# Citizens' Climate Report

# **Recommendations for German climate policy**

A report developed over 12 sessions by 160 randomly drawn people from across Germany Advised by experts from science, politics, and civil society





### Foreword by Horst Köhler, former President of Germany

Ladies and gentlemen,

The climate crisis is not a concern for the distant future. Rather, it is already underway and making its presence known. To achieve the goals Germany committed to in 2015 with the signing of the Paris Agreement, society must be ready for change. It is therefore fitting that the Citizens' Climate Assembly (de. Bürgerrat Klima) dealt extensively with this pressing topic. This Citizens' Report presents their recommendations, agreed upon through a majority vote, to the policy makers of Germany.

Over a period of eight weeks, randomly selected citizens came together to offer their evenings and weekends, over 50 hours in total, and even more for some. The participants, young and old, came from very different life paths across every part of Germany, with a diversity of ideas and professions. Most of them remained committed throughout, even amidst easing pandemic restrictions and lovely weather. With the help of scientists, they grappled with complex issues. They discussed, argued, and raised crucial questions of social justice in all processes of change.

In the end, despite their differences, the Citizens' Assembly developed common ideas. They have demonstrated that informed citizens, through this innovative process of deliberation, are often further ahead than politicians, the media, and even the wider public may assume.

The Citizens' Climate Assembly acknowledges that slowing climate change is a responsibility that can be shirked no longer. And in their guiding principles, the participants describe this responsibility as belonging to both society as a whole as well as to individuals. At the same time, they call on politicians to actually implement what they've already agreed to – such as the 1.5 degree climate target of the 2015 Paris Agreement. In the results of the Citizens' Assembly, I see a shining example of how liberal democracy can master the herculean task of climate protection (as well as the preservation of the environment as a whole) to the benefit of all.

I also see in the great commitment made by these citizens a certain longing — a longing for political debate that does not rely on fearmongering or pitting lifestyles against one another, but truly strives to find the best solutions that can ensure the future viability of the entire country. And that is precisely what we need: competition for the best ways to protect the climate; truthfulness about the costs of action and inaction alike.

The federal government, the parliament, and political parties should not only accept the recommendations of the Citizens' Assembly, but also study them closely. While the decision-making process remains in the hands of the government and parliament, I believe these recommendations can help to bring about the crucial changes we already know to be necessary.

For me, the Citizens' Assembly sends a powerful message: do not underestimate citizens, nor their readiness for change, nor their willingness to participate in the search for ways out of the climate crisis. There are solutions, and this moment demands we fight for them.

The Citizens' Climate Assembly deserves thanks and appreciation from all of us.

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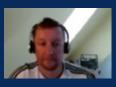


























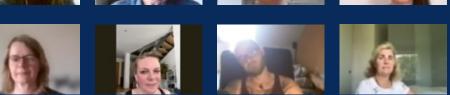










































# Bürgerrat Klima











































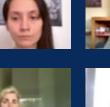












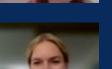


















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### Acknowledgements

The Citizens' Climate Assembly addressed one of the most important questions of our time: how should we deal with the climate crisis?

More specifically, approximately 160 citizens asked themselves how Germany can fulfill its contribution to the goals of the Paris Climate Agreement by limiting global warming to well below 2 degrees, and if possible, to 1.5 degrees.

A national citizens' assembly is an enormous undertaking whose success relies on the support of many. This one was organized by civil societies, and many organizations and individuals helped to guide and support it.

The Citizens' Climate Assembly proceeded under the patronage of former German President Prof. Dr. Horst Köhler, who fulfilled his role with dedication, interest, and a keen sense for communication. In press conferences, livestreams, and in the Citizens' Assembly itself, Dr. Köhler displayed a deep understanding of the subject matter, as well as professionalism and interpersonal strength. We are very grateful for his commitment.

The Citizens' Climate Assembly was financed by donations and funding from foundations.

Sincere thanks go out to the following foundations:

- Schöpflin Stiftung
- Open Society Foundations
- GLS Treuhand
- Deutsche Postcode-Lotterie-Stiftung

and to all donors.

The official sponsor and organizing institute for the Citizens' Climate Assembly was *BürgerBegehren Klimaschutz (BBK)*, an association without which this citizens' assembly would not have been possible. Special thanks go out to the management and project staff at BBK for their courage and extraordinary commitment.

Thanks are also due to the experts on the scientific board of advisors who accompanied the Citizens' Climate Assembly from a scientific point of view; to the members of the advisory council from business and civil society; to the more than 50 speakers who supported the Citizens' Assembly with their expertise; and to the many supporting organizations. Each of them are listed at the end of this Citizens' Report.

Of course, special thanks are also in order for the participants who, as citizen representatives, dedicated more than 50 hours of their time to the Citizens' Climate Assembly. With great dedication, stamina, and enthusiasm for discussion, they informed themselves, dealt with topics that were not always easy, debated, and brought the Citizens' Climate Assembly to life.



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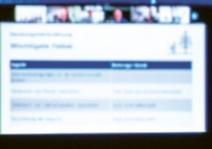


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# **1. The most important facts in brief**

160 people, 12 sessions, 1 topic: How can Germany achieve the goals of the Paris Climate Agreement with due consideration to social, economic, and environmental factors?

This was the guiding question of the Citizens' Climate Assembly, Germany's third national lottery-based citizens' assembly, which took place from April to June 2021.

In 2015, Germany signed the Paris Climate Agreement, thereby committing to fulfill its national responsibility in limiting the global temperature increase to well below 2 degrees Celsius, if possible to 1.5 degrees. To achieve this goal, the parliament passed the Climate Protection Act in 2019. Following a ruling by Germany's constitutional court in the spring of 2021, the targets of this Climate Protection Act were readjusted and made more ambitious. Nevertheless, it currently seems unlikely that Germany will be able to achieve the goals of the Paris Agreement.

The wide-sweeping reduction of greenhouse gas emissions that is necessary to meet these goals requires comprehensive climate protection measures that will change, even transform, people's lives; thus, such changes also harbor potential for social conflict. For this reason, any transformative measures must be backed by strong democratic legitimacy.

In December 2020, *Scientists for Future* published a statement advocating for the creation of an initial lottery-based citizens' assembly on climate change before the end of 2021. The Citizens' Climate Assembly was then launched by the non-profit association *BürgerBegehren Klimaschutz (BBK)*.

### 1.1. How do citizens' assemblies work?

To represent German society at large, the Citizens' Climate Assembly brought together 160 randomly selected citizens. Over the course of 12 meetings and more than 50 hours, they discussed possible measures and developed policy recommendations to deal with the climate crisis. Amidst the COVID-19 pandemic, the Citizens' Climate Assembly took place entirely digitally.

In order to make the very complex topic of climate change tangible enough for effective discussion in 12 sessions, four fields of action were identified, each of which is particularly impactful for both the climate and everyday life. Smaller working groups were formed for each field of action, where roughly 40 participants dealt with their assigned topic in greater detail over the course of the Citizens' Assembly:

- Energy
- Mobility
- Buildings and Heating
- Food and Agriculture

In the plenary sessions, all participants came together to discuss and deliberate on an additional topic: Instruments of Transformation. During the first four sessions, all participants in the Citizens' Assembly met in a large group and were able to develop a working understanding of the topic of climate change, its consequences, the goals of the Paris Agreement, and the individual fields of action. Afterwards, the citizens were randomly assigned to a working group dedicated to one of the four fields.

Within these working groups, participants developed policy recommendations specific to their field of action. Additionally, participants also met outside of their field of action groups to develop recommendations on the overarching topic of Instruments of Transformation.

As part of this process, the participants were accompanied by subject matter experts from academia, civil society, and business who gave short presentations designed to deliver foundational knowledge and convey a range of perspectives. Over the course of the Citizens' Assembly, each working group had two chances to present the rescommendations they had drafted for their field of action. As part of this process, they obtained a scientific evaluation of their proposals from the experts as well as feedback from the entire Citizens' Assembly group.

In addition to the specific fields of action, participants also dealt with broader questions about the future of society and the planet. They developed overarching principles meant to guide climate protection policy in keeping with this vision for the future. This process took place within the framework of a Future Workshop. The discussion resulted in 10 overarching principles for how society as a whole should approach the climate transformation.

At the end of the Assembly, all citizens voted on each guiding principle and recommendation. Those that received a majority vote were passed on to politicians as the official recommendations of the Citizens' Climate Assembly.





**Buildings and Heating** 

Energy



Food and Agriculture

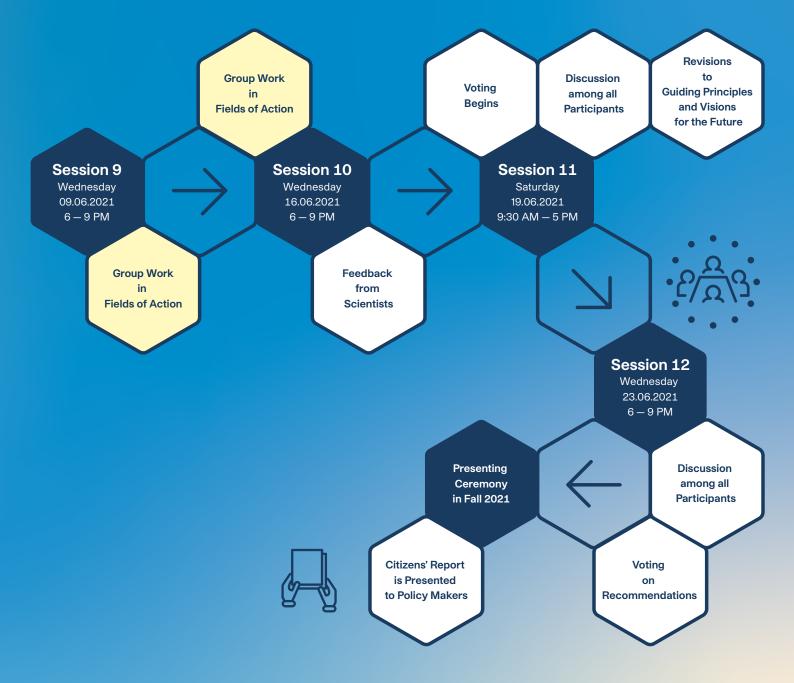


Mobility



Instruments of Transformation





### 1.2. Visions for the future and guiding principles for transformation

#### Visions for the future

The transformation necessary to combat climate change raises questions that go far beyond individual fields of action. In the Future Workshop, the Citizens' Assembly came together to discuss overarching issues. There, they first dealt with the question of what the Germany of 2035 should look like, and how they, their children, and their grandchildren should be able to live. The plenary session broke into smaller groups where participants could discuss their visions for the future.

A common vision emerged, defined by several key features upon which most agreed: cities of the future that have been adapted to meet the needs of the climate, that are sustainable and clean, that offer affordable housing and attractive public transport, where the cost of progress is distributed justly across society, and where humanity and the common good are the leading priorities. In this Germany of 2035, the economy has evolved into an ecological-social marketplace in which environmental consequences are priced transparently and sustainability is profitable. Here, energy is won from the wind and the sun, agriculture is defined by fair prices, and factory farming has been abolished. This future is accompanied by a cultural change: people learn to live modestly, work less and live better, and celebrate solidarity and social cohesion. With this vision of the future in mind, the participants set an ambitious goal for their work in the Citizens' Climate Assembly.

### 10 guiding principles for transformation

10 overarching principles resulted from the Future Workshop. These were developed and agreed upon by the citizens in several steps over the course of the Citizens' Assembly. The guiding principles offer clarity and orientation for the complicated questions we will inevitably face in combatting climate change.

### "It is very important to me that our grandchildren can enjoy good years on this planet."

Karl-Heinz Steiger, Participant of the Citizens' Climate Assembly

- 1. The 1.5 degree target is the top priority.
- 2. Climate protection serves the common good and is to be prioritized over individual interests.
- 3. For every action that impacts the climate, there must be education and transparency.
- 4. Everyone must assume responsibility and accept change as part of combatting the climate crisis.
- 5. Climate protection must be included in all educational programs.

- 6. Climate policy must be generationally just.
- 7. Climate policy must be socially just.
- 8. Climate policy must be globally just.
- 9. The future of the economy must be climate-neutral.
- 10. Actions that impact the climate, whether positively or negatively, must directly impact the actors in turn.

The complete guiding principles are listed at the end of Chapter 2; the first sentence of each principle has been reproduced above.

### 1.3. Fields of action

#### Working group: Energy

In order to reduce the greenhouse gases emitted in energy production, it is imperative that climatedamaging fossil fuels such as coal, gas, and oil are replaced with sustainable, climate-friendly energy sources. The working group dedicated to energy began with the question of how to build out renewable energy sources, especially wind and solar, while strengthening acceptance for these technologies among the general public. In the second part of their work in this field of action, the participants discussed how converting the energy supply to climate-friendly sources could extend beyond the expansion of renewable energy.

As intensive discussions came to a close, the citizens were certain about one thing: the transition to renewable energy must proceed more quickly than the federal government had previously planned. By 2035, Germany's supply of electricity must come entirely from renewable sources. In order to achieve this, policy must provide a stronger and more suitable framework by which private individuals, industry, and the public sector can drive the expansion of wind and photovoltaic systems forward.

The envisioned framework should be realized through legal requirements on the one hand (e.g. requiring at least two percent of the land area in each federal state to be dedicated to wind and solar energy generation; requiring the installation of solar panels on rooftops), and compelling incentives on the other (e.g. reducing the surcharge<sup>1</sup> on personal energy use; greater subsidies for the dual use of agricultural land by means of open-space photovoltaic systems). In many of their recommendations about renewable energy expansion projects, the participants emphasized the importance of actively involving the public early on.

#### Working group: Mobility

Mobility is an important foundation of modern society, transporting both goods and people. However, the transport sector is the cause of nearly a quarter of all Germany's greenhouse gas emissions. Furthermore, transport emissions have not meaningfully decreased at all in the past few decades. A climate-friendly transformation of this sector will require a 90% reduction in greenhouse gas emissions from transport by 2035.

In order to achieve this, there are three major strategies for spurring comprehensive changes: avoiding travel, shifting travel to alternative transportation methods, and improving the efficiency of vehicles and engines. In the working group for mobility, assigned participants dealt with questions of how to ensure the expansion and adoption of more climate-friendly means of transport.

The participants in the working group on mobility consider it essential to create attractive, flexible, and affordable alternatives to private motorized vehicles. The switchover to more climate-friendly mobility should be facilitated through the expansion and optimization of the existing public transport and bicycle infrastructure, both in urban and rural areas. To promote the use of climate-friendly transportation, existing subsidies for car transport should be reduced and given instead to alternative transport methods. Companies should also assume a greater responsibility for promoting the use of climatefriendly transportation among their employees. The internal combustion engine should be banned as soon as possible, and alternative drive systems, especially electric mobility, should be promoted in their place. Research on and funding for other types of climate-friendly drive systems should continue. Furthermore, the participants identified various prerequisites in order for electric mobility to become attractive to consumers, such as expanding the charging infrastructure, and increasing the battery recycling rate.

Regarding air travel, the Citizens' Assembly calls for higher ticket prices through increased taxes that would make flying less attractive and reduce the number of flights overall. They also call for a more ambitious transition to synthetic fuels in aviation, and for reducing air travel, especially short-haul flights.

<sup>1</sup> The Renewable Energy Sources Act (de. Erneuerbare-Energien-Gesetz, EEG) is a law that regulates the advancement of renewable energy in Germany. This law includes the EEG surcharge, which is a method of refinancing the feed-in tariff for green electricity by distributing the financial burden among electricity consumers. The tariff is guaranteed and fixed for a period of 20 years.

#### Working group: Buildings and Heating

The transformation of our heat supply will require significant changes to the way heat is generated and distributed as well as a reduction in the amount of heat consumed. This will only be possible by renovating buildings across Germany to reduce their heating needs by as much as 50%.

The citizens assigned to this field of action have included this pressing matter in their recommendations, stressing at multiple points that homeowners must be provided with information about the urgency of renovating their homes for energy efficiency as well as consultation opportunities. Good examples of energy efficient renovations should be presented to the general public. In addition, the participants recommend that state institutions lead the way by renovating their own buildings for energy efficiency. Financing plays an central role in the recommendations: to accelerate these necessary renovations, state institutions should bear part of the costs.

The participants also discussed the shortage of skilled workers needed to perform so many renovations so rapidly, a lack that threatens to slow the rate of transformation. To address this shortage, they call for a variety of measures to support workers in the building and heating sector: first, the expansion of digitalized technologies used in the building and planning professions; and second, engaging volunteers with experience in construction and renovation. Furthermore, the participants recommend phasing out fossil energy and old heating systems, and call for nationwide mandatory heat planning for municipalities and districts.

#### Working group: Food and Agriculture

Our diets have a major impact on the climate. Both the production and consumption of foods change our ecosystems and emit greenhouse gases including CO<sub>2</sub> methane, and nitrous oxide. Animal agriculture accounts for the largest share of greenhouse gas emissions in the food sector.

Transforming our food system is at once a crucially important step towards the 1.5 degree target, and also one of the most sensitive topics in the public climate debate. The participants assigned to this field of action discussed how we can change the production and consumption of food to benefit both the environment and our health, and which instruments can help us forge the path to a sustainable food system. Over the course of discussion, it became increasingly clear that the consumption and production of food are intimately intertwined, and that this relationship plays an important role in combatting climate change.

