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Environmental Awareness in Germany 2018

Results of a representative survey

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Environmental Awareness in Germany 2018

Results of a representative survey

"Environmental Awareness in Germany" is a study of the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety together with the Federal Environment Agency that is published every two years.

The study was conducted by Dr Frieder Rubik, Ria Müller, Richard Harnisch (Institute for Ecological Economy Research, project management), Dr Brigitte Holzhauer (Holzhauerei), Michael Schipperges (Sociodimensions), and Dr Sonja Geiger (Technische Universität Berlin).

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Foreword

Dear reader,

Environmental policy relies on active participation and acceptance more than any other policy field. It is pleasing to note that environmental protection and climate action are firmly anchored in people's minds in this country and that many people are committed to these issues.

Around the world we are currently experiencing school strikes for climate action and petitions on insect protection. Many scientists are speaking up and increasing our knowledge of climate change with well-founded analyses. At the same time, however, there are also political upheavals, accompanied by 'fake news', climate change denials and global power shifts.

I am convinced that effective environmental protection and climate action at a time like this can only succeed with the support of society as a whole. Policymakers must create the framework conditions to ensure that the transition to a decarbonised world is socially equitable. This can only succeed if those affected by the changes are able to participate in them. It is important that citizens are kept informed about and involved in the process.

For more than 20 years, we have been surveying the German population's attitudes to environmental issues, their perception of environmental quality and how lifestyles develop. We collect these data in order to better incorporate the interests of citizens when drafting environmental policy measures and laws.

The results of the Environmental Awareness Study 2018 confirm that environmental protection and climate action must not be regarded as isolated policy areas. Rather, the effects in almost all areas of society must be considered from the outset. In areas as wide-ranging as transport, food and drink, and living conditions, respondents are calling for policymakers to take greater account of environmental concerns.

This study and the criticism that too little is being done must be motivation for the work ahead. Important steps have been taken, such as the gradual phasing out of coal-fired power generation and the establishment of a climate task force. Further tasks, such as the implementation of structural development in the coal-producing regions, show that much still remains to be done.

This Environmental Awareness Study provides momentum towards shaping a society and a future that is more ecologically and socially sound.

Svenja Schulze
Federal Minister for the Environment, Nature Conservation and Nuclear Safety

Foreword

Dear reader,

For over 20 years, we have been regularly interviewing people in Germany for the Environmental Awareness Study. The resulting time series show how attitudes towards environmental protection and the perception of environmental quality have been developing over the years.

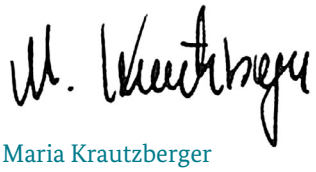
The current study shows just how valuable such a treasure trove of data is – I consider the results as a clear mandate to place more focus on environmental policy issues. Only 60 per cent of respondents still rate the state of the environment in Germany as very good or somewhat good. This is the lowest value since 2000 – in the last survey in 2016 this figure was 75 per cent. This means that more and more people are realising that the environment is not doing well in many ways – now also in their immediate surroundings. The extremely dry summer of 2018 also made the consequences of global climate change tangible in Germany. Additionally, the decline in insect populations, the debate on air quality in cities and the plastic waste in the oceans also show us in Germany to what extent our natural resources are endangered.

Furthermore, respondents rate the commitment of key actors to environmental protection and climate action more negatively in 2018 than in all previous surveys. Only 14 per cent of the respondents still believe that the federal government is doing enough to counter pressing environmental problems. For industry, the figures are even worse: Only eight per cent believe that industry is doing enough to protect the environment. These values also mark a new low. It is evident that not only the concern about the state of the environment has grown, but also the dissatisfaction with the efforts that have been made so far to protect it.

There are however grounds for optimism. People in Germany are aware that we must act urgently and comprehensively to protect our livelihoods. Around two thirds of those surveyed in our current study regard environmental protection and climate action as very important challenges – eleven percentage points more than in 2016. And they want environmental protection and climate action to be given far more priority in energy, transport and agricultural policy than has been the case to date.

I consider the results of our study to be an appeal to all relevant actors in our society, whether in politics, business or civil society, to gear their actions more towards the well-being of people and the environment, so that future generations can also enjoy a healthy, intact and liveable environment.

