%	50%	46%
<b>Age</b>				
< 18 - 29 years	19%	19%	21%	7%
< 30 - 39 years	17%	16%	15%	17%
< 40 - 49 years	18%	18%	18%	20%
< 50 - 59 years	22%	23%	21%	32%
< 60 - 69 years	16%	17%	18%	17%
< 70+ years	8%	8%	7%	7%
<b>Region / Federal State</b>				
Baden-Württemberg	13%	12%	14%	22%
Bayern	15%	15%	14%	10%
Berlin	4%	4%	5%	7%
Brandenburg	3%	3%	2%	7%
Bremen	1%	1%	1%	2%
Hamburg	2%	2%	2%	7%
Hessen	7%	7%	6%	7%
Mecklenburg-Vorpommern	2%	2%	2%	0%
Niedersachsen	10%	10%	11%	7%
Nordrhein-Westfalen	22%	22%	23%	20%
Rheinland-Pfalz	5%	5%	5%	0%
Saarland	1%	1%	1%	2%
Sachsen	5%	5%	5%	0%
Sachsen-Anhalt	3%	3%	3%	0%
Schleswig-Holstein	4%	4%	3%	7%
Thüringen	3%	3%	3%	0%
<b>Education</b>				
< No Degree	15%	11%	12%	2%
< Lower level secondary school degree	20%	35%	33%	22%
< Higher level secondary school degree	35%	28%	28%	20%
< university degree	30%	27%	27%	56%



## Appendix A, Table A2: Descriptive Evidence used in the Paper

How much do you agree or disagree with the following statements? (n = 1,252)

**Statement: Information from climate scientists is not trustworthy.**

Strongly agree	4%
Agree	5%
Somewhat agree	10%
Neither agree nor disagree	18%
Somewhat disagree	17%
Disagree	24%
Strongly disagree	22%
Total	100%

**Statement: Citizens should have more say in German climate policy.**

Strongly agree	13%
Agree	20%
Somewhat agree	35%
Neither agree nor disagree	21%
Somewhat disagree	6%
Disagree	3%
Strongly disagree	2%
Total	100%

**Statement: Businesses have too much influence and say in German climate policy.**

Strongly agree	21%
Agree	21%
Somewhat agree	26%
Neither agree nor disagree	21%
Somewhat disagree	5%
Disagree	3%
Strongly disagree	3%
Total	100%

## Appendix A, Table A3: Example Conjoint Choice Task

Example of a survey-embedded choice task as given to 624 respondents in four consecutive rounds (note: 106 observations are missing due to occasional non-completion of rounds by some respondents, resulting in n = 4,902 observations). The survey was conducted in German.

**Aufgabe 1:** Bitte vergleichen Sie gründlich die folgenden zwei Politikpakete zum Klimaschutz in Deutschland. Jedes Paket besteht aus verschiedenen Maßnahmen.

	Politikpaket A	Politikpaket B
<b>Finanzielle Unterstützung:</b>	Keine Unterstützung für klimafreundliche Produkte	Große Unterstützung (30% niedrigerer Preis für klimafreundliche Produkte)
<b>Investitionen in klimafreundliche Mobilität:</b>	Keine Investitionen	Investitionen (€50 Mrd. bis 2030 in DB, Elektromobilität und ÖPNV)
<b>Standards für Produzenten:</b>	Hohe Standards für Autohersteller (30% weniger Emissionen)	Standards für Autohersteller (15% weniger Emissionen)
<b>CO2 Steuer Höhe:</b>	Hohe CO2 Steuer (30% höherer Preis für klimaschädliche Produkte)	Hohe CO2 Steuer (30% höherer Preis für klimaschädliche Produkte)
<b>Restriktionen:</b>	Restriktionen (1 fleischfreier Tag pro Woche in öff. Kantinen)	Keine Restriktionen
<b>Paket vorgeschlagen von:</b>	Klima-Bürgerrat	Expertenkommissionen

**Welches Politikpaket unterstützen Sie eher?** (Bitte beachten Sie, dass Sie Ihre Antwort nicht ändern können)

Paket A

Paket B

**Appendix A, Table A4: Conjoint Regression Results (corresponding to Figure 1 in main manuscript)**

Attribute	Level	AMCE	Std. Err	Z-Value	Pr(> z )
<b>Policy Proposer</b>	Citizen Assembly	0.0653	0.0183	3.5627	***
	Expert Panel	0.0766	0.0174	4.4094	***
<b>Government Financial Support</b>	High Support (30% lower price for climate-friendly products)	0.1595	0.0175	9.1131	***
	Moderate Support (15% lower price for climate-friendly products)	0.1107	0.0182	6.0777	***
<b>Public Investments</b>	High Investments (€150 bn until 2030 in German Railways, electric mobility and public transport)	0.1368	0.0181	7.5596	***
	Moderate Investments (€50 bn until 2030 in German Railways, electric mobility and public transport)	0.0986	0.0173	5.6945	***
<b>Restrictions</b>	High Restrictions (3 days/week inner-city driving ban for combustion engine vehicles)	-0.0723	0.0216	-3.3522	***
	High Restrictions (3 Vegetarian Days/week in canteens)	-0.075	0.023	-3.2621	**
	Moderate Restrictions (1 day/week inner-city driving ban for combustion engine vehicles)	0.0212	0.0203	1.0448	
	Moderate Restrictions (1 Vegetarian Day/week in canteens)	-0.0263	0.0211	-1.2439	
<b>Emission Standards</b>	High Standards for Car Manufacturers (30% lower emissions)	0.1253	0.0176	7.1025	***
	Moderate Standards for Car Manufacturers (15% lower emissions)	0.0891	0.0174	5.1315	***
<b>Carbon Tax</b>	High Carbon Tax (30% higher prices for climate-damaging products)	-0.0255	0.0197	-1.2963	
	Moderate Carbon Tax (15% higher prices for climate-damaging products)	0.0082	0.0177	0.4632	
<b>Baseline Level</b>					
Policy Proposer	Federal Government				
Gov. Fin. Support	No Support for climate-friendly products				
Public Investments	No Investment				
Restrictions	No Restrictions				
Emission Standards	No Standards				
Carbon Tax	No Carbon Tax				
<b>Number of Observations</b>	4,902				
<b>Number of Respondents</b>	624				