The recommendations of the Citizens' Assembly are written in clear language: the transformation of the food sector must take place immediately and must be supported by a great willingness on behalf of the public to make restrictions and changes. By 2030, agriculture and food production across the EU must undergo comprehensive structural change in the name of climate protection. The introduction of a modern law for Germany's agriculture sector should limit emissions and offer farmers viable opportunities to switch to regenerative agricultural practices. Subsidies should be calculated according to environmental impact, and thus incentivize agriculture to gradually convert. Through a reduction in the number of livestock, emissions from animal agriculture should be reduced by 50% or more, and consumers should contribute to this effort by significantly reducing their consumption of meat and dairy products.

By 2030, all food products should display an official seal, for example in the form of a traffic light, that clearly indicates a product's climate impact. The price of food products should also reflect their environmental and health costs, such that climate-friendly products become less expensive while climate-damaging ones climb in price. In another major step, the participants proposed that new nutrition guidelines ensure climate-friendly menus in public spaces such as canteens, schools, and daycare centers as early as 2023. At the same time, food waste must be disincentivized through new legal requirements.

#### Instruments of Transformation

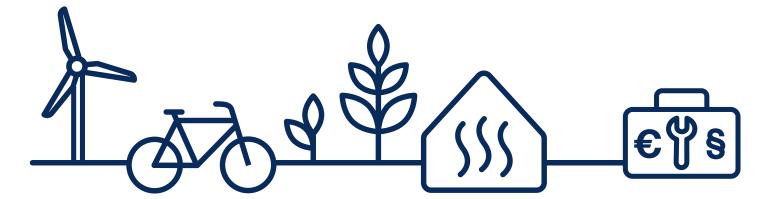
The specific interplay of various instruments of climate policy will be decisive in shaping climate protection in Germany moving forward. As such, instruments of change are an important topic for the Citizens' Climate Assembly.

Carbon pricing is considered to be among the most critical instruments of climate policy. If set at an appropriate level, carbon pricing could make emitting CO<sub>2</sub> financially unattractive. This instrument is controversial, however, because of its impact on private households, among other things. Carbon pricing was discussed in the Citizens' Climate Assembly across every field of action. Special attention was paid to questions of distributive justice.

As a result of their discussions, the Citizens' Assembly recommends implementing carbon pricing as a binding means of climate protection. Transparency will be necessary in calculating the price of CO<sub>2</sub> emissions as well as in reporting the revenue generated and how these funds are used. Furthermore, the revenue should only be spent for purposes that meet specific criteria for climate protection and social compensation. Because carbon pricing will initially lead to additional expenditures for private households, social compensation should proceed through a climate dividend or a per capita flat rate. It is also recommended that part of the revenue from carbon pricing be used to offset global climate damage. Furthermore, the Citizens' Assembly recommends further research into the implementation of a per capita climate budget as well as possibilities for tax relief in other areas.

### 1.4. Recommendations from the Citizens' Climate Assembly at a glance

The full recommendations from all working groups are printed in Chapter 3.



## Guiding principles from the working group on energy

- 1) The state is responsible for developing a framework to guide the energy transition.
  - The aim is to act in an unbureaucratic, cross-party, and humanistic manner in the spirit of intergenerational justice.
  - The speed of the energy transition takes precedence over the costs, and the end-consumer should carry the smallest financial burden.
  - The security of the energy supply must be guaranteed.
  - Public acceptance must be ensured through increased participation.
- 2) By 2035, 70% of Germany's total energy supply should come from renewable sources.By 2040, this figure should be 90%.
  - By 2035, 100% of Germany's electricity supply should come from renewable sources.

### Recommendations from the working group on energy at a glance

- Mandate for municipal climate protection programs by 2023
- Dedication of at least 2% of the country's land area to solar and wind parks
- Mandate for solar panels on roof tops
- Expansion of free-standing photovoltaic systems on agricultural land and bodies of water
- Expansion of free-standing photovoltaic systems in paved and fallow areas
- Promotion of wind energy development through abolition of minimum distances between wind turbines
- Promotion of wind energy development by strengthening participation from municipalities and citizens
- Reduction of the EEG surcharge, elimination of taxes on personal use
- Lasting feed-in tariff for private individuals
- Apply EEG surcharge to energy-intensive industries
- Expansion of decentralized power supply
- Coal phaseout by 2030
- Strengthen early participation by citizens
- Promotion of citizen-led energy programs
- Supply- and demand-driven energy prices
- Electric cars as intermediate storage for the electrical grid
- Expanded use of digital technologies for the energy transition
- Promotion of international cooperation
- Extending the life of electrical appliances
- Preference for natural CO<sub>2</sub> storage methods



## Guiding principle from the working group on mobility

From now on, climate neutrality must be the top priority in any and all measures and decisions made by the federal government, states, and municipalities in the field of mobility.

Public spaces should offer an attractive habitat to people, plants, and animals. Curbing excessive and climate-damaging travel is just as important as redirecting travel to convenient and socially acceptable alternatives, both in cities and in rural areas. The fulfilment of mobility needs must not be dependent on income. Public transport, cycling, and walking must take precedence over motorized private vehicles and, for long distances, rail must take precedence over air travel.

### Recommendations from the working group on mobility at a glance

- Immediate expansion and improvement of the local public transport infrastructure
- Significantly cheaper local public transport
- 70% of infrastructure funds dedicated to local public transport
- Expansion of long-distance rail, nationwide clock-face scheduling by 2035
- Expansion of freight transport by rail, reduction of freight transport by truck
- Shift subsidies for car transport towards climate-friendly mobility
- Speed limit on highways, country roads, and in city centers
- Education and awareness campaigns for the mobility transition
- Reducing daily travel through the introduction of an entitlement to work-from-home
- Mandate for companies to incentivize the use of climate-friendly means of commuting
- Promotion of autonomous vehicles for public transport
- Expansion of the cycling infrastructure
- Promotion of electric bikes
- Cease to approve combustion engine vehicles by 2027, at the latest by 2030
- Rapid expansion of electromobility
- Research and testing on all promising climate-friendly alternative drive systems
- Ticket prices for air travel must reflect climate costs
- Reducing air travel, especially short-haul flights
- Transition to synthetic fuels for aviation

The participants narrowly rejected a proposal to introduce a city toll.



### Guiding principles from the working group on buildings and heating

- In order to achieve the 1.5 degree target, federal, state, and local governments are called upon to meaningfully advance the heating transition through accompanying legislation and adequate financing during the next two legislative periods.
- 2) At the same time, acceptance for the heating transition is to be promoted through broad-based information campaigns and ongoing dialogue between all stakeholders, as well as by raising the status of the skilled trades in this sector.

### Recommendations from the working group on buildings and heating at a glance

- Widely publicize information on energy-efficient renovations
- State institutions as role models for energy-efficient renovations
- Promotion of energy-efficient renovations according to financing ratios
- Financing for renovations
- Addressing the shortage of skilled workers as quickly as possible
- Comprehensible tools and consultations for renovations
- Promotion of ecological building materials
- Promotion of civic engagement in municipalities
- Use of digital technologies for planning, construction, and heating renovation
- Creation of a central and networked data infrastructure for heating and renovation planning
- Making renewable heating sources cheaper than fossil fuels
- Support for municipalities in the preparation of renovation and heating plans
- Reduction of climate-damaging subsidies
- Installation ban on oil and gas heating systems starting between 2026 and 2028
- Europe-wide exchange of expertise
- Presentation of energy-efficient homes by private individuals
- Nationwide task force for heat planning
- Mandatory heat planning in municipalities



## Guiding principles from the working group on food and agriculture

The conversion to climate-friendly agriculture is to take place as fast as possible. It must ensure an adequate supply of healthy food that is affordable for the entire population and provide income for food producers.

### Recommendations from the working group on food and agriculture at a glance

- Strong advocacy for climate-friendliness in the Common Agricultural Policy (CAP) of the EU
- New agricultural laws based on the 1.5 degree target
- Structural change in agriculture with the help of a commission, education and training on transition opportunities
- Restructuring of subsidies according to climate impact, environmental impact, and emissions
- Curbing emissions in animal agriculture by reducing livestock numbers
- Curbing overproduction, destruction, and food waste
- Compliance with product standards for imports and non-adjustment of import quantities
- Renunciation of animal feed produced via deforestation abroad
- Creation of a climate-friendly export policy
- Research focus on climate impact and sustainability
- Abolition of patents on seeds
- New nutrition guidelines aligned with the 1.5 degree course
- Prices to reflect environmental and health costs
- All food products to carry an official seal indicating climate impact
- Reduction of consumer food waste
- Ban on advertisements for climate-damaging products
- Awareness campaigns promoting avoidance of meat and dairy
- Education and information on climate-friendly nutrition for all ages
- Democratization and citizen participation in the food sector



### Recommendations for instruments of transformation at a glance

- Carbon pricing as a binding instrument for climate protection
- Transparency in the calculation, revenue, and use of revenue from carbon pricing
- Earmarking revenue from carbon pricing for purposes that meet criteria for climate protection and social compensation.
   Result of the vote on the use of revenue from carbon pricing:
  - O Paid back to citizens: 29.1%
  - Research and development on climate-neutral technologies: 21.2%
  - O Development and expansion of climate-neutral infrastructure: 41.7%
  - O None of these options: 7.9%
- Public to be compensated for additional expenditure through climate dividend or flat rate per capita. Result of the vote on the structure of

reimbursements:

- Per capita flat rate and reduction of the EEG surcharge: 28.5%
- Climate dividend based on household income: 38.4%
- Climate dividend based on health insurance contribution: 12.6%.
- None of these options: 20.5%
- Use of part of the revenue from the carbon pricing to offset global climate damage.
   Result of the vote on offsetting global climate damage:
  - Proportionate according to the polluter pays principle: 53.3%
  - Share corresponds to one third of revenue: 5.9%
  - O None of these options: 40.8%
- Working towards a per capita climate budget
- Examination of tax relief in other areas



# 2. The Citizens' Assembly Future Workshop: Visions for the future and guiding principles

While the citizens developed concrete recommendations for specific fields of action in their working groups, they also took part in the Future Workshop. Here, they developed a detailed vision of Germany in 2035. They also formulated 10 overarching principles that should guide the transformation to a climate-friendly society.

#### What was the Future Workshop about?

The climate crisis raises questions that reach far beyond individual fields of action and national borders. These issues affect people everywhere. The 1.5 degree target of the Paris Agreement cannot be achieved through technical tweaks or baby steps alone. With the adoption of sustainable development goals in 2015, the United Nations described the magnitude of change necessary to meet this target as nothing short of "the transformation of our world." Fundamental changes to our most basic conditions of life are necessary in order to be able to live and do business in a climate-friendly way.

Simple awareness of the consequences of global warming is not enough to encourage the necessary changes in behavior. Furthermore, knowledge of an impending climate catastrophe may even lead to pessimism and an unwillingness to change. With this in mind, the goal of the Future Workshop was to develop a common vision of a desirable, dignified future. The citizens were also tasked with developing overarching principles to guide the transformation and the most fundamental decisions about climate policy.

### 2.1. Visions of the future and the Parliament of Things

The first session of the Citizens' Assembly included a presentation by *Prof. Dr. Stefan Rahmstorf* from the *Potsdam Institute for Climate Impact Research* and a video introducing the concepts of climate and climate protection.

What is climate change? What are its consequences? What is the Paris Climate Agreement? What would 1.5 degrees of warming mean for the Earth's ecosystem and for human beings? The presentation explained how the amount of greenhouse gases in the atmosphere has increased significantly over the last century, largely caused and accelerated by human activity. Specific examples were used to illustrate the difference that even a half a degree of additional warming can make: the extinction of plant and animal species, the emergence of extreme heat waves and droughts, the thawing of permafrost, rising sea levels, and the absence of ice in the Arctic. Some of these effects are already taking place, and some in turn further exacerbate the greenhouse effect.

For these reasons, the global community agreed at the 2015 World Climate Conference in Paris to make every effort to limit global warming to significantly less than 2 degrees, if possible to 1.5 degrees. Every tenth of a degree of further warming must be avoided. Achieving this goal will require a significant reduction in greenhouse gas emissions in the coming years compared to today. Doing so will call for a major societal transformation across all sectors, shared by as many people as possible. The German government's plans to date are insufficient to achieve this goal. At the same time, Germany bears a special responsibility for contributing to the goals of the Paris Agreement due to the nation's comparatively high greenhouse gas emissions.

Following this introduction, the participants compiled their thoughts about the aspects of climate change that concerned them the most. This provided an initial overview of the participants' attitudes, concerns, and fears about global warming and climate protection, as well as the opportunities they see. In the second session, participants chose 20 terms – things, concepts, or living beings – that should be considered throughout the Citizens' Assembly. This selection illustrated where priorities lay and whose perspectives, in addition to those of the 160 participants, should be represented in climate policy. From this point on, this "Parliament of Things" digitally attended all Citizens' Assembly meetings as silent, but still visible participants. Every now and then, the 20 terms informed the discussion, serving as a reminder of the presence of other priorities and perspectives. Several of the chosen terms can be found in the guiding principles.



Bees



Digitalization



Peace



Biodiversity



Water



World Hunger



Community



**Energy Generation** 



Sustainability



Longevity

Oceans

trati - ii - i



Forests



Universal Basic Income



**Species Conservation** 



Traffic



Health



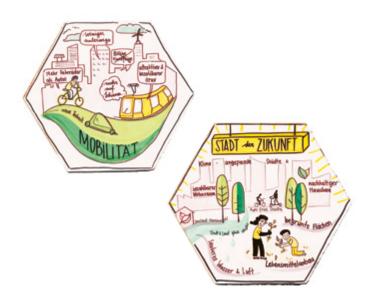
Social Justice



In his lecture during the fourth session of the Citizens' Assembly, transformation scholar *Prof. Dr. Harald Welzer* spoke about social change in the direction of a climate-friendly society. He emphasized that our social and economic success must be decoupled from the destruction of nature, and that a positive conception of change is crucial in order ensure dignified living conditions moving forward. Welzer thus provided a theoretical basis for discussion about the imminent transformation.

The climate transformation should enable a future worth living in. In political discourse, there are differing views on how such a future might look and by what means it should be achieved. These different perspectives were made tangible through a series of videos that presented five of the most salient outlooks on the future and the climate: 1. transform the economy; 2. let business carry on; 3. trust in the free market; 4. encourage living with less; and 5. acknowledge the climate reality.

After the impactful presentation of these possible futures, the citizens developed their own vision for the future. In small groups, they discussed this question: "What should the Germany of 2035 look like, and what kind of life should you, your children, or your grandchildren be able to lead within it?" The participants conceived of nearly 300 terms to describe this future vision of Germany. The terms were sorted, condensed, and professionally illustrated as preliminary results. The resulting vision of the future is comprised of seven honeycombs.





Over the course of the Citizens' Assembly, the participants evaluated specific policies for different fields of action within their working groups. They then presented their results to the other groups for comment and open discussion. With these discussions as a basis, the participants came together in the Future Workshop to reexamine the vision for the future they developed at the beginning of the Assembly according to the recommendations they had drafted so far for the different fields of action.

Many concerns and questions were raised, such as: can the extraction of rare earth elements for use in climate-friendly technologies proceed in a globally just manner? How can we ensure the necessary levels of education and transparency moving forward? Might higher prices leave more vulnerable social groups behind, and what are the dangers of doing so? Is it possible to exercise political influence by means of positive incentives for behavior change instead of bans and sanctions?



### 2.1. Procedure: Development of guiding principles

In small groups, the participants discussed the various obstacles and opportunities they saw on the path towards the future they envisioned, as well as the values that should set the tone for progress. This discussion about the values that should help politics and society navigate the next 14 years of change formed the foundation for the first drafts of the participants' guiding principles.

In an separate meeting, members of the editorial team used these drafts as well as the visions of the future to formulate 10 guiding principles. They also compiled further salient topics that arose from the discussions up to this point. Based on these insights, the Citizens' Assembly devised a supplementary explanation for each guiding principle. In the vote, each guiding principle was accepted by a majority of more than 90% of participants.

### 2.2. Results: 10 guiding principles for transformation

The 10 guiding principles are values upon which all climate policy should be based, with the clear directive for a courageous and just transition towards a sustainable economy and society. They offer a clear orientation for political and social questions over the course of the next decade.

The adopted guidelines are listed below along with the results of the vote.

#### #1 The 1.5 degree target is the top priority.

We are all equal before the climate. The 1.5 degree target is non-negotiable, as it is necessary to preserve the basic conditions of life upon which the future of following generations depends. Every new law must be evaluated for its potential to impact the climate and must not work against climate protection goals. Climate protection is a human right and must be included in the Basic Law.

141 Yes-\	/otes	Accepted	No-Vot <mark>es 11</mark>
#2	Climat	e protection serves t	he common
	good a	nd is to be prioritized	d over individual
	interes	sts.	
In the int	erest o	f the common good, t	the protection of
our plane	et has fo	premost priority over	economic and
individua	al intere	sts. Large companies	s in particular
must be	obliged	to act in the interest	of climate
protectio	on and t	o the benefit of the c	ommon good.
145 Yes-\	/otes	Accepted	No-Vote <mark>s 8</mark>

#### #3 For every action that impacts the climate, there must be education and transparency.

All citizens must be in a position to make informed decisions. This requires awareness and transparency about climate impacts and consequences. Everyone must have access to all relevant information, and the state must be obliged to provide such access.

149 Yes-Votes Accepted

No-Votes <mark>4</mark>

#### #4 **Everyone must assume responsibility** and accept change as part of combatting the climate crisis.

Change is essential and should be seen as an opportunity. The necessary transformation will require a shift in consciousness and a willingness to embrace a new economy, political system, society, and private life. Politics and society must be guided by their responsibility for a better future that is both climate-neutral and more just.