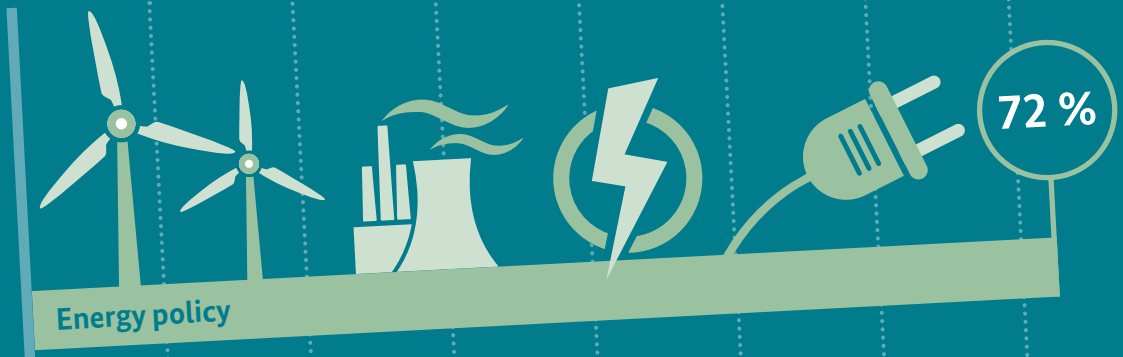
I hope you find this report interesting and inspiring!

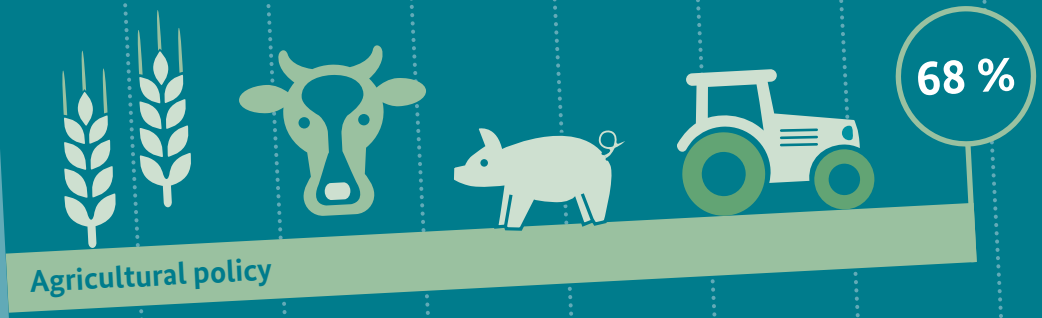


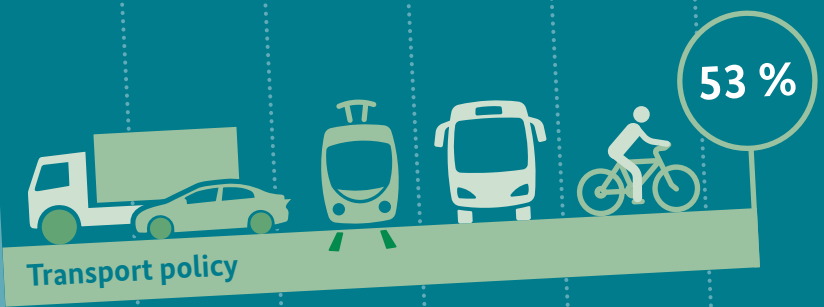
Maria Krautzberger
President of the Federal Environment Agency

1. Key results at a glance

Environmental protection and climate action should be of overriding importance in ...







1.1 Environmental protection and climate action over time

Environmental protection and climate action remain priority challenges for people

What significance do environmental protection and climate action have for people in Germany in comparison to other current problems? The participants of the Environmental Awareness Study were asked to assess how important they found ten different societal challenges that were given to them as a list. 64 per cent rate environmental protection and climate action as a very important challenge and give it a similarly high significance as the two top issues of education (69 per cent) and social justice (65 per cent). Compared to the previous survey in 2016, all these concerns have gained in importance; for example, the importance of environmental protection and climate action increased by eleven percentage points. Topics that respondents cited as their greatest concerns at that time, such as wars/terrorism, immigration/migration and crime/public safety, have lost some of their attention, although they are still very important to many.

→ Chapter 2.1

Required: Integrating environmental protection and climate action into key policy areas

Future-oriented environmental protection and climate action require a variety of efforts. Fundamental changes are needed in the key areas of energy, agriculture and transport, as highlighted in the Integrated Environmental Programme 2030 of the Federal Ministry for the Environment.[1] The respondents also see this necessity. More than two thirds are of the opinion that environmental protection and climate action should be of overriding importance in energy and agricultural policy, and more than 50 per cent feel that this is the case for transport and urban development policy.

The importance attached to environmental protection and climate action as instruments to address other political tasks remains at a high level. The majority of respondents see environmental protection and climate action as necessary in order to master future challenges, secure prosperity and competitiveness and create jobs. However, one fifth of those surveyed believe that there must first be progress in social justice before environmental protection and climate action can come into play, and 27 per cent believe that at least compromises in favour of social justice are necessary.