146 Yes-Votes	Accepted	No-Vote <mark>s 7</mark>
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#### #5 Climate protection must be included in all educational programs.

Education about climate protection must be mandatory in the curricula of all educational institutions; this serves to expand climate protection awareness, promote climate-neutral behaviors, and strengthen participation.

147 Yes-Votes	Accepted	No-Votes 6
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#### #6 Climate policy must be generationally just.

Our current actions must not put future generations at a disadvantage. By lowering the legal voting age to 16, younger people will be given greater responsibility and politicians will face greater pressure to account for younger generations.

#### Climate policy must be socially just. #7

In order to build a future in solidarity, all people must be able to lead a sustainable, environmentally friendly life. The polluter pays principle should be used to allocate responsibility for the transformation. The effects of change must be fairly distributed throughout all levels of society.

148 Yes-Votes Accepted

No-Votes 24

#### #8 Climate policy must be globally just.

Combatting climate change is a global challenge. Outside of Germany, there are many countries that are more severely affected by climate change; humanitarian disasters must be averted. Therefore, responsibility must be taken for the countries particularly affected by climate change and pressure must be exerted on climate transgressors. Climate policy and peace policy belong together.

138 Yes-Votes Accepted	No-Vo <mark>tes 14</mark>
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#### #9 The future of the economy must be climate-neutral.

Germany should lead the way as a global role model of climate-neutral culture and business. The state should implement economic policy instruments to incentivize companies to operate in a climate-neutral and environmentally friendly manner. To this end, it is crucial to support climate-neutral and environmentally friendly technologies and career paths.

145 Yes-Votes	Accepted	No-Vote <mark>s 8</mark>
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#### #10 Actions that impact the climate, whether positively or negatively, must directly impact the actors in turn.

In order to achieve climate goals, climate friendliness must become convenient and desirable. The impact on the climate must be considered in all areas of climate spending and action. Choosing environmentally friendly alternatives is to be encouraged through incentives. Climate-damaging activities are to be taxed and sanctioned. Climate crimes are to be punished.

146 Yes-Votes	Accepted	No-Vote <mark>s 7</mark>

# 3. Results of the fields of action

In their working groups on each field of action, the participants of the Citizens' Assembly dedicated several meetings to developing recommendations for climate policy as well as one or two overarching principles that should guide all activity within each field of action moving forward. Before the citizens were broken into working groups, the scientific board of advisors had helped to define one or two questions to serve as the focal points of discussion in each field of action. In the case of food and agriculture, a single multi-part question was determined. Over the course of the Citizens' Assembly, all recommendations developed for each field of action were scientifically evaluated by experts, received feedback from participants in other working groups, and, if necessary, were adjusted accordingly. "Coming generations will have to deal with the consequences of our current inaction. We must come together for discussion. I will hold my tongue no longer."



Adelheid Dreistein, Participant of the Citizens' Climate Assembly

#### Thematic sponsorships

Programming for the field of action on energy was advised by:

- Dr. Roland Kube of the German Economic Institute Cologne e.V.
- Dr. Christoph Kost of the Fraunhofer Institute for Solar Energy Systems ISE

#### **Fact checkers**

In the field of action on energy, meetings were supported by:

- Charlotte Loreck of the Öko-Institut e.V., with focus on renewable energy technologies, electricity generation, and the Renewable Energy Sources Act (EEG)
- Fabian Zuber, freelance consultant and founder of *l*<sup>o</sup>energy—local energy consulting, with focus on financing the energy transition, acceptance, and citizen-led energy programs
- Editha Kötter of the Reiner Lemoine Institute, with focus on energy system issues
- Dr. Barbara Saerbeck of Agora Energiewende, with focus on the economic and political issues of the energy transition
- *Ryan Kelly* of the *University of Stuttgart*, with focus on planning and licensing issues in the energy transition

From electrical outlets, to gas heating, to petrol for transportation – our society runs on energy. However, energy production is by far the leading source of emissions in Germany, amounting to over 80% of the greenhouse gasses emitted nationwide. This is because our energy is still largely won from coal, oil, and gas, the combustion of which releases climate-damaging greenhouse gases. Limiting global warming to 1.5 degrees will require transitioning our energy supply from fossil fuels to renewable energy sources.

However, the current infrastructure for renewables cannot yet cover the country's energy needs. Because our electricity demand will grow - for example through the adoption of electric vehicles and heaters - we will have to produce even more electricity than ever before. In addition, energy production will become decentralized. Rather than the bulk of production taking place in a few large power plants, energy is increasingly being generated in many different places by solar and wind parks. In order for energy to reach consumers, new grids are needed. However, the construction of new power lines and cables is not progressing fast enough. In addition, there is resistance to renewable energies and new power lines among the public. The issue of acceptance was therefore a key issue for the working group on energy.

### Question 1: How can the expansion of renewable energies – especially wind and solar – proceed at the necessary pace while still strengthening their acceptance among the public?

However, the current rate of expansion for wind and solar infrastructure is insufficient to cover the demand for renewable energies. One reason for the slow expansion are tedious and lengthy approval procedures. In addition, some local residents feel their concerns are not considered and pursue legal action against wind energy construction projects in their neighborhoods. Renewable energies require a lot of space, which raises concerns among residents and nature conservationists. In some cases, they conflict with environmental conservation and species protection projects. An essential question for the Citizens' Assembly was therefore: How can the expansion of renewable energies - especially wind and solar - proceed at the necessary pace while still strengthening their acceptance among the public?

#### Input from the speakers

As an introduction to the field of action on energy, *Prof. Dr. Claudia Kemfert* of the *German Institute for Economic Research (DIW)* explained the fundamental challenges and strategies in the energy sector.

Bettina Bönisch of the Specialist Agency for Wind Energy on Land gave a presentation on the expansion and acceptance of wind energy. Among other things, she explained which factors are decisive for public acceptance or rejection of wind turbines in any given region. She mentioned financial participation as having a positive influence — an aspect that was also taken up by the Citizens' Assembly later on.

Prof. Dr. Andreas Bett of the Fraunhofer Institute for Solar Energy Systems contributed his expertise on the expansion and acceptance of solar energy. An intensive discussion followed his presentation about the dual use of open spaces, a means by which solar energy is generated on the same land used for agriculture or environmental protection. Rooftop solar panels and the generation of renewable energy for private use were also discussed in detail. Some participants even owned photovoltaic systems themselves and therefore had first-hand experience with the bureaucratic and financial hurdles involved.

*Dominik Seebach* of the *Öko-Institut e.V.* spoke on the promotion and financing of green electricity, in particular the current legal framework for expanding the infrastructure for renewables: the Renewable Energy Sources Act (EEG).

These presentations were complemented by short, recorded interviews with people working in the energy transition. The participants were able to watch these interviews on the Assembly's digital knowledge platform. The interviewees explained the challenges they face in their everyday lives as they work to expand renewable energies. Featured in these interviews were: Michael Knape, mayor of the Brandenburg municipality of Treuenbrietzen; Lother Schulze of the wind energy development project Windwärts; Matthias Ederhof of the solar energy development project Energienetz Hamburg and spokesperson for the Solaroffensive Hamburg; Jan Strobel of the German Association of Energy and Water Industries (BDEW); and Florian Schöne of the German Nature Conservation Ring.

#### Discussion

Discussion among the participants often revolved around the tension between incentive and obligation. On the one hand, participants valued greater accessibility to information and education, as well as making climate-friendly energy projects — such as the installation of solar panels — more financially attractive. On the other hand, they also saw a need for clear-cut guidelines and binding legal requirements, such as a mandate that all federal states dedicate at least two percent of their land to wind and solar energy generation.

While the participants were in favor of obligatory measures, such as a mandate to install solar panels on the rooftops of new and existing buildings, it was also important to many that financially weaker groups were given support, such as through rooftop leasing opportunities. In the case of wind energy, it was clear to the participants that the minimum distancing rules must be abolished, but that this cannot be implemented without increased communication with and participation on behalf of people living near wind parks.

Questions about community engagement, education, and advising also arose in discussions about the expansion of both solar and wind energy. The participants called for involving the public on renewable energy expansion projects in order to strengthen acceptance, but also as a means of mobilizing social forces for structural change.

# Question 2: How should we structure the transition to a climate-friendly energy system?

There is no one right approach to achieving a climateneutral energy sector; rather, success is a matter of a striking a balance between many diverse measures in a process of sweeping social transformation. In addition to building out the capacity to generate renewable energy, Germany also faces the challenge of actually delivering this energy to consumers. The second question for the field of action on energy was therefore: **How should we structure the transition to a climate-friendly energy system?** 

In this line of questioning, participants discussed the following topics: expanding the electrical grid and storage infrastructure; flexible use and pricing of energy according to production and consumption; expanding and promoting various energy generation models; accelerating planning and approval procedures; and the use of fossil fuels.

#### Input from the speakers

Aurel Wünsch of Prognos AG presented a scenario he co-developed for a climate-neutral Germany in 2045. This included both assumptions and trade-offs made with regard to the energy sector.

Dr. Lars Holstenkamp of the Leuphana University Lüneburg addressed how electricity is currently priced and showed possibilities for future price models as well as how citizens could financially participate in the energy transition moving forward.

Ryan Kelly of the University of Stuttgart explained Germany's current planning and licensing framework for the energy transition. He showed how lengthy approval procedures might be accelerated and how this would affect opportunities for citizen participation.

As a complement to these presentations, the Assembly's online platform also featured a video interview with *Matthias Otte*, head of the *Grid Expansion Department at the Federal Network Agency*. Here, Otte answered questions about the goals of grid expansion in Germany and Europe as well as strategies for dealing with the challenges that arise along the way.

#### Discussion

The participants identified the acceleration of digital technologies as particularly important to resolving this second line of questioning. Digitalization could enable intelligent energy consumption, storage, and feeding into the electrical grid. The citizens also considered the expansion of a decentralized energy supply and the promotion of energy cooperatives as key in this process. It quickly became clear to the participants that coal must be phased out much sooner. To this end, they discussed if and how companies should be compensated. Many participants were of the strong conviction that companies as well as end-consumers should finance the energy transition. They also discussed how this may impact economic competitiveness and employment. Nevertheless, the Citizens' Assembly stuck to their guiding principle for the field of action on energy: "The speed of the energy transition takes precedence over the costs, and the end-consumer should carry the smallest financial burden."

## **Guiding principles: Energy**

- 1. Guiding principle
- The state is responsible for developing a framework to guide the energy transition.
- The aim is to act in an unbureaucratic, cross-party, and humanistic manner in the spirit of intergenerational justice.
- The speed of the energy transition takes precedence over the costs, and the end-consumer should see the smallest financial burden.
- The security of the energy supply must be guaranteed. Citizen acceptance must be ensured through increased participation.

141 Yes	s-Votes	Accepted	No-Votes 7
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#### 2. Guiding principle 2

- By 2035, 70% of Germany's total energy supply should come from renewable sources.
   By 2040, this figure should be 90%.
- By 2035, 100% of Germany's electricity supply should come from renewable sources.

140 Yes-Votes	Accepted	No-Votes 8
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# "Climate protection not only demands money, but also an enormous amount of flexibility from all of us."

Participant of the Citizens' Climate Assembly

# **Recommendations: Energy**

### #1 Mandatory municipal climate protection programs

With the involvement of citizens, by 2023 every municipality must develop a plan for achieving climate neutrality in the energy sector by 2030.

- Neighborhood-based concepts are one possibility here.
- For support in this endeavor, municipalities can consult with independent agencies, local utility companies, and consumer advocacy centers
- Municipalities may also join forces with one another to implement cooperative energy plans.

141 Yes-Votes	Accepted	No-Votes 10

# #2 More land for renewable energies and reforestation

At least two percent of the total land area in each federal state is to be dedicated to the expansion of photovoltaic and wind energy generation.

- Federal planning for the long-term requirements of this mandate are to be completed by the end of 2022, and regional development is to be considered.
- By 2023, municipalities are obliged to develop land use plans with consideration to regional conditions and circumstances and with early and binding input from citizens. Following these processes, a federal law is to be drafted from these plans, and it is recommended that the Planning Security Act is upheld with as much digital citizen participation as possible.
- The state should lead by example and make public lands available for renewable energy generation, for example former airports, opencast mining sites, unused agricultural land, water areas, and along highways.
- Photovoltaic and wind energy systems may also be built in compensation areas, provided that due consideration is given to wildlife and climate protection goals.
- Municipalities may not trade the 2% land designation amongst themselves.
- Where possible, the energy needs of the federal states and municipalities, including industry, should be considered.
- Industrial enterprises, especially former coal mining areas, should be obliged to reforest their unused land, provided that no other climate-friendly use is foreseen.

141 Yes-Votes

Accepted

No-Votes 9

#### #3 Increased use of roof tops for photovoltaic systems

Starting in 2022, the use of photovoltaic systems on roof tops must be gradually introduced and required in all construction plans.

- Starting in 2022, all new buildings must be equipped with photovoltaic systems.
- Retrofitting existing public, private, and commercial buildings shall begin in 2023, insofar as this is technically possible and sensible for climate policy. Any major renovations, such as roof replacement, shall be required to include retrofitting for solar panels.
- For building owners who cannot carry out these measures themselves, whether due to finances or other reasons, it must be possible to lease roof areas – for example via a digital marketplace
- Policy makers must create funding opportunities to finance these measures.

### 123 Yes-Votes Accepted No-Votes 25

# #4 Accelerated expansion of

#### free-standing photovoltaic systems (1)

Where possible, agricultural land and water areas shall also be used for electricity generation.

- Dual use of space through agrivoltaic where suitable as well as floating solar must be encouraged through a simplification of the licensing laws and comprehensive information campaigns.
- Free-standing photovoltaic should be included in the Building Code as a project with privileged status.

Accepted	No-Votes 23
	Accepted

## #5 Accelerated expansion of free-standing photovoltaic systems (2)

129 Yes-\

Already paved areas such as parking lots, fallow land, and unused building lots must be examined for their potential to be used for the expansion of photovoltaic systems.

- Funding must be made available and unbureaucratically accessible for this purpose.
- These measures increase efficiency in land use and reduce the paving of further open spaces.

144 Yes-Votes Accepted No-Votes 8
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### **#6** Promotion of wind energy development (1)

It must be made possible to quickly replace old wind turbines by changing the legal framework.

- To this end, it is imperative that the current minimum distances for wind turbines are abolished, as new turbines are more efficient and produce less noise.
- Tendering policy for wind turbine construction must be revised so that the expansion of wind energy progresses as quickly as possible.

131 Yes-Votes	Accepted	No-Votes 22
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#### **#7** Promotion of wind energy development (2)

Future wind energy expansion projects must include a stronger focus on participation from local authorities and residents who should be involved in the search for appropriate construction sites.

- In addition, nationwide standards (e.g. in the form of laws, guidelines, or ordinances) should be created to guide efforts in the areas of financial participation by citizens and wildlife conservation.
- In order to promote wind energy, it is necessary to deploy local awareness campaigns and create new opportunities for dialogue between politicians, residents, farmers, etc.

# #8 Simplification and promotion of private energy consumption (1)

In order to encourage greater financial participation in and private consumption of solar energy, the EEG surcharge regulating private use and consumption should be reduced.

• These measures will strengthen acceptance among the population and create incentives to invest in photovoltaic systems.

148 Yes-Votes	Accepted
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No-Votes 4

### #9 Simplification and promotion of private energy consumption (2)

A long-term (at least 20-year) tariff for feeding into the electricity grid must be made possible for private individuals.

 This measure is intended to ensure sustainable planning.

135 Yes-Votes Accepted No-Votes 17
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#### #10 Adjustment of the EEG surcharge

In order to position Germany as a global leader in energy-positive business, it is necessary to gradually reverse the exemption from the EEG surcharge for energy-intensive industries.

 Additional revenue generated from this reversal should be used in part to finance technological innovation in these same industries.

Accepted	No-Votes 10
	Accepted

#### **#11** Expansion of decentralized power supply

In order for our future energy supply to come from both centralized and decentralized sources, it is necessary to strengthen the decentralized energy supply.

 This requires targeted incentives for energy cooperatives and private use, as well as uniform framework conditions nationwide.

142 Yes-Votes	Accepted	No-Votes 1
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#### #12 Coal phaseout

The deadline for the nationwide coal phaseout should be advanced from 2038 to 2030.

- This is to be regulated via European certificate trading and an increase in the carbon price.
- Energy production from coal should become unprofitable so that no further compensation payments are made to this dying industry.
- If compensation payments are made, social acceptability and environmental aspects should be considered.
- The emergency power reserve should be converted, with renewable gas as possible solution.

134 Yes-Votes	Accepted	No-Votes 17
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#### **#13 Early citizen participation**

Before undertaking construction on renewable energy plants and related infrastructure, the regional population must be provided with sufficient information about the projects and public opinion must be considered in the planning.

- This will serve to increase acceptance among the public, avoid subsequent conflicts, and speed up the procedure without ignoring citizens.
- Participation should proceed efficiently through digital channels or other measures such as "mini citizens' assemblies."

137 Yes-Votes	Accepted	No-Votes 15
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#### #14 Promotion of citizen-led energy programs

Citizen-led energy cooperatives and companies are to be promoted in the financing and expansion of renewable energy systems.

#### **#15 Variable electricity prices**

Electricity prices for consumers should be flexible and based on supply and demand within the electricity grid.

 This requires a nationwide rollout of intelligent, digital electricity meters (smart meters) in keeping with the General Data Protection Regulation.

115 Yes-Votes	Accepted	No-Votes 35

#### #16 Electric cars as intermediate storage

Electric cars should be used as temporary storage for surplus electricity in return for financial compensation.

- To achieve this, it is necessary to create an intelligent and area-wide charging and storage infrastructure, especially in front of companies and businesses.
- While a battery is being used as storage for the electricity grid, the owner should be accredited points via an app that can later be used for charging elsewhere.
- Private use of electric cars as storage should have priority over public use.
- The standardized and uniform development of batteries and charging infrastructure must be driven forward by a law. This must be adopted in coordination with the EU by 2023.

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Accepted
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No-Votes 41

**#17** Digitalization

Digitalization and the necessary infrastructure – especially fiber optic cables and mobile networks in rural areas – must be driven forward and expanded.

- As an important tool for the energy transition, digitalization lays the foundation for flexible and transparent electricity use as well as for technical innovations.
- In line with the goals of the current federal government, 100% of the nation should be equipped with fiber optic cables by 2025.

#### **#18** International cooperation and imports

Germany should deepen and strengthen existing international energy partnerships and promote the expansion of renewable energies worldwide.

 Geographically strategic energy distribution networks should be created throughout Europe to supply local energy.

142 Yes-Votes	Accepted	No-Votes 7

#### **#19 Extending the life of electrical appliances**

Intentionally short lifespans for electronic devices must be abolished and the minimum warranty extended to 10 years.

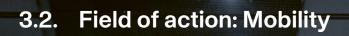
- Manufacturers must guarantee the availability of spare parts during this period.
- This will create incentives to manufacture high-quality products and thus counteract a throwaway consumption culture.

130 res-voles Accepted	138 Yes-Votes	Accepted
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#### #20 Negative emissions

CO<sub>2</sub> sequestration projects based on renaturation, for example peatland restoration and tree planting, should be prioritized over carbon capture methods such as underground storage.

137 Yes-Votes	Accepted	No-Votes 14
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# "Where is this giant automobile lobby that is creating so many unnecessary subsidies for senseless things?"

Manuela Heidecker, Participant of the Citizens' Climate Assembly



### Thematic sponsorships

Programming for the field of action on mobility was advised by:

- Thorsten Koska of the Wuppertal Institute for Climate, Environment, and Energy
- Carolin Schäfer-Sparenberg of the Wuppertal Institute for Climate, Environment, and Energy
- Dr. Weert Canzler of the Social Science Research Center Berlin (WZB)

#### **Fact checkers**

In the field of action on mobility, meetings were supported by:

Thorsten Koska of the Wuppertal Institute for Climate, Environment, and Energy

Our society is constantly on the move. People travel to work, to shop, and for leisure. In addition to people, goods must also be transported. People and goods should remain mobile, but transport in its current form emits immense amounts of greenhouse gases. Currently, transport is responsible for 22% of Germany's greenhouse gas emissions.

Unlike in other sectors, emissions from transport have not decreased over the last three decades. 2019 saw the same level of transport emissions as 1990. In order to achieve the 1.5 degree target of the Paris Climate Agreement, by 2035 greenhouse gas emissions from the transport sector must be decreased by 90% compared to 1990. This is a mammoth task given the lack of progress to date.

There are three major strategies for curbing emissions in the transport sector:

- 1. Avoiding travel: Reducing unnecessary journeys; meeting everyone's needs with less travel, shorter distances, and virtual technologies.
- 2. Shifting travel: Redirecting traffic from private vehicles to more climate-friendly means of transport such as bicycle, bus, train, shared mobility (e.g. carsharing), and walking.
- 3. Improving efficiency: For travel that cannot be avoided or redirected, switching to vehicles with climate-neutral and energy-efficient drive systems.

The transformation of our transportation infrastructure can only succeed by pursuing all three of these strategies. Due to time constraints, the Citizens' Assembly focused primarily on the latter two strategies. Participants in the working group on mobility addressed the following questions:

- 1. How can we shape our mobility with climate-friendly means of transport?
- 2. How can travel be transitioned to alternative, climate-friendly drive systems?

# Question 1: How can we shape our mobility with climate-friendly means of transport?

To successfully transform mobility, as much travel as possible must take place via climate-friendly means of transport. Around 60% of the greenhouse gas emissions in today's transport sector are caused by the use of private vehicles. Roughly a third of emissions in this sector come from the transport of goods by truck. These means of transport involve high levels of fuel consumption and move comparatively few passengers or goods. Other means of transport, such as trains or buses, move significantly more passengers with lower per capita fuel or energy consumption. Cycling and walking do not consume any fuel at all. At the same time, each year sees more and larger cars registered to German drivers. For many, the car is not only a means of transport, but also a status marker, a lifestyle, and a symbol of freedom and flexibility. In many cases, especially in rural regions with poor supply and long distances, car ownership is perceived as a necessity.

The participants therefore first dealt with the fundamental question: **How can we shape our mobility with climate-friendly means of transport?** 

Participants discussed how to shift traffic away from climate-damaging means of transport to more climate-friendly ones: what measures must be taken, and which preconditions must be met? In this regard, both regional and long-distance travel were considered. For both kinds of travel, possible measures were identified that could make climate-friendly means of transport more attractive. The working group also identified existing regulations that currently incentivize car travel over climate-friendly means of transport.

#### Input from the speakers

To introduce this field of action, *Dr. Katrin Dziekan* of the *Federal Environment Agency* explained the most fundamental challenges and strategies facing the transport sector.

To speak on the topic of commuter traffic and regional transport, *Dr. Sophia Becker* of the *Technical University of Berlin* and the *Institute for Advanced Sustainability Studies (IASS)* presented alongside *Martin Randelhoff* of the *Technical University of Dortmund.* They spoke about the challenges of and effective measures for encouraging cycling and the use of public transport, as well as strategies for winning these modes of transportation more weight in the planning of public space. The presenters considered the expansion of an attractive public transportation and cycling infrastructure to be necessary to combatting climate change. They also discussed measures that could help make the use of cars less attractive in everyday life (e.g. parking space management). Such measures would also make public spaces more appealing in turn.

For long-distance travel, *Wolfgang Bohrer* of the *DB Netz AG* presented the Deutsche Bahn's plans for the expansion of the country's rail network. He also spoke about the challenges of such a project: financing, long approval and implementation times, and the potential for conflict with environmental protection and wildlife conservation.

Lisa Ruhrort of the Social Science Research Center Berlin (WZB) showed that car traffic plays a major role in Germany, especially in long-distance travel. She explained how this is encouraged by existing political measures — such as subsidies and tax deductions (inexpensive diesel, commuting allowance, the special status of company cars) — and a lack of cost transparency compared with more climate-friendly modes of transportation.

#### Discussion

During the discussion about transitioning towards climate-friendly mobility, participants were particularly concerned with expanding and incentivizing local and long-distance public transport. The transition can only succeed if public transport and the cycling infrastructure are seen as an attractive, flexible, and affordable alternative that meets the diverse needs of the public. To achieve this, the expansion must progress quickly, and the corresponding financial resources must be made available. This includes shifting subsidies away from motorized private vehicles to climate-friendly mobility.

To this end, participants also discussed the various mobility needs that must be met by an expanded infrastructure. For example, they raised the topic of differences between urban and rural areas in terms of infrastructure and mobility needs. The issues of convenience and flexibility as well as the need for a car in specific situations were also considered. The participants agreed that new ways of thinking are to be encouraged, and above all, more emphasis must be placed on the positive effects of the mobility transition.

# Question 2: How can travel be transitioned to alternative, climate-friendly drive systems?

In order to bring about a transition in the transport sector, travel that cannot be avoided or redirected must proceed via climate-neutral and energy-efficient drive systems: for example, by running cars with energy-efficient electric motors and trucks with hydrogen fuel cells. The participants addressed the question: **How can travel be transitioned to alternative, climate-friendly drive systems?** 

The automotive industry, which is a major economic player in Germany, must reckon with new requirements and adapt accordingly. Ships and aircrafts that cannot currently be powered by electric batteries can use synthetic fuels produced with renewable electricity. However, because large volumes of renewable energy would be needed for this transition, this strategy calls for sweeping technical conversions. Air travel, with its extremely high rate of CO<sub>2</sub> emissions per passenger-km, is particularly harmful to the climate and constituted one major topic of discussion. However, in addition to transitioning drive systems, other measures must also be taken into account in order to reduce the number of flights.

#### Input from the speakers

Lukas Minnich of the Öko-Institut e.V. spoke on the different types of drive systems that could replace the combustion engine in cars, as well as their energy efficiency, advantages, and disadvantages. The battery-powered electric motor offers significantly higher energy efficiency than both fuel cells and synthetic fuels, as well as a potential storage function for the energy grid. Its disadvantages compared with synthetic fuels include a shorter distance range and a recharging process that is more complicated than refueling. However, the use of electric batteries in passenger cars would compete with the demand for air and sea transport.

Patrick Ruess of the Fraunhofer Institute for Industrial Engineering (IAO) also explained the transformative significance of new drive systems for the automotive industry. On the one hand, there is less need for workers in the production of electric vehicles; on the other hand, such a change offers opportunities for innovation and new business models.

*Minnich* and *Reuss* also explained possible measures to encourage the development of alternative drive systems, including financial incentives, the expansion of the charging infrastructure, and restrictions on combustion vehicles.

An introductory short film by WDR was shown on the topic of air travel. It presented different perspectives from the airline industry, the railway industry, and governmental institutions about the measures that should be taken regarding air travel. *Dr. Olaf Hölzer* of the *Federal Environment Agency* then explained the impact of air travel on the climate. Aviation is particularly damaging for the climate due to the volume of passengers and an extremely high rate of greenhouse gas emissions per passenger-km compared with other methods of transportation. To reduce the number of flights, redirect passengers to other means of transport, and develop more sustainable fuels. This can be achieved through various financial instruments.

#### Discussion

In discussions about transitioning to new drive systems, it quickly became clear that the participants wish to move away from the combustion engine as quickly as possible. Participants emphasized the need for appropriate alternatives that are at once accessible, affordable, and attractive. This includes, for example, a comprehensive expansion of the charging infrastructure for electric vehicles. Environmental aspects — for example, regarding the mining of the raw materials needed for batteries and vehicle parts as well as possibilities for recycling them — were also discussed.

As to the question of the different types of potential drive systems, the participants called for openness and further research into these technologies. The transition to new drive systems should provide a number of options. Furthermore, it should be possible to continue using existing vehicles and transportation infrastructure during the transition. As with the first question in the field of action on mobility, here the question of costs for the public also played a major role in the discussion.

The participants agreed that the price of air travel must increase in order to reduce the number of flights. At the same time, it was important to the participants that the revenue from these increased taxes go towards climate protection or social causes. Flights necessary for social and cultural cohesion – for example, to visit relatives in other countries – must remain possible. The participants also spoke in favor of curbing flights – for example, through the use of digital tools and redirecting more passengers to rail – especially with regard to short-haul flights.

# "Our words must translate into action. I promise here and now that I am going to buy a bicycle."

Adnan Arslan, Participant of the Citizens' Climate Assembly



# **Guiding principle: Mobility**

### 1. Guiding principle 1

From now on, climate neutrality must be the top priority in any and all measures and decisions made by the federal government, states, and municipalities in the field of mobility.

Public spaces should offer an attractive habitat to people, plants, and animals. Curbing excessive and climate-damaging travel is just as important as redirecting travel to convenient and socially acceptable alternatives, both in cities and in rural areas. The fulfilment of mobility needs must not be dependent on income. Public transport, cycling, and walking must take precedence over motorized private vehicles and, for long distances, rail must take precedence over air travel.

141 Yes-Votes	Accepted	No-Votes 5	S
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# **Recommendations: Mobility**

## #1 Local public transportation

Local public transport is to be expanded, optimized, and made more convenient as soon as possible.

- The expansion of local public transport should no longer be an optional but rather a mandatory task for municipalities.
- With comprehensive door-to-door connections as the goal, the network of stops should be expanded and the frequency of routes increased; in the countryside, this is to be achieved in combination with on-demand services for buses and taxis as well as carsharing services.
- Specialty mobility needs must also be considered (strollers, bicycles, transport of large objects) and accessibility must be guaranteed.
- Digital technologies should be used to enable simple ticketing nationwide (automatic best-price fare), as well as to gather feedback and information about mobility needs for further consideration.
- Security and cleanliness at stations must be prioritized (e.g. more staff and video surveillance).
- Cycling should be promoted by increasing the number of bicycle parking spaces as well as bicycle rental opportunities at train stations. It must become more convenient to take bicycles and e-bikes on trains and public transport, even in rush-hour traffic.

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146 Yes-Votes Accepted
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## #2 Local public transportation

1

Local public transportation should immediately become significantly less expensive.

 Possible measures to this end include nationwide tickets, flat-rate tickets, and annual or monthly tickets.

#### #3 Local public transportation

Over the next 5 years, 70% of available funding for transportation projects is to flow into the expansion of rail and cycling infrastructure instead of road construction. Financing for the expansion of local public transport (de. ÖPNV) is to be secured by the federal government.

 The costs of expanding local public transport are to be covered in by abolishing tax concessions for motorized private transport, through revenue from carbon pricing, and through general taxes.
 125 Yes-Votes Accepted No-Votes 27

125 165-Voles	Accepted	NO-VOIES 2

#### #4 Expansion of rail transportation

Expanding the rail network and upgrading single-track bottlenecks in order to achieve a nationwide, synchronized train timetable (de. Deutschlandtakt) has absolute priority over new road construction projects or investment in any other rail projects. Deutschlandtakt is to be realized by 2035.

- For long-distance transport, the European rail network must be expanded to enable unrestricted rail transport from south to north.
- The automobile industry and the railways must collaborate to create opportunities for linked mobility in which passengers can use rail and car-sharing services with a single ticket.

143 Yes-Votes	Accepted	No-Votes 8

#### #5 Greater use of rail to transport goods

The German government and railways should advocate both nationally and at the EU level to create an international infrastructure to move freight traffic onto the railways by 2030. The target is to reduce truck transport to 25% of its current level by the end of 2030.

- The railways must become competitive for long-distance transport (freight and passenger transport).
- Where train routes are already possible, freight transport by rail should become cheaper than freight transport by truck.

Accepted

149 Yes-Votes

No-Votes 3

#### #6 Abolition of subsidies for car transport

Policymakers should immediately start shifting subsidies away from motorized private transport in favor of climate-friendly and resource-saving transportation methods.

- This should proceed as quickly as is economically possible.
- Car transport, which is harmful to the climate, must be made more expensive. Where improved and inexpensive public transport cannot be made possible, there must be offsetting measures in place.

133 Yes-Votes	Accepted	No-Votes 17

#### **#7** Speed limit

The federal government should immediately enact a general speed limit of 120 km/h on federal highways, 80 km/h on rural roads, and 30 km/h in city areas.

#### #8 City toll

A city toll is to be introduced with the goal of reducing car traffic in cities.

74 Yes-Votes	Declined with	No-Votes 77

# #9 Education and awareness campaigns for the mobility transition

In order to encourage behavior change, outreach campaigns are needed to inform the public about the connection between everyday behaviors and climate change, as well as to promote positive messaging about the mobility transition.

- This will require advertising, education, and training. Possible measures to this end include professional mobility advisors, increased media representation of sustainable transportation methods such as small cars and bicycles, messaging about improved quality of life via the mobility transition, and the promotion of bicycle tourism.
- Policymakers must make funds available for these efforts, and should furthermore act as role models for the use of climate-neutral transportation methods.

Accepted

#### #10 Reducing travel / Work from home

Employees should have a right to work from home if they choose, and the introduction of such a policy must adequately account for coercive measures, psychological stress, and social isolation.

132 Yes-Votes	Accepted	No-Votes 19
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#### **#11** Holding companies to account

Companies should be obliged to create incentives for their employees to commute by climate-neutral means such as local public transport. The target here is that, by 2024, 80% of the workforce no longer commutes with climate-damaging vehicles.

- Such incentives include, for instance, reducing the number of parking spaces, offering job bikes and changing rooms to bike commuters, employer-sponsored public transport tickets, better transport connections, and climate-neutral company vehicles (with a limit on engine power).
- In addition, companies with 50 or more employees should be obliged to appoint a sustainability officer.

125 Yes-Votes	Accepted	No-Votes 26	
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#### **#12** Autonomous vehicles

The technological capabilities and legal standing of autonomous vehicles should be promoted for use in public transport (e.g. on-demand buses and taxis, ridesharing).

No-Votes 41

103 Yes-Votes Accepted

#### #13 Promotion of bicycle travel

The cycling infrastructure must be massively expanded over the course of the next 5 to 10 years, following the example of the Netherlands. This should be a mandatory project for the federal government as well as states and municipalities.

- In cities, this project shall include constructing separate bicycle lanes along major thoroughfares and converting smaller streets into dedicated bike routes in order to create a convenient transportation network.
- All rural roads should run parallel to a separate, clearly marked, two-lane bicycle path that older citizens as well as children can feel safe and comfortable using. Safe bicycle lanes are also necessary within smaller towns, and their construction is to proceed systematically with the goal of linking cities, towns, and rural areas by means of convenient Park&Ride rail connections.
- There must also be a sufficient number of secure parking spaces for bicycles.
- Every new road construction or extension project must include mandatory bicycle lanes.

139 Yes-Votes Accepted No-Votes 13

#### **#14 Promotion of electric bikes**

The use of electric bikes in both cities and rural areas is to be actively promoted.

Possible measures to consider include:

- a comprehensive expansion of charging networks and secure parking spaces for electric bikes and cargo bikes alike, especially at points of transfer such as train or bus stations;
- subsidies for the purchase of electric bikes and cargo bikes;
- permission for S-Pedelecs to use certain cycle lanes in observation of a speed limit (following the example of the Netherlands).