However, 39 per cent, and thus slightly more than in 2016, believe that adequate environmental protection and climate action are essential conditions for improving social justice.

→ Chapter 2.2 und 2.3

Local and national environmental conditions are assessed as worse

Previous studies have already shown that respondents are concerned about the state of the environment worldwide. These findings are reflected in our survey, with over 90 per cent of respondents rating it as very bad or somewhat bad. What is different, however, is that the respondents also rate the environmental quality in Germany significantly worse: Although 71 per cent consider the state of the environment at their own place of residence to be good or very good in 2018, this is eight percentage points less than in 2016. For Germany as a whole, only 60 per cent still see it that way – 15 percentage points less than two years ago.

→ Chapter 2.4

People are dissatisfied with what relevant actors are doing to protect the environment

Is enough being done to protect the environment and climate? The study shows that people are highly dissatisfied with relevant actors, whose commitment they rate as significantly worse than in the last survey in 2016. The only relative exception: 71 per cent of those surveyed attested that the environmental associations are doing enough or somewhat enough to protect the environment and the climate – in 2016, 80 per cent thought so. For other actors, this approval has roughly halved: In the case of cities and municipalities from 49 to 24 per cent, in the case of the federal government from 34 per cent to 14 per cent and concerning industry from 15 per cent to eight per cent. Agreement with the statement that citizens do (somewhat) enough has also almost halved, from 36 per cent in 2016 to 19 per cent now. All actors, with the exception of environmental associations, are therefore rated worse than ever before with regard to their commitment to environmental protection and climate action.

→ Chapter 2.5

1.2 Energy, agriculture and transport – key areas for environmental protection and climate action

Energy sector – quickly and comprehensively adapting the energy supply

The majority of respondents agree with the goals of the Energiewende, Germany's energy transition away from fossil fuels toward renewable energy and energy efficiency. The survey shows, however, that current progress is too slow for many – 43 per cent agree completely and 38 per cent somewhat. Half of the respondents consider it particularly important that greenhouse gas emissions are reduced quickly. In this respect, expectations largely coincide with the perception of current energy policy: 16 per cent completely agree and 44 per cent somewhat agree that the energy transition will help to reduce greenhouse gas emissions. The respondents feel differently regarding the cost distribution of the energy transition: For 35 per cent of those surveyed, a socially equitable distribution of costs is of the greatest importance, but only six per cent completely and twelve per cent somewhat agree that the costs of the energy transition are currently distributed socially equitably.

In other respects, too, respondents attach great importance to ensuring that the policy instruments and measures of the energy transition are set out in a socially equitable manner: 68 per cent rate it as very important that an affordable energy supply remains guaranteed for all, 26 per cent consider this somewhat important. And 59 per cent regard it as very important that new jobs are created in the regions affected by a coal phase-out, 33 per cent think this is somewhat important.

Economic measures, such as the reduction of climate-damaging subsidies, the higher taxation of climate-damaging products or the promotion of energy saving in residential buildings, are considered very important by around one in two, with 30 to 40 per cent finding such approaches somewhat important. 70 per cent of the respondents see the federal and state governments as the main actors responsible for a successful transition. They also attribute significant responsibility to industry (44 per cent) and the energy sector (41 per cent). About half also consider the contribution of each and every individual to the energy transition to be important.

→ Chapter 3

Agriculture – Strengthening environmental protection and climate action

The respondents are sensitised to the environmental impacts of agriculture: About two thirds consider the decline in plant and animal biodiversity and the use of plant protection products to be very serious problems, while another quarter regard them to be serious problems. Respondents consider it particularly important that agriculture provides them with high-quality and healthy foods. Agriculture performs this task very well from the perspective of 15 per cent of respondents and somewhat well from the perspective of 56 per cent.

For other tasks, respondents see greater discrepancies between their demands and perceived reality, especially in the welfare of livestock and the protection of the environment and nature. For future agriculture, 45 per cent of those surveyed consider environmental protection and climate action to be particularly important. However, few respondents can at present discern this priority in current agricultural policy. Rather, a large majority considers agricultural policy in Germany to be oriented towards the interests of industry – 51 per cent agree completely and 35 per cent somewhat. Which actors are most important for a more environmentally friendly form of agriculture? 54 per cent name federal and state governments, 42 per cent each and every individual and 41 per cent farmers.