Accepted

132 Yes-Votes

### #15 Approvals for internal combustion vehicles

Initial approvals for combustion engine vehicles should cease by 2027, at the latest by 2030. To ensure this measure is viable and without undue social burdens, the following preconditions must be achieved:

- Leading up to the complete phaseout, a gradual transition should occur by means of quotas for new registrations (e.g. earlier phaseout of vehicles with high emissions, company cars, etc.), with exceptions for work, fleet, and construction vehicles;
- Gradual increase in taxes and costs for fuel for combustion vehicles;
- Promotion of synthetic fuels for combustion vehicles during the transitional period;
- Due consideration to different living conditions (urban/rural, social and economic circumstances) and targeted assistance for particularly affected groups;
- Federally sponsored expansion of car and bike sharing along with cost-effective solutions for long-distance travel and long-term usage.
- If necessary, rebates should be offered to drivers who opt to scrap their climatedamaging vehicle and go several years without replacing it with another combustion engine vehicle.

#### **#16** Avoiding and shifting travel

In order to achieve the goals outlined in Recommendation 15, the expansion of electric mobility should be advanced at a correspondingly rapid pace after emission reduction potentials from measures to curb and reroute travel have been exhausted.

- To this end, the following measures should be considered:
- Rebates to incentivize the purchase of electric cars, with subsidies favoring vehicles with lower rates of energy consumption; Exclusion of hybrid vehicles from the label "electric car"; Rapid expansion of vehicle charging infrastructure, especially in rural areas; Ensuring sufficient supply of charging facilities (at home and in public spaces) for all citizens; Sweeping expansion of fast charging stations including at rest stops; Mandate for employers to install charging stations on premises; Combined funding opportunities for solar and storage systems on buildings as charging options; Funding research and development of technologies to improve electric vehicle range;
- By 2030, a closed-loop system for battery recycling in Germany with the goals of transparency about the origin of raw materials and a 90% recycling rate for battery components; Electrification of truck transport with overhead cables on highways within 10 years.

119 Yes-Votes      Accepted      No-Votes 32      132 Yes-Votes      Accepted      No-Vote	.19 Yes-Votes Accepted	No-Votes 32	132 Yes-Votes	Accepted	No-Votes 1
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#### **#17** Research and testing alternative drive systems

In order to achieve the goals outlined in Recommendation 15, research and testing for all promising forms of alternative, climate-neutral drive systems should be funded on a broad scale. In particular, the following aspects should be considered:

- Introduction of a bonus-malus system with the goal that 50% of all vehicles on the road are climate-neutral by 2030;
- Higher ratio of synthetics in fuel blends;
- Lower prices for synthetic fuels; Ensuring electric cars remain the most attractive option for private cars.

143 Yes-Votes	Accepted	No-Votes 7
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#### #18 Air travel costs

The cost of air travel must reflect its costs to the climate. Additional revenue from higher ticket prices should go to fund the expansion of the rail network, or returned to citizens as a tax rebate.

Possible measures to this end include:

- Increasing taxes on flights and jet fuels;
- Germany advocating for EU-wide adoption of such measures;
- Abolishing short-haul flights where rail alternatives are available (e.g. stop-over flights between Stuttgart and Frankfurt) by means of a carbon tax included in the ticket price.

128 Yes-Votes

Accepted

No-Votes 24

#### #19 Avoiding air travel

Ambitious action must be taken to curb air travel, in particular short-haul flights.

Possible measures to this end include:

- Immediate adjustments to the Federal Travel Expenses Act to incentivize video conferencing and only allow for domestic flights to be expensed with valid justification;
- Shifting passengers from domestic flights to rail by 2030;
- Widespread avoidance of flights through digital tools (e.g. video conferencing);
- Forgoing of short-haul flights by politicians;
- Taxing advertising for holiday travel;
- Reduction in air freight.

139 Yes-Votes	Accepted	No-Votes 13
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#### #20 Transition to synthetic fuels for aviation

All remaining flights are to be converted to synthetic fuels. No green fuels from agricultural cultivation should be used. Research into alternative propulsion systems for aircraft should be promoted, financed in part by revenue from a tax on jet fuels.

147 Yes-Votes Accepted

# Field of action: Buildings and Heating



"I am so grateful to the citizens and team for this time spent together. I have a good feeling that all our recommendations and guiding principles can be implemented as quickly as possible, so that our baby can soon say: 'Thank you, dear Citizens' Assembly 2021! You have made it possible for me to live on this beautiful, crystal blue planet for a long time to come.'"

Participant in the working group on buildings and heating

#### **Thematic sponsorships**

Programming for the field of action on buildings and heating was advised by:

- Prof. Dr. Harald Krause of the Rosenheim University of Technology
- Prof. Dr. Ulrike Jordan of the University of Kassel
- Prof. Dr. Uli Spindler of the Rosenheim University of Applied Sciences

#### **Fact checkers**

In the field of action on buildings and heating, meetings were supported by:

- Ferdinand Sigg of the Rosenheim University of Applied Sciences with focus on issues of energy-efficient building renovations
- Ulrich Trabert of the University of Kassel with focus on heat supply issues

There are between 21 and 22 million buildings in Germany used for residential, commercial, trade, and service purposes.  $CO_2$  is emitted not only through the production of building materials used in construction and renovation projects, but also by heating and cooling indoor spaces. Heating and cooling for buildings accounts for a significant part (about one third) of Germany's energy consumption, and the greenhouse gases produced during energy generation comprise about 18% of Germany's total greenhouse gas emissions.

In order to achieve the 1.5 degree target, Germany's heating sector must become climate neutral by 2040 at the very latest. Heating with fossil fuels, such as oil and gas, by itself is responsible for 13% of emissions. Poorly renovated buildings lose a lot of heat energy during the winter and require energy to keep them cool during the summer.

In the field of action on buildings and heating, two topics are of central importance for achieving climate goals. First, the amount of energy consumed per building must be reduced; this is to be accomplished by renovating buildings and using more efficient heating systems. Second, the energy needed to heat and cool buildings must be generated by climate-neutral methods, for example with heat pumps, solar thermal energy, and fossil-free local and district heating.

### Question 1: How can we ensure that the majority of buildings in Germany are renovated for energy efficiency and that the construction sector achieves climate neutrality?

The generation of heat and hot water accounts for a large portion of Germany's energy consumption and greenhouse gas emissions. Currently, many buildings lose large amounts of heat to the outside air for lack of proper insulation. In addition, cooling buildings during the summer months requires a lot of energy. Energy renovation measures, such as insulation and ventilation, can lead to a significant reduction in energy consumption. Energy-efficient buildings require only small amounts of heat and use modern heating systems, such as heat pumps or solar thermal energy, that operate at low temperatures. For new buildings, there are already requirements for energy efficiency in place. However, for existing buildings, renovations for energy-efficiency often require a prohibitively high financial investment which is often only recouped after many years. Many homeowners are therefore skeptical about costly renovation measures, and many simply do not have the financial means. Furthermore, there is a growing shortage of both new and experienced workers in the construction industry, which significantly slows down the pace of renovations.

A first essential question for the working group on buildings and heating was therefore: **How can we ensure that the majority of buildings in Germany are renovated for energy efficiency and that the construction sector achieves climate neutrality?** 

#### Input from the speakers

Felix Gruber of the German Federal Environment Foundation (DBU) gave a presentation on building renovations and the various actors who play a role in the construction sector. He spoke about the different phases of renovation (a sort of "Renovation Compass"), a modernization roadmap for the construction industry, as well as the various opportunities and challenges of renovating buildings.

Dr. Berthold Kaufmann of the Passive House Institute provided information about the concept of a passive house as well as solutions for energy-efficient building renovation. After a short introduction on how passive houses work, practical examples were shown. Kaufmann emphasized that energy-efficient buildings are both economically viable and socially desirable.

Input from the speakers was supplemented by short video statements from relevant players in this field of action. Frank Hettler of Zukunft Altbau; Thorsten Herdan of the Federal Ministry for Economic Affairs and Energy (BMWi); Dr. Kai H. Warnecke, President of Haus & Grund Deutschland; and Dr. Melanie Weber-Moritz, Federal Director of the German Tenants' Association, all provided statements.

#### Discussion

The first sessions revolved around the fundamental question of how to reduce the need for heating in buildings. But the range of topics did not stop there. Particularly striking was the fact that, in every small group discussion, participants noted that the public has insufficient access to information and consultation on the subjects of home renovations and funding opportunities. They criticized the lack of expert knowledge among energy advisors as well as the bureaucracy and incomprehensibility of funding programs. To these ends, the participants formulated several recommendations dealing with the topic of informing and advising the public.

The recommendations reflect many other concerns as well. For instance, it was noted that, in the medium- to long-term, ecological and organic materials for insulation and construction must prevail over materials made from fossil fuels (plastic, oil) or carbon-intensive production (concrete). There was much discussion about the possibilities for financing and encouraging renovations, as well as about how green façades could help to reduce some CO<sub>2</sub> emissions.

There were opposing opinions about whether mandates or incentives should be the driving force of the transition. Should we introduce additional penalties for missed renovations, or should the building transition be driven primarily by incentives?

# Question 2: How can we make our heat supply climate-friendly?

Currently, a significant proportion of heating in buildings is generated by oil- and gas-based systems, and district heating networks also still partly run on fossil fuel combustion. The resulting  $CO_2$  emissions make a considerable contribution to global warming. Existing fossil fuel-based heating systems must therefore be replaced with climate-friendly technologies such as heat pumps or solar thermal energy as quickly as possible, and an emissions-free local and district heating network must be built out across the country.

This transition will involve many actors at different levels, including homeowners, landlords, suppliers of local and district heating, institutions responsible for infrastructure development, tenants, and cooperatively organized communities, among others. Transitioning our heat supply will involve extensive installation projects and thus carry significant financial costs. How to distribute these costs was an important point of discussion for the Citizens' Assembly. With these issues in mind, the participants addressed the following question: **How can we make our heat supply climate-friendly?** 

#### Input from the speakers

What does the future of sustainable heat generation look like, and how will it develop over the coming years and decades? *Dr. Jens Clausen* of the *Borderstep Institute for Innovation and Sustainability* spoke on this topic. In particular, he emphasized that heat planning, energy-efficient buildings, and renewable sources of heat come together to comprise a holistic solution.

Ruth Drügemöller of the Lower Saxony Climate Protection and Energy Agency provided insights into municipal heat planning as a prerequisite for the heating transition. In addition to a breakdown of Germany's heat supply at present and in the future, she named a number of obstacles to municipal heat planning. These included a lack of financial resources for planning and implementation as well as the current legal framework.

To provide supplementary context, short video statements were shown featuring: *Daniel Then*, Head of Department Networks and Technology at *Bamberg Municipal Utility; Rolf Pfeifer,* Managing Director of the consulting agency *endura kommunal;* and *Frank-Michael Uhle,* Climate Protection Manager of the Rhine-Hunsrück district. The architect *Dr. Burkhard Schulze-Darup* also contributed a written statement.

#### Discussion

On the question of how to make the heat supply climate-neutral, participants found many exciting answers and raised many concerns. Digitalization as an instrument of change featured prominently in the discussion and was proposed as a possible solution for decentralized energy distribution. The topic of information and advice was also discussed heavily in this context, which is reflected in the recommendations.

In addition to the question of personal responsibility, participants showed great interest in the question of how a climate-neutral heat supply is possible when so many homes are already outfitted with oil or gas heating systems. The participants recommended stopping the installation of new oil and gas heating systems as soon as possible. Furthermore, heat planning was discussed in detail, and a separate session was dedicated to this topic alone.

# **Guiding principles: Buildings and Heating**

## 1. Guiding principle 1

In order to achieve the 1.5 degree target, federal, state, and local governments are called upon to meaningfully advance the heating transition through accompanying legislation and adequate financing during the next two legislative periods.

146 Yes-Votes	Accepted	No-Votes 3
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# 2. Guiding principle 2

At the same time, acceptance for the heating transition is to be promoted through broad-based information campaigns and ongoing dialogue between all stakeholders, as well as by raising the status of the skilled trades in this sector.

144 Yes-Votes	Accepted	No-Votes 5
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"The ball is in the policy makers' court. They now have a catalogue of policies that citizens support and are ready to make happen. They should seize this chance!"

Christiane Waschk, Participant of the Citizens' Climate Assembly



# **Recommendations: Buildings and Heating**

#### **#1** Information and communication

Policymakers must ensure that the public has access to comprehensive, transparent information about the need for climate-efficient renovations and heating. By 2023, these campaigns must reach 95% of the population.

 Such an information campaign could proceed as part of National Climate Week with both digital and analog outreach measures.
 Potential channels for transparent and accessible awareness-raising include public media broadcasting, social media, private broadcasting companies, and a central online portal.
 These initiatives should stem from the federal government and extend to every level of politics and society.

141 Yes-Votes Accepted	No-Votes 7
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#### #2 Leading by example

By 2036, all public and official buildings belonging to the federal government, the states, and municipalities are to undergo climate-neutral renovations, in so far as this is structurally possible and rational from an energyusage standpoint. These renovations should serve to set an example moving forward. Renovations should be prioritized according to need.

143 Yes-Votes	Accepted	No-Votes 7
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#### **#3** Financing and promotion (1)

The federal government and local authorities are to promote energy-efficient renovations for residential buildings according to a financing ratio. This should subsidize renovation costs for low-income families by up to 70%; the financing ratio shall be significantly lower for high-income families who live with a greater amount of space per person.

121 Yes-Votes	Accepted	

No-Votes 28

#### #4 Financing and promotion (2)

Starting in 2023, financing for energy-efficient renovations in residential buildings is to come from four sources: building owner's share 20%, tenant's share 10%, federal government share 50%, municipality share 20%. In the case of unrented residential spaces, the building owner assumes the tenant's share. The tenant's share is administered by the landlord as a limited bank loan (minimum term: 10 years) that is to be paid off in monthly installments. A rent increase may not exceed 8%.

109 Yes-Votes	Accepted	No-Votes 39

#### #5 Skilled laborers

In order to address the shortage of workers across the entire skilled trade sector, the federal government must reform training and employment conditions. To this end, the following measures should be implemented with immediate effect:

- Financial support for vocational schools and companies offering apprenticeships in skilled trades related to energy-efficient renovation and sustainability;
- Hiring push and more extensive training for instructors in these sectors;
- Financial assistance for smaller companies to begin providing apprenticeships;
- Improvement in the working conditions across the skilled trades sector, including higher wages, access to health benefits (e.g. massage, physical therapy), coaching opportunities, and more days of leave;
- Compulsory training in the area of energy efficient renovations and new technologies;
- Extensive career transition programs training skilled workers from automotive and fossil energy production industries to become renovation specialists;
- Over the next 10 years, skilled workers from abroad should be actively recruited to bridge the current shortage.

135 Yes-Votes	Accepted	No-Votes 15

#### #6 Consulting

By 2024, every building should receive a free energy consultation that includes advice for renovation and a simple rating (e.g. in the form of an energy traffic light).

In order to guide the pace and prioritization of nationwide renovations, data from these consultations will be collected in a central database. Buildings with the most urgent need shall be renovated with higher priority than those that are already more energy-efficient. Following the renovation of a building, a final report about its energy efficiency shall be prepared. Moving forward, every municipality grants its citizens the right to free energy renovation consultations from state-certified advisors.

128 Yes-Votes	Accepted	No-Votes 21
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#### **#7** Building and construction materials

Policy must prioritize and promote the use of environmentally friendly, ecological building materials in energy renovations. All building materials should be recyclable in a circular economy. Non-sustainable materials are to be taxed much more heavily.

141 Yes-Votes	Accepted	No-Votes 7
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#### #8 Civic engagement

In order to accelerate all phases of work and construction, the federal government, states, and local authorities are to use digital workflows that serve to optimize the renovation of existing buildings as well as the construction of new buildings.

These digitalization requirements should be fulfilled through an open call for proposals such that start-ups promising innovative solutions can receive funding.

133 Yes-Votes	Accepted	No-Vo <mark>tes 16</mark>
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#### **#9** Data and digitalization (1)

In order to accelerate all phases of work and construction, the federal government, states, and local authorities are to use digital workflows that serve to optimize the renovation of existing buildings as well as the construction of new buildings.

These digitalization requirements should be fulfilled through an open call for proposals such that start-ups promising innovative solutions can receive funding. Accepted with 95%

142 Yes-Votes	Accepted	No-Votes 8
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#### **#10** Data and digitalization (2)

A nationally standardized, future-proof data infrastructure should serve as the mechanism for the networked, intelligent management of building renovations and heat planning.

134 Yes-Votes	Accepted	No-Votes 13

#### #11 Energy sources

The federal government should establish a right to renewable energy that is cheaper than fossil fuels.

Policymakers should introduce tax relief and other financial measures to support climate-neutral heating sources, and remove subsidies for environmentally damaging heating sources. Additionally, fossil fuel sources should be taxed more heavily.

137 Yes-Votes Accepted No-Votes 12

#### #12 Heat planning

The federal government and states shall provide financial and organizational support to municipalities for the preparation of renovation and heating plans.

141 Yes-Votes	Accepted	No-Votes 8
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#### #13 Energy sources

Federal funds must be redirected (e.g. by canceling subsidies to polluting companies, realigning the federal budget and tax revenue) and passed on to municipalities for investment in climate-neutral heat sources and building renovations.

The amount of funds made available for renewable energy sources must be at least equivalent to that which has been spent so far on subsidies and compensation payments to fossil fuel industries and other climate-damaging technologies and systems.

o-Votes 8
I

#### **#14 Energy sources**

Between 2026 and 2028, the government is to enact a ban on the installation of oil and gas heating systems. In addition, the government is to introduce a uniform traffic light system indicating the efficiency of heating systems.

 In keeping with this system, particularly climate-damaging heaters are to be replaced first. The replacement of the most harmful heating systems should proceed gradually at a rate of 5% per year.

#### #15 Leading by example

The federal government, states, and municipalities should turn to our European neighbors (e.g. Denmark, the Netherlands) to learn from their experiences, for example by establishing new and strengthening existing city partnerships.

 A Europe-wide database shall collect case studies and best practices relating to a successful heat transition and building renovations. The success in Baden-Württemberg should serve as a model for municipal heat planning in other regions of Germany.

140 Yes-Votes

Accepted

No-Votes 9

#### #16 Leading by example

At the municipal level, programs should be created through which owners of energy-efficient homes can present their renovated houses to other interested persons on a voluntary basis.

118 Yes-Votes	Accepted	No-Votes 28
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#### #17 Heat planning (1)

By 2022, the federal government shall create the basis for the formation of supra-regional task forces dedicated to heat planning and its construction, as well as an international platform for commissioning experts from abroad in an effort to counteract the acute shortage of specialists domestically.

130 Yes-Votes

Accepted I

No-Votes 17

#### #18 Heat planning (2)

Municipalities shall be mandated to carry out heat planning.

- Municipal heat plans shall contain information about the number of buildings and the demand for heat (monitoring), as well as concrete measures for how to achieve climate-neutral heating within the region.
- From 2023 onwards, the federal government shall oblige and support the states and their municipalities in the creation of these plans.
- The necessary support for municipalities shall be provided in the form of regular financing in a cooperative effort between the federal government, the states, and the municipalities.
- The necessary support for municipalities shall be provided in the form of regular financing in a cooperative effort between the federal government, the states, and the municipalities. In this way, by 2026 each municipality should be in a position to describe their heating sector and develop a heating plan for the future.
- Smaller municipalities with fewer than 40,000 residents may join forces with others, for example at the district level. The states should adapt legislation regarding the heating transition accordingly. Municipalities must give homeowners concrete examples of ways to join the heating transition and proactively provide consultations on energy efficiency.

142 Yes-Votes	Accepted	No-Votes <mark>6</mark>
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# 3.4. Field of action: Food and Agriculture

"We already knew that the way to the heart is through the stomach. But we've learned that the way to a liveable climate is also through the stomach."

Axel Wilhelm, Participant of the Citizens' Climate Assembly



#### Thematic sponsorships

Programming for the field of action on food and agriculture was advised by:

- Prof. Dr. Lucia Reisch of the Copenhagen Business School and Zeppelin University gGmbH
- Prof. Dr. Ellen Matthies of the Otto von Guericke University Magdeburg
- Karen Krause of the Otto von Guericke University Magdeburg

#### **Fact checkers**

In the field of action on food and agriculture, meetings were supported by:

- Friederike Döbbe of the Stockholm School of Economics
- Johanna Meier of the Ruhr University Bochum

Our food system is not climate neutral, and food is more than agriculture. From cultivation, to processing, to consumption, current studies link more than 30% of all greenhouse gas emissions worldwide to food production. In addition to emissions in the agriculture sector, this figure also takes into account greenhouse gases released through land conversion (e.g. deforestation, draining marshlands) as well as along the entire production chain (e.g. storage, cooling, transport, preparation). In the working group on food and agriculture, participants examined both the production and consumption of food and considered their relation to one another. Additionally, nutritional health, the impact of different diets, and issues of social justice all played important roles in the discussion.

Livestock farming, especially cattle farming, accounts for a particularly large share (40%) of agricultural emissions. As ruminants, cattle emit methane gas during digestion and elimination, which is much more harmful to the climate than CO<sub>2</sub>. Fertilizing land with manure is another major contributor of greenhouse gases (40%), as this releases nitrous oxide into the atmosphere, which is also more potent than CO<sub>2</sub>. At the same time, the high levels of nitrate in manure-based fertilizers also contaminate groundwater. Large swathes of natural marshlands, which store a lot of CO, and contribute to a climate-balancing effect, have been drained to make room for animal agriculture. Rearing animals for the production of meat and dairy products also leads to deforestation internationally, as land abroad is cleared to cultivate animal feed. A dramatic reduction of livestock farming by at least half - especially cattle farming - is necessary to limit global warming to 1.5 degrees. In addition, a shift towards regenerative modes of agriculture that actively contribute to climate protection and landscape conservation must be implemented as soon as possible.

The capacity of this field of action to offer climate protection greatly depends on changing our habits. To meet climate goals, the consumption and production of meat and dairy products must be reduced as much as possible. To achieve this, policy must use a variety of instruments to gain leverage in the market. Consumers must be presented with easily accessible and transparent information about the actual environmental and health costs of food products, which in turn must be made more sustainable and climate-friendly. Above all, awareness must be raised about the urgent need for a transformation of our food system in order to gain public acceptance and promote dietary change. This will require a widespread shift away from animal-based foods to mostly plant-based ones.

Such a dietary transition can only succeed with the transformation of the entire food system. Over the course of the Citizens' Assembly, participants developed recommendations for changing our food system that went much further than initially expected.

### Question: What must be done about the production and consumption of meat and dairy products in order to benefit public health and the environment?

Our diets impact the climate, our systems of land use, and also our health. Current studies indicate that a diet comprised largely of animal products is significantly more detrimental to the climate and the environment and also leads to significantly more diseases than a plant-based diet. To sustainably and nutritiously feed a growing world population by 2050, there must be a fundamental shift in the way we eat. A new food system that is in harmony with both our planet and human health must be created, requiring us to transition from animal-based to mostly plantbased diets.

However, the necessary transformation of our food system cannot be achieved through the development of singular measures applied in isolation. Rather, it will require an interplay between several effective strategies and participation at all levels of society. A central question for the Citizens' Assembly was therefore: What must be done about the production and consumption of meat and dairy products in order to benefit public health and the environment? And more broadly: What will the path to sustainable nutrition look like for the climate and the public? Which steps are most important, and which strategies are most effective?

Among the topics discussed were: alternative food models such as the Planetary Health Diet; life cycle assessments; regional vs. factory farmed livestock; emission caps; land commitments and environmental services; regenerative agriculture; greenhouse gas surcharges and pricing structures; standards for exports and imports; advertising bans; awareness, education, and research. In addition, relevant topics from other fields of action – such as land use and raw material production – were also discussed. New food guidelines were identified as a powerful tool for implementing change, and the issue of food waste also was addressed. Participants repeatedly examined their own willingness to reduce or completely renounce the consumption of animal-based foods. Discussions on various approaches to democratizing our food system rounded off the working group sessions.

#### Input from the speakers

In his introductory lecture, *Dr. Alexander Popp* of the *Potsdam Institute for Climate Impact Research (PIK)* spoke about the current state of our food system, its most significant sources of emissions, the connection between land use, environmental destruction, and climate damage, as well as the impact of diet on human health. In doing so, he pointed out that global population growth will be accompanied by a massive strain on social institutions and the environment. In addition, he provided an initial overview of possible measures for a sustainable food transition, both on the part of consumers and producers.

Dr. Marco Springmann of the University of Oxford presented "Menu for a Healthy Planet — the Planetary Health Diet." Published in 2019, this program serves as a model for the sustainable transformation of our global food system and explains the changes necessary for its implementation.

Dr. Ulrike Eberle of the Corporate Sustainability GmbH applied the Planetary Health Diet to Germany and presented three dietary models in detail (flexitarian, vegetarian, and vegan), considering each in terms of their climate impact. She illustrated the foods and their quantities that comprise these diets, and also their potential for reducing one's own climate impact: a flexitarian diet that includes moderate amounts of meat and dairy can reduce greenhouse gas emissions by as much as a 25%, while a vegan diet consisting exclusively of plant-based foods can reduce emissions by as much as 40%.

Dr. Malte Rubach of M.R.Expert and author of the book Eco-Friendly Eating: The Ecological Footprint on Our Plates spoke about the impact of different foods and recommended a nuanced approach to various issues, such as freshwater consumption, greenhouse gas emissions, land use, and eutrophication (i.e. the excessive accumulation of nutrients in bodies of water) in both regional and national contexts.

*Margarethe Scheffler* of the *Öko-Institut e.V.* pointed out other important connections and dilemmas in the context of agriculture and climate protection. She spoke about land use, livestock, and the effects of current agricultural subsidies. She compared the current legal framework with the Renewable Energy Sources Act (EEG), and put forward scientific proposals for developing a holistic strategy for transforming our food system.

Stephanie Wunder of the Ecologic Institut gGmbH also contributed her expertise on the socio-ecological transformation of the food system. Specifically, she addressed regulatory approaches to resource efficiency, the use of food surpluses, compulsory documentation, and recording food waste. She additionally spoke about various approaches for cooperation with public health institutions, cross-departmental governance , and limiting the influence of lobbies through transparency requirements.

Permaculture designer Stefan Schwarzer of the United Nations Environment Program (UNEP) spoke about regenerative agriculture and its potential to mitigate the effects of climate change amidst a transformation of our food system. He presented on sustainable soil management techniques such as intercropping, direct seeding, humus build-up, agroforestry, and carbon sequestration, as well as mob grazing as an alternative approach to integrated livestock farming.

Gundula Oertel of the Nutrition Council Berlin and Valentin Thurn of the Nutrition Council Cologne presented perspectives and examples of successful democratization models in the food system, highlighting the potential climate benefits of social participation and offering perspectives on these efforts. The presentations were complemented by a short video portrait of the farmer Michael Reber, who was involved in the Youtube educational series #wirstehendrauf (en. "we're standing on it") as "an arable farmer on the way to regeneration," as well as another short film called Solidarity Farming Bamberg by the Bavarian Broadcasting Corporation.

#### Discussion

The debate about the complex challenges of transforming our food system initially revolved around the tension between the urgent need to reduce emissions in order to meet the 1.5 degree target on the one hand, and questions of social justice on the other. Both the perspectives of end-consumers and the agricultural industry were considered. The working group agreed, climate-friendly and nutritious food must be affordable for all, and farmers must be supported and safeguarded through the transition.

Systemic solutions must be implemented at the highest political levels, such as through a clear political framework and new agricultural law based around the Paris climate goals, and by restructuring subsidy policies according to climate protection criteria. It was important to the participants that actions are taken on both sides. On the side of production, macro-political measures - in particular systemic change and the reduction of livestock farming - must work to curb emissions. On the side of consumers, comprehensive awareness and education campaigns must help guide the public in making more responsible purchase decisions. From the outset, participants showed a very high willingness to change their own diets. At the same time, they found it important to be able exercise a degree of individual freedom in how they eat.

The participants identified various instruments that could have a direct effect on regulating the market for climate-damaging food products and holding food producers accountable for their climate impact. These included an official seal indicating climate impact and new nutritional guidelines. A food system in which there is equal supply and demand for climate-friendly products was named as an overarching goal. As with other topics, education and awareness were especially important to the citizens in the working group on food and agriculture. They emphasized the importance of information designed to reach all age groups and relevant professions so that the transformation would be supported by industry expertise as well as a sustainable shift in public consciousness.

From beginning to end, the central challenge of discussions on food and agriculture revolved not around the question of whether, but of how to achieve a food transformation. Alternative agricultural approaches and climate-friendly land use systems remain largely unfamiliar concepts among the general populace. This partly explains why many lack trust in alternative visions for the future of food and are skeptical as to whether they can provide adequate nutrition for all. However, this did not stop the participants from exercising differentiation and developing ambitious, sweeping recommendations for instruments and strategies for all levels of the field of action on food and agriculture.

# **Guiding principle: Food and Agriculture**

#### 1. Guiding principle

The transition to climate-friendly agriculture is to take place as fast as possible. It must ensure an adequate supply of healthy food that is affordable for the entire population and provide income for food producers.

143 Yes-Votes	Accepted	No-Votes 2

## **Recommendations: Food and Agriculture**

# #1 Greater promotion of EU common agricultural policy

The agriculture and food sector must become climate-friendly by 2030, and the results of this transition must be readily comprehensible to end-consumers.

Germany should promote EU-wide compliance with the Paris climate targets by lobbying for profound changes to agricultural subsidies within the EU.

142 Yes-Votes Accepted No-Votes 4

#### #2 Agricultural laws

By 2030, a contemporary Agriculture Law must be introduced that limits emissions from the agriculture and food sector.

The regulations should be based on targets set in the Federal Climate Protection Act (1.5 degrees). Experts and affected groups (e.g. farmers) are to be involved in the drafting process.

Accepted

147 Yes-Votes

No-Votes 2

# "No one is chopping down the rainforest to make tofu."

Participant of the Citizens' Climate Assembly

#3	Structural change/formation of agriculture
	commision and transition opportunities

A structural change must occur, transforming our current agriculture system into a climate-friendly one.

- To coordinate and implement this change, an agricultural commission shall be established to oversee the fulfillment of these goals.
- Subsidies should be designed in a climate-friendly way (see Recommendation 4).
- 1c) To facilitate the conversion process, appropriate support programs shall be established and adequate resources shall be provided for the areas of education and vocational training.
- 2) Criteria for climate-friendly agriculture shall be clearly defined. These should include, for example:
- A reduction in the number of livestock, with the aim of reducing emissions from animal agriculture by 50%
- Use of freed-up areas for renewable energy generation, peatlands, agroforestry, biodiversity, water retention
- Production of raw materials for climate neutrality and energy generation
- Avoiding soil erosion through alternating, continuous cultivation
- 3) Cooperative agriculture should be promoted over large food corporations. This should, among other things, free small farmers from dependency on these corporations and enable a more robust regional agricultural supply. As a full-time occupation, farming must once again become a financially worthwhile endeavor.

142	Yes-Votes	

Accepted

No-Votes 9

#### #4 Restructuring subsidies

Subsidy policy must be guided by climate impact.

As such, subsidies are no longer to be calculated according to area, but rather according to fixed benchmarks for environmental performance and emissions. To support the climate-friendly transformation of the agriculture sector, subsidies are to be used both for compensation and investment. In particular, subsidies for products or processes that are harmful to the climate should be abolished. Overall, the total amount of subsidization need not change, but a reallocation must take place.

148 Yes-Votes Accepted	No-Votes 2
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#### #5 Reducing emissions in animal agriculture

The production of meat and dairy products in particular must undergo serious changes as part of the transformation of our agriculture system. To this end, the following measures must be implemented:

- By 2030, emissions from livestock farming must be reduced by 50% or more. This will require a significant reduction in livestock numbers throughout Germany, including those kept in operations with particularly high stocking densities (factory farming).
- New animal agriculture guidelines should come into force. These must take animal welfare into account, and their implementation must also be possible for smaller scale farms (see Recommendation 3.1c).
- It shall no longer be permissible to practice intensive livestock farming on existing or rewetted peatlands.
- Systems of sanctions and incentives should be reexamined to enforce compliance with these guidelines.

140 Yes-Votes

Accepted

#### #6 Overproduction / destruction / waste

The systematic overproduction of food products in Germany and across the EU must be curbed.

143 Yes-Vote	Accepted	No-Votes 7
#7 Impoi	S	
The federa	government must take a	ppropriate action
to ensure t	at	
1) the sa	the same production standards apply to imports	
as to	as to domestic products, and	
2) that reductions in emissions achieved through		
the declining domestic production of meat and		
dairy	re not offset by imports.	
136 Yes-Vot	Accepted	No-Votes 14

#### #8 Deforestation for feed from abroad

Imported animal feed must be limited to short transport routes.

 It should no longer be permissible to import feed that is produced by means of deforestation and land conversion abroad.

148 Yes-Votes Accepted	No-Votes 3
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#### **#9 Exports**

Export policy must be designed to account for climate impact. Appropriate guidelines and restrictions on exports must be established.

Ang	eno	mm	en	mit:	

137 Yes-Votes	Accepted	No-Votes 12
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#### #10 Research

Publicly funded research should focus on methods for establishing a climate-friendly, sustainable agricultural and food system.

147 Yes-Votes	Accepted	No-Votes 4

#### **#11** Genetic modification

We recommend abolishing patents on seeds, including genetically modified seeds.

122 Yes-Votes	Accepted	No-Votes 27
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#### **#12 Nutrition guidelines**

By the start of 2023, the guidelines of the German Nutrition Society (de. DGE) must be realigned to promote a healthy and climate-friendly diet in keeping with the Planetary Health Diet.

All training and continuing education programs for occupations relevant to nutrition should be adapted to uphold these guidelines. Menus in public institutions (e.g. schools, hospitals, nursing homes, etc.) should be based around these guidelines. The implementation of these guidelines should be monitored by a committee of experts.

136 Yes-Votes Accepted No-Vo
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#### #13 True pricing

By 2030, a basic supply of healthy food must become the most affordable option for all. This is to be achieved by making climate-damaging products more expensive and climate-friendly products cheaper by comparison.

To this end, the basis for calculating social benefits must account for premiums on climate-friendly food products. A commission of experts shall be tasked with developing a catalogue of measures by which to introduce and implement "True Prices" that account for the health and environmental costs of food products; these measures shall include various instruments such as measuring greenhouse gas footprints, financial incentives, regulations, provisions, etc.

134 Yes-Votes

Accepted

No-Votes 10

#### #14 Official seal

By 2030, all food products must carry an official seal in the form of a climate traffic light. The seal will carry a standardized assessment by a panel of experts who evaluate the climate impact of the product from production, to transport, to packaging, to its potential for recycling.

Products receiving a green classification must be climate-neutral and produced by natural means. Products with a red classification are those that are not climate-friendly.

Accepted

137 Yes-Votes

#### #15 Destruction / waste

Food waste and destruction must be reduced. This is to be achieved by the following means:

- The destruction of food in the public sector and the food service industry, as well as by suppliers and processors, must be documented and classified according to different kinds of waste. It should become a punishable offense to waste a certain quantity of food in relation to the total volume of handled goods.
- 2) Useable food waste should be processed for animal feed.
- Food rescue (e.g. dumpster diving) should be decriminalized.

136 Yes-Votes	No-Votes 14
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#### **#16 Advertising ban**

Advertising for climate-damaging and unhealthy food products, especially advertising aimed at children, should be banned.

Advertisements for these products shall be forbidden during the airing of television programming for children. The classification of products as climate-damaging should be based on clear standards such as the climate traffic light system.

138 Yes-Votes Accepted

No-Votes 9

### #17 Avoidance of meat and dairy products

In Germany, climate-friendly and healthy nutrition according to the guidelines of the Planetary Health Diet should be encouraged through education, and should especially emphasize avoidance of meat and dairy products as far as possible. To this end, marketing and advertising campaigns for healthy and climate-friendly nutrition should be developed for all age groups (e.g. fixed advertising spots on YouTube, during primetime on public media channels, pamphlets featuring recipes in keeping with the Planetary Health Diet).

Accepted

No-Votes 36

#### **#18** Education / awareness

The topic of climate-friendly and healthy nutrition must be anchored in educational curricula. To this end, opportunities for learning and hands-on experience (e.g. school gardens, cooking classes) should be introduced as early as primary school and daycare, and consideration must be made for children's familial situations. At minimum, this topic should be included in at least one class, or better yet, as a cross-cutting theme in all subjects. Similar curriculum adjustments are also to be made for adult education programs (e.g. community college).

#### **#19 Democratization**

A democratization of the food sector should take place with the involvement of all municipalities and citizens.

100 Yes-Votes Accepted No-Votes
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# 3.5. Instruments of transformation



#### **Thematic sponsorships**

Programing for the topic of instruments of transformation was advised by:

- Dr. Christine Merk of the Kiel Institute for the World Economy (IfW Kiel)
- Dr. Johannes Pfeiffer of the ifo Institute

#### **Fact checkers**

The following supported sessions by answering participants' questions about instruments of transformation:

Dr. Wolfgang Habla of the ZEW – Leibniz Center for European Economic Research

In order for Germany to make its contribution to achieving the 1.5 degree target, transformation is needed across all levels of society and the economy. This can be achieved through various climate policy tools, referred to in the Citizens' Assembly as instruments of transformation. They include incentives and bans, pricing and information tools, and public investments, among others. Instruments of transformation address issues of social justice, influence people's freedom to act in various ways, and serve the cause of climate protection with different degrees of speed and intensity.

### Question: When it comes to carbon pricing, what are the key issues regarding financial relief and revenue use, especially in the interest of social justice?

While participants broke into four working groups dedicated to different fields of action, the topic of instruments of transformation offered a space in the plenary session in which all participants came together to deliberate on climate policy tools more generally.

First and foremost, the Citizens' Assembly dealt with carbon pricing. While regarded by climate scientists and many politicians as an essential mechanism for reducing greenhouse gas emissions, carbon pricing is also controversial for its impact on the cost of goods, fuel, and energy, and thus its direct impact on all citizens. Discussions in the Citizens' Assembly were therefore guided by the following question: When it comes to carbon pricing, what are the key issues regarding financial relief and revenue use, especially in the interest of social justice? For this topic, seven recommendations were developed and voted on.

Since the question of carbon pricing affects every field of action covered in the Citizens' Assembly, the work on this topic was carried out together in plenary sessions as well as in small discussion groups made up of participants from all fields of action.

#### Input from the speakers

*Prof. Dr. Andreas Löschel* of the *University of Münster* provided foundational information about the various instruments of climate policy. He explained the basic mechanisms by which climate policy can function with a focus on market mechanisms. Afterwards, the participants discussed which challenges and opportunities they saw in these climate policy instruments, and in further discussion shared how they believed these instruments should be evaluated.

The topic was taken up again by the *Citizens'* Assembly during a later session in which *Dr. Michael Pahle* of the *Potsdam Institute for Climate Impact Research* gave a presentation on carbon pricing. His presentation centered on the modes of action and distribution effects of carbon pricing, as well as on different concepts of justice.

#### **Discussion and work process**

Subsequent discussion on carbon pricing concerned how the revenue it generated should be used. Participants shared ideas as to where the majority of these funds should be applied: climate protection measures, compensating the public for the additional financial burden of carbon pricing, technological innovations for climate protection, or redistribution among all citizens (a climate dividend). Numerous citizens mentioned the dilemma between their personal desire to contribute to climate protection and the limits of the financial burden they could bear.

The results of this discussion were categorized according to reoccurring themes and commented on from a scientific perspective. Subsequently, the participants developed recommendations on carbon pricing, the use of revenue, and social compensation. A group of participants volunteered to join an editorial team in which they summarized these results for a vote. Within this editorial team, a decision was reached to depart from the structure used in the working groups for each field of action. In order to adequately represent the diversity of opinions shared during the discussions, the editors chose not to draft individual recommendations but rather recommendations that included different options on which all participants would vote.

#### Recommendations: Instruments of Transformation

#### **#1** Design of carbon pricing

As a binding instrument applicable to every level of society and the economy, carbon pricing should contribute to achieving the 1.5 degree target.

#### #2 Reporting and oversight

It must be clear and comprehensible to citizens how the carbon price is calculated, how much revenue it generates, and how this revenue is used.

- A regular climate report subject to public law should be published each year detailing the revenue from carbon pricing as well as the use of this revenue.
- Products must carry information disclosing the amount of carbon tax included in their price along with a simple and intuitive representation of their climate impact (e.g. a climate traffic light). Further information about a product's impact should be easily accessible.

144 Yes-Votes	Accepted	No-Votes 8

#### #3a Use of revenue from carbon pricing

The revenue from carbon pricing should be earmarked for investment in social compensation, research and development, and infrastructure. In particular, projects that meet the following criteria are to be prioritized: rapid, impactful, and long-term climate protection; social compensation.

#### #3b Use of revenue from carbon pricing

- **Opt. A** Revenue from carbon pricing should primarily benefit citizens directly, both to provide relief from social hardships and to promote a climate-neutral lifestyle.
- **Opt. B** Revenue from carbon pricing should primarily fund the research and development of new, climate-neutral technologies and innovations.
- **Opt. C** Revenue from carbon pricing should primarily be invested in the construction and expansion of climate-neutral infrastructure.
- Opt. D None of these options.

44	32	63	12
Α	В	С	D

"We are all guests on this planet, given the gift of a limited lifetime. Reflecting on and delving into climate issues made me very aware of my own personal responsibility, but also showed me possible solutions. After such open dialogue, appropriate action must follow – personally as well as culturally, nationally as well as globally."

Participant of the Citizens' Climate Assembly

#### #4a Social compensation through reimbursement

"To compensate the public for additional expenditures associated with carbon pricing, a climate dividend or per capita flat rate should be introduced.

#### #4b Structure of reimbursement

- **Opt. A** Social compensation should proceed primarily by means of a per capita flat rate and a reduction of the EEG surcharge.
- **Opt. B** Social compensation should proceed by means of a climate dividend calculated according to household income. Households with lower income should receive higher payments.
- **Opt. C** Social compensation should proceed by means of a climate dividend calculated according to the annual health insurance contribution. Those who pay more have higher incomes and shall therefore receive lower dividends from carbon pricing. Citizens outside of the health insurance system must be included by other means (e.g. through social institutions).

#### **Opt. D** None of these options.

43	58	19	31
Α	В	С	D

#### #5a Global, social justice

A portion of the revenue from carbon pricing should be dedicated to offsetting global climate damage.

109 Yes-Votes	Accepted	No-Votes 40

#### #5b Global, social justice

- **Opt. A** The share should be proportionate according to the polluter pays principle
- **Opt. B** This share should correspond to a third of the total revenue from carbon pricing.

#### Opt. C None of these options.

81	9	62
Α	В	C

#### #6 Climate budget

Efforts should be made to work towards introducing a per capita climate budget. All measures to this end that are currently viable should be implemented directly. Any elements of a per capita climate budget that are not currently viable should undergo further research and development. This policy should not give rise to social controls or surveillance over individual consumption practices.

99 Yes-Votes Accepted	No-Votes 53
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#### **#7** Potential for tax relief

With the introduction of carbon pricing, opportunities for tax relief in other areas are to be examined.

#### "Just to think – our proposals will be passed on to the parliament! I've never had this much influence before."

Alexandra North, Participant of the Citizens' Climate Assembly





# 4. Background information on the Citizens' Climate Assembly

#### 4.1. How do citizens' assemblies work?

Citizens' assemblies are a special form of democratic participation by a randomly selected group of citizens. First, a larger sample of citizens is drawn by lottery. In the case of the Citizens' Climate Assembly, this sample was narrowed down to 160 participants based on criteria such as gender, age, and migration experience in order to build a group whose demographic composition corresponds as closely as possible to the German population as a whole. A nearly representative composition of participants (see figure 4.5) is meant to ensure that many perspectives from a diversity of people can find their way into the deliberations, and also to confer democratic legitimacy to the process.

Citizens' assemblies have proved themselves to be valuable instruments for addressing highly controversial issues in a society. One particularly striking example of their potential is the Irish Citizens' Assembly that helped the country resolve its profound conflict over abortion rights.

Presentations by experts and other relevant actors help to inform the discussion and bring different perspectives on the topic at hand. The discussions are supported by a team of moderators and assistants who, while adhering to a strict policy of neutrality regarding content, are tasked with ensuring that everyone can participate in the conversation and that the results of each discussion are recorded in a way that group feels is accurate.

Through discussion of different perspectives in smaller groups, participants are encouraged to develop and examine their own opinions. Towards the end of the process, the participants jointly formulate recommendations to policy-makers based on the knowledge and perspective they have won over the course of the many presentations and discussions. The drafted recommendations are then voted on by all participants. The overall process for the Citizens' Climate Assembly took place in four four phases:

- Preparing the content and organizing the assembly.
- Randomly selected participants develop their recommendations in the form of a citizens' report and vote on them – sometimes with a large majority. This second phase represents the core of the project.
- The Citizens' Report is presented to representatives from all parties in the German parliament.
- Politicians are compelled to implement the recommendations by means of campaigns organized by BürgerBegehren Klimaschutz e. V. with support from civil society and volunteers from the Citizens' Assembly.

Germany's first nationwide citizens' assembly took place in Leipzig in 2019 and addressed the topic of democracy. There was great public approval for this format of citizen participation. A second citizens' assembly, this time themed "Germany's Role in the World," followed in the spring of 2021. This also served as an experiment to determine whether this form of democratic participation can be carried out digitally. The 2021 Citizens' Climate Assembly is the third of its kind in Germany and the second citizens' assembly to take place 100% digitally.

Citizens' assemblies on climate policy in France, the UK, and other countries served as models for Germany's version. From October 2019 to June 2020, the "Convention Citoyenne pour le Climat" took place in France, whereby 150 French citizens addressed the topics of energy, agriculture, and mobility in seven weekend sessions and developed recommendations for action on how to reduce net  $CO_2$  emissions in France by at least 40% by 2030. In June 2019, "The Climate Assembly UK" was launched in the United Kingdom, consisting of 108 participants. Up through the spring of 2020, the participants discussed how to achieve the country's core climate goal of zero net  $CO_2$  emissions by 2050.

#### 4.2. Topic selection

The overarching question posed to the Citizens' Climate Assembly was: How can Germany achieve the goals of the Paris Agreement – with due consideration to social, economic, and environmental factors?

In order to answer this question, the participants were asked to develop recommendations for climate policy that, if implemented, would have the greatest possible effect on climate protection in Germany as well as in other countries around the world. In doing so, they were also asked to consider questions of social, economic, and ecological viability.

In the spring of 2021, the scientific board of advisors decided on the concrete topics and questions that the Citizens' Climate Assembly would address, using surveys of civil society organizations, politicians, and citizens as their basis.

#### Step 1:

#### Science sets the framework

With the help of an independent scientific board of advisors, the content framework for questions and topics for the Citizens' Climate Assembly was first defined from a scientific perspective. The selection of questions was based on the following criteria:

- Can this issue make a significant contribution to the reduction of greenhouse gases?
- Does the issue particularly affect the lives of citizens?
- Does the issue have the potential for social division, or does it involve conflicts of interest that the format of a citizens' assembly is ideal for resolving?

#### Step 2:

#### What do politicians and civil society find important?

Based on proposals from the scientific community, representatives from federal politics and civil society were invited to support the selection and prioritization of topics and questions for the Citizens' Climate Assembly. Party and fraction leaders from the German parliament, together with various civil society organizations, were asked about their views and suggestions for issues to address in the Citizens' Assembly.

#### Step 3:

#### What does the public find important?

As part of a nationwide representative survey, the drafted questions and topics were presented to ordinary citizens. The public was asked which of these issues the Citizens' Assembly should address. The results of the survey flowed into the final decision as to the topics and questions presented to the Citizens' Assembly.

#### Step 4:

#### Define fields of action and lines of questioning

Based on the feedback from politicians, civil society, and opinion surveys, the scientific board of advisors, with the support of the organizing institutes, developed a proposal for the fields of action and central questions for each field.

#### 4.3. Procedure and discussion process

The citizens dealt with the question of how Germany can make its contribution to achieving the goals of the Paris Climate Agreement over twelve sessions in which they partook in different opinion-forming exercises.

In the first meeting, all participants joined a **plenary session** where they were introduced to the topic of climate change and its consequences. They were provided with foundational information about the climate, climate change, and climate protection, as well as on current international and domestic climate goals.

This was followed by **discussion groups consisting of six to eight participants.** These small groups were generally the most important places for discussion and opinion-forming during the Citizens' Assembly sessions. The groups were supported by a moderator who ensured that all participants had their say, that the discussion was respectful, and that conversation stayed on topic. Key points from the discussion, initial suggestions for policy recommendations, and open questions were recorded on a **digital whiteboard** in consultation with the participants.

The second and third sessions were dedicated to the **Future Workshop**, where participants exchanged ideas for the country's future. With this foundation, the citizens were primed to discuss social transformation. At several points over the course of the Citizens' Assembly, these **visions for the future** were discussed in greater detail (in plenary sessions and in small groups). At the same time, the **overarching principles** were formulated as a means of guiding climate policy across all fields of action. Further details on the process of the Future Workshop, as well as on the development of visions for the future and guiding principles, can be found in Chapter 2.

In the fourth meeting, the participants joined a plenary session where they were provided with an introduction to the central challenges and most important measures in all four **fields of action** (energy, mobility, food and agriculture, buildings and heating), as well as the overarching topic of instruments of transformation. Afterwards, the work in individual fields of action commenced. In order to do justice to the complexity of each topic, and to be able to look at a range of measures in detail, the participants of the Citizens' Climate Assembly were randomly assigned to a **working group** dedicated to one of the four fields of action; each working group consisted of roughly 40 participants. The fifth topic, instruments of transformation, was discussed in a plenary session with all citizens. The work in the fields of action was structured to include short presentations by speakers, small group discussions, and collaboration with all 40 participants in each working group.

In the fifth and sixth session, the working groups for each field of action drafted recommendations for the first line of questioning.

For the seventh session, ambassadors from each field of action presented these drafts to the entire Citizens' Assembly. **Discussion between participants from every working group followed.** This way, the participants had the opportunity to gain insight into the work in other fields of action, to give feedback on their proposals, and to draw connections back to their own field of action.

In addition to feedback from other participants, the scientific board of advisors provided quantitative and qualitative feedback on the recommendations. How effective are the proposed recommendations, and will they be enough to keep Germany on the path to 1.5 degrees of warming? A team led by *Karl-Martin Hentschel* developed a rough quantitative assessment of the recommendations in consultation with the scientific board of advisors. In addition, topic mentors from each field of action gave qualitative feedback on the drafts: do the recommendations conflict with one another? Are there any legal restrictions or unintended consequences to consider?

The seventh session marked the half-way point for the Citizens' Assembly. During this meeting, politicians were invited to a discussion round in which each political party in the German parliament was represented by a climate policy spokesperson. Mr. Karsten Hilse, spokesperson for the party Alternative for Germany (de. *Alternative für Deutschland, AfD*) and member of the parliamentary committee on the environment, nature conservation, and nuclear safety, was unable to attend. For the other parties, the following members of parliament answered questions from the participants:

- *Lisa Badum,* Climate Policy Spokesperson for the Green Party (de. *die Grünen*)
- Lorenz Gösta Beutin, Climate and Energy Policy Spokesperson for the Left Party (de. die Linke)
- Dr. Lukas Köhler, Climate Policy
  Spokesperson for the Free Democratic Party (de. die Freie Demokratische Partei, FDP)
- Klaus Mindrup, Head of the Advisory Group on Climate Protection for the Social Democratic Party (de. die Sozialdemokratische Partei, SPD)
- Dr. Anja Weisgerber, Climate Protection Commissioner for the Christian Democratic Union and Christian Social Union (de. die Christlich Demokratische Union, Christlich-Soziale Union, CDU/CSU)

In preparation for the discussion, the participants brainstormed questions to ask the politicians.

Having collected all this feedback, the working groups for each field of action finalized their recommendations for the first line of questioning during sessions 7, 8, and 9 and then turned to the second line of questioning in their respective fields. Between sessions, **editorial teams** consisting of participants and the lead moderators from each field of action met to put the finishing touches on the recommendations.

The exchange of feedback between participants from all working groups, as well evaluations by members of the scientific board of advisors, was repeated (as described above) in session 10 for the recommendations drafted for the second line of questioning.

In sessions 11 and 12, participants **voted** on the recommendations and guiding principles drafted so far. They also worked intensively once again to develop recommendations on the overarching topic of instruments of transformation (with a focus on carbon pricing). Voting took place via the **online platform** set up for exclusive use by participants of the Citizens' Assembly. A great deal of information and resources were made available on this platform: daily agendas, a library with background literature, videos and slide decks from the presentations, links to help participants navigate to the meetings, and an overview of the results produced so far. At the same time, it also offered participants the possibility for casual interaction in **chats and digital break rooms.** 

#### 4.4. Roles and responsibilities

#### **Official sponsor**

The official sponsor of the Citizens' Climate Assembly is the non-profit association *Citizens' Climate Protection Initiative* (de. *BürgerBegehren Klimaschutz e.V., BBK*). The association was founded in 2008 with the central aim of promoting municipal climate protection measures through citizen-led petitions and referendums. The Citizens' Climate Assembly is its first project at the federal level. As the official sponsor, the *BBK* commissioned and financed its implementation through *ifok, the nexus Institute,* and the *IPG,* set up and supervised the support network, created the website, and assumed responsibility for press and public relations work as well as political communication.

#### Scientific board of advisors

The scientific board of advisors was involved in the selection and prioritization of the topics as well as in the selection of experts who contributed to the Citizens' Climate Assembly. These advisors evaluated the citizens' recommendations from a scientific point of view and provided feedback for them to review. The scientific board of advisors was comprised of over 25 leading researchers from social and climate science and was led under the chairmanship of *Prof. Dr. Ortwin Renn.* 

In addition, topic mentors and fact checkers provided scientific support for the work in each field of action. Mentors supported the organizing institutes in shaping the content and selecting the experts. During meetings, fact checkers were available to answer specific questions on climate protection raised by the participants.

#### Independent organizing institutes

To help organize the Citizens' Climate Assembly, BBK commissioned three independent institutes with many years of practical experience in the implementation of various formats of citizen participation:

**ifok GmbH** is a European market leader for citizen participation. For 25 years, ifok has been giving citizens a platform to shape the issues of tomorrow through integrative processes, dialogue, communication, neutral moderation, and subject matter expertise. The results that emerge from their projects have a meaningful and lasting impact. The nexus Institute for Cooperation Management and Interdisciplinary Research has been designing and moderating participatory processes for over 20 years, from complex citizen participation projects to tailored formats commissioned for different stakeholders. The institute collaborates with participants to design decision-making processes with a focus on transparent communication, active cooperation, and sustainable consensus. The nexus Institute also has many years of experience with lottery-based (random selection) procedures.

#### The IPG Institute for Participatory Design (IPG)

develops innovative processes for involvement at all levels of society by which actors from civil society, business, politics, administration, and academia find sustainable and meaningful solutions. To this end, the institute makes use of design-oriented and collaborative methods.

#### **Advisory board**

The advisory board was informed about the proceedings of the Citizens' Climate Assembly in three meetings. Their task was to ensure that the contents of the overall process were balanced. The advisory board was comprised of approximately 20 members: selected representatives from business, social, and environmental associations, churches, foundations, activist movements, and non-governmental organizations, as well as experts in citizen participation. They brought a wide range of perspectives on the issue of climate protection in Germany.

#### Support network

The approach and goals of the Citizens' Climate Assembly were supported by 86 organizations from a wide range of sectors. This support network lent the project legitimacy in external communication. Following Germany's 2021 federal elections, this network of supporting organizations is committed to ensuring that the results of the Citizens' Climate Assembly are taken into account during the negotiations for a new governing coalition.

#### 4.5. Random selection of participants

## Random selection and socio-demographic criteria

The random selection of participants was guided by two principles that had already been used in the selection process for previous citizens' assemblies:

- 1. Every person should theoretically have the chance to be selected.
- 2. As a group, the participants should be as representative of the German population as possible – a kind of Germany in miniature, so to speak.

This means that the distribution of various socio-demographic dimensions among the 160 participants of the Citizens' Assembly should correspond as closely as possible to their distribution in the German population as a whole. In addition to regional distribution factors (e.g. federal state and hometown population), the following characteristics were taken into account: gender, age group, educational attainment, migration experience, and the individual's self-described level of concern for the issue of climate protection.

In order to build a representative group of citizens, a random selection process was carried out. First, roughly 14,000 people throughout Germany, aged 16 and over, were contacted by telephone and asked about their interest in participating in the Citizens' Climate Assembly. The telephone numbers – both mobile and landline numbers – were randomly generated so that every person with a landline or mobile phone connection might theoretically be selected for participation. In this first step, 2,000 people expressed interest in participating in the Citizens' Climate Assembly. Second, an official invitation with further information was sent to those interested. 592 people subsequently registered to participate in the Citizens' Climate Assembly and provided information on the socio-demographic characteristics mentioned above. In order to compose a group of participants as representative of the German population as possible, significantly more people must express interest in the Citizens' Assembly than can actually participate.

In the final step, a representative group of participants was built based on the six socio-demographic criteria mentioned above. This sampling work was carried out with the help of an algorithm developed by the *Sortition Foundation*. This ensured that the final sample corresponded as closely as possible to the distribution of socio-demographic characteristics in German society and that the probability that any given registrant would be selected for the final sample was balanced.

## Socio-demographic composition of the Citizens' Climate Assembly

The following chart compares the socio-demographic composition of participants in the Citizens' Assembly with the overall population of Germany:

The participants represent German society well with regard to most of the aforementioned criteria. Only in the case of two criteria were there slight deviations from the overall German population.

For the criterion education, people with low educational attainment were underrepresented in the Citizens' Climate Assembly. It can also be observed in other citizens' assemblies and participation formats that people with low educational attainment are less likely to register for participation processes and are therefore underrepresented therein. However, compared with other citizens' assemblies and participatory processes, the Citizens' Climate Assembly had a smaller-than-usual deviation with regard to low educational attainment: only a 15% discrepancy (18% of participants vs. 33% of German society). The selection process was successful in ensuring that people with a medium level of educational attainment were proportionately represented in the Citizens' Climate Assembly. .

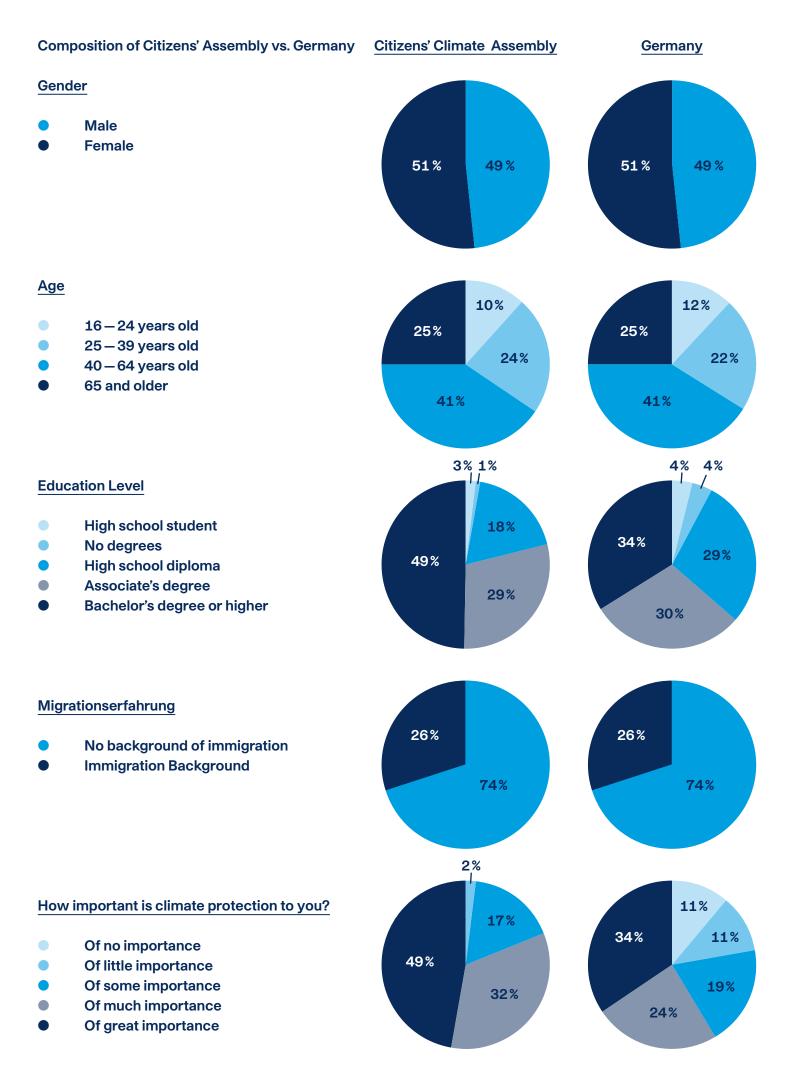
Furthermore, people who reported the issue of climate protection as being important to them were overrepresented in the Citizens' Climate Assembly according to the comparative survey of citizens carried out in the run-up to the selection process. As such, people who reported the issue of climate protection as being "of some importance," "of little importance," or "of partial importance" to them are underrepresented in the final sample. The criterion was included to ensure that people who had previously been unconcerned with climate protection were also represented in the Citizens' Assembly. Despite unequal representation in this respect, it was nonetheless clear throughout the Citizens' Climate Assembly that the participants held a diversity of opposing opinions and attitudes. Disagreements were not uncommon, and the citizens displayed varied levels of existing knowledge with regard to different topics in the field of climate protection.

#### Participants from 139 municipalities



#### Composition by federal state

Federal State	Participants	Germany
Baden-Württemberg	23 (15%)	21 (13%)
Bavaria	24 (15%)	24 (16%)
Berlin	6 (4%)	7 (4%)
Brandenburg	3 (2%)	5 (3%)
Bremen	1(1%)	1(1%)
Hamburg	4 (3%)	3 (2%)
Hessen	12 (8%)	12 (8%)
Lower Saxony	15 (10%)	15 (10%)
Mecklenburg-		
Western Pomerania	2(1%)	3 (2%)
North Rhine Westphali	a 35 (23%)	33 (22%)
<b>Rhineland Palatinate</b>	9 (6%)	8 (5%)
Saarland	1(1%)	2 (1%)
Saxony	8 (5%)	8 (5%)
Saxony-Anhalt	3 (2%)	4 (3%)
Schleswig-Holstein	6 (4%)	5 (3%)
Thuringia	3 (2%)	4 (3%)
In Total	155 (100%)	155 (100%)



die deutsche Klimapolitik

160 Menschen 12 Sitzungen 1 Thema

Bürgerrat Klima

# 5. Statements from citizen participants

#### 5.1. Statements made at the press conference unveiling the results

#### Statement by Adnan Arslan, 24th of June, 2021

When I first heard I was selected by lottery to take part in the Citizens' Climate Assembly, I couldn't believe it. It seemed pretty improbable to me that I'd be one of millions selected by lottery to join 159 other participants. My decision to participate was not immediate. I wasn't sure whether I was the right person for the job; perhaps they'd be better off with someone who knew more about the topic. But after consulting with my wife, I finally decided to join.

During the Citizens' Assembly, I was particularly impressed by the diversity of participants. I myself come from an immigrant background, and felt proud to be able to represent this group in society, and also to have the chance to perhaps influence decisions about the future.

At the start of the first session, I had mixed feelings. There was a certain anticipation and excitement. Nevertheless, I wondered whether I actually had anything to contribute to climate policy. Until this point, I hadn't looked into the topic much at all. I'd heard a lot about it in the media, but to be honest, I hadn't given much thought to issues of the environment and climate, let alone considered my own behavior. I assumed that others would somehow figure it out; that smart people would come up with something to save the climate. As an individual I couldn't change anything, anyway.

After 12 sessions, over 50 hours of discussions, and many lectures, my outlook on and understanding of the environment and climate have changed. For me, this is clear proof that education must come first, as it is decisive in how a person develops their understanding and perception of a topic. In retrospect, it is obvious why I had so little interest in the subject: I simply lacked basic knowledge. Through discussions with other people who were complete strangers to me, and through lectures from scientists and professors, I was able to glean a more complete picture. It was not always easy to attend the sessions. They sometimes ran until late in the evening or spanned entire weekend days. Work and daily life did not pause, and the birth of my daughter made for long nights. The group discussions were not always easy either because, just like in a family, not everyone in a working group always agrees. Nevertheless, debate and conversation among participants always remained respectful and fair. Session after session, participation became a labor of love — otherwise I probably would have thrown in the towel after the second or third session, tops. Today, I can say it was the right decision to take on this task and not to give up. I felt a sense of responsibility and was determined to see it through, which I eventually did.

We developed many recommendations for the fields of action. I personally was assigned to the working group on mobility. We dealt with different topics, tackled different tasks, and worked with different people. But everything was done in pursuit of the same goal.

We also want to send a message to politicians: we are prepared to make changes. The ideas of ordinary citizens can be more valuable than people think. The voices of everyday people should play a decisive role, no matter what issue is at stake.

Of the recommendations we developed, I don't have a single favorite. Personally, I think they are all strong. I would, however, like to share a few thoughts for the public and politicians.

I highly recommend that my fellow citizens and the rest of society consider more education when it comes to the environment and the climate. The whole thing is less complicated than you might think, and one individual can make much more difference than you may believe.

My recommendation to politicians is to please think of all levels of our society when making decisions. Because tackling and overcoming the most important issue of our time will require that everyone participates and feels heard. Adnan Arslan, 32, is a production controller and lives in Velbert in North Rhine-Westphalia.

1.

Mareike Menneckemeyer, 37, is a sales employee, currently on parental leave. She lives in Schwarzenbruck near Nuremberg.

### Statement from Mereike Menneckemeyer, 24th of June, 2021

Sometimes the positions that you don't apply for, but rather stumble into, end up having the most impact. Had it been necessary to actively apply to take part in the Citizens' Assembly, I probably wouldn't have done it. I already had enough on my plate. But it's different when you're asked or selected.

At the beginning, I had practical concerns: can I spare the time, what about my other commitments? But after all that was settled and appointments had been postponed, I began to feel, let's say, cautiously optimistic. Of course I wanted to participate. But at the beginning of the process, I never would have thought that the Citizens' Assembly would come to occupy so much space in my life.

If you are so inclined, there is plenty of reading material on the topic of climate protection. Messages such as: WE must do something, WE are all running out of time, and so on. But what is hard to understand from all this is whether people actually agree on the right way forward. Electric cars, yes or no – because of the battery. Avoiding meat would help – but is soy so much better? Just think of the rainforest... And what does this 1.5 degree target actually mean in concrete terms? I thought to myself, it's not my job to understand this topic in so much depth, the politicians will take care of it ...

But they don't. Not adequately, anyway. I have my theories as to why: perhaps making difficult decisions does not always poll well. But that's precisely what needs to be done. It's no longer a question of whether we do something, but how we can rapidly implement the most important changes, which means taking as many people with us as possible. That's where my opinion has already changed. I've also noticed that what I've learned during the Citizens' Assembly impacts my day-to-day life.

As our daily lives began to evolve, so did the recommendations developed by the Citizens' Assembly. They became more concrete and real. It was exciting to see something take shape that could change Germany, so long as we manage to gain the acceptance of politicians as well as the public. That is not

always easy; we are all so different, after all. You could truly see this reflected in our discussions. We represented a microcosm of society: old and young, rural and urban, meat eaters and vegans, some more willing to make drastic changes and some less willing. Throughout the process, it was important to me to try to envision an "way out" of our welfare state. There are people in this country who live on noodles and toast at the end of the month because they do not have money for anything else. They must not get the short end of the stick from climate policy. Of course, it is unclear if climate protection will bring about any changes for social justice. That may be another task for another citizens' assembly. If anyone needs ideas for issues which the next assembly should tackle - I have a tip!

I think education is also important; to raise awareness about the possible alternatives for mobility, food, energy, and so on. Education can make this clear to people, and help calm the fear of the unknown. If someone says we're going to ban meat, then of course many people start to scream. I would too. But if you understand that cows in particular are problematic, and that you can make a big difference by eating different types of meat as well as a vegetarian dish from time to time, then it doesn't sound so bad anymore, does it?

In the end, of course not everyone was 100% in agreement about the strength of the recommendations. In any case, it became clear to me that it is never easy to make such big decisions, and it is impossible to please everyone.

I believe that we would all benefit from more information about harm to our climate as well as less harmful alternatives in our daily lives. For example, in the form of an official seal that you can trust. We all must learn to do what we can with this knowledge and make the best of it together: to consume more consciously, to abstain more consciously, to live more consciously. "A unique opportunity for many different people representing our population to receive information on a crucial issue from well-versed experts in different fields, with the aim that, after intensive discussions, the citizens can jointly develop policy recommendations to preserve our planet for coming generations." "Experts led through the different topics in an exciting and instructive way. A wide variety of people were able to express their thoughts and opinions and develop policy recommendations after intensive discussions in which many social points of view were considered."

"I am very worried that our efforts are going up in smoke ... and that only a drop of what we have worked for has reached the government. A slight disappointment is spreading. I hope that the citizen participants will keep in touch. It was really nice with all of you. A sense of 'we' has certainly been created."

"An incredibly beautiful, but at times also energy-sapping task that was carried out with great pride." "Despite all our differences in origin, socialization, life paths, life phases, and lifestyles – the 1.5 degree target of the Paris Climate Agreement repeatedly united us and served as a constant, immovable basis for our sometimes impassioned and critical discussions."



We thank all the contributors and supporters who have dedicated their time, expertise, and commitment to this Citizens' Assembly:

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