→ Chapter 4

Transport transition – necessity recognised, implementation barely discernible

At 89 per cent, a clear majority of those surveyed regard reducing transport-related environmental problems such as noise, exhaust gases and particulate matter in road traffic as very good or somewhat important. In everyday life, however, motorised private transport continues to dominate. 70 per cent of respondents use their cars for everyday trips daily or several times a week. Of those who drive regularly, 60 per cent justify this with everyday practical requirements such as saving time or the possibility of being able to combine several trips that are necessary in daily life. One third ride their bicycles regularly, but the reasons vary: health and fitness, enjoyment, environmental protection and climate action as well as cost savings dominate. When using public transport, which 22 per cent use daily or several times a week, the opportunity to use the time for other things or to relax, as well as

environmental protection and climate action reasons are in the foreground.

What are the respondents' priorities for the future development of transport? For half of them, environmental protection and climate action have the highest priority. For 40 per cent, the top priority is to make everyday journeys comfortable and inexpensive. Only ten per cent name economic development and the competitiveness of German companies as the top priority. Respondents do not find their priorities reflected in current transport policy: 52 per cent of those surveyed completely believe that transport policy is primarily concerned with the interests of industry, 37 per cent somewhat agree with this view. Only five per cent believe that transport policy is geared towards environmental protection and climate action, and a further 22 per cent believe that this is somewhat the case. 69 per cent consider a transition towards a sustainable transport system to be first and foremost the responsibility of the federal and state governments, 63 per cent the automotive industry and 51 per cent each and every individual.

→ Chapter 5

1.3 Key figures for describing environmental awareness

Environmental awareness can be defined and ascertained in different ways. In this study, a measuring instrument was developed that maps three different dimensions: the affective component, the cognitive component and the conative component, i.e. emotional participation, rational assessment and active action. Seven to eight questions were developed for each of the three sub-areas and their responses were condensed into key figures. On a scale of zero to ten, the affective component and the cognitive component received rather high approval values of 7.2 and 7.9 respectively. Environmentally conscious behaviour (the conative component) is less widespread with 4.6 points. The average values for female respondents are higher than for male respondents. This measuring instrument will provide for a uniform measurement of environmental awareness, as well as comparisons over time.

→ Chapter 6

1.4 Varying significance of environmental protection and climate action in the Social Milieus

The attitudes towards ecological issues differ between the various Social Milieus sometimes significantly. What they all have in common, however, is that they predominantly regard environmental protection and climate action as central tasks for the future.

The key figures for the affective and cognitive components are significantly higher among the Critical and Creatives and Young Idealists than in other Social Milieus. They also behave more environmentally consciously in everyday life. With the exception of the environmental associations, members of these two Social Milieus assess the commitment of the various actors to environmental protection and climate action much more critically and the environmental quality generally as worse. They assess the contribution that ecologically oriented policies can make to the accomplishment of other societal tasks much more positively than others. More than others, they feel that the energy transition in Germany is progressing too slowly. They regard environmental protection and climate action much more frequently as the most important task of agriculture, just as they give priority to minimising the impact on the environment and climate for the future development of transport.

Cognitive environmental awareness and environmentally conscious behaviour are also above average in the Traditionals. On the other hand, environmental awareness among the Well-establisheds, the Modern Mainstream and the Young Pragmatists is significantly weaker than average in all three sub-areas of affective, cognitive and conative components. These three groups also assess the commitment of the federal government, cities and municipalities as well as industry to environmental protection and climate action much more positively and rate the overall environmental quality better than those in the other Social Milieus. Environmental concerns in the energy, agriculture and transport sectors are of below-average relevance.

The emotional environmental awareness (affective component) and cognitive environmental awareness (cognitive component) of the Precarious and the Young Distanced are within the average, but their environmentally conscious behaviour (conative component) in everyday life is significantly below average. In energy, agriculture and transport policy, the focus is less on the

environment and climate than on cost aspects and a socially just implementation.

→ Chapter 7

1.5 Interpretation of the results: A strong call for shared responsibility

In the general overview, the survey results show a very remarkable pattern: The importance of environmental protection and climate action has increased. The environmental quality in Germany is assessed to be worse than in the previous surveys. The commitment of relevant actors to environmental protection and climate action is also rated worse than in the previous studies. Against this background, it is understandable that people in Germany expect environmental protection and climate action to be more strongly integrated into other policy fields. The majority of respondents clearly consider a fundamental policy change in the three central policy areas of energy, agriculture and transport to be imperative. Environmental protection and climate action should play a stronger role in these areas and also shape them more significantly. Such an expansion of environmental protection and climate action into a cross-sectional task could also have positive effects on other tasks and help create synergies, for example to secure prosperity and competitiveness and to master challenges of the future.

The fact that the assessment of the commitment of the relevant actors to environmental protection and climate action reaches historic lows should give food for thought. How can these insights be interpreted? Firstly, it may be that the respondents, due to the rise in environmental problems, increasingly expect responsible actors to find ecological solutions. Secondly, it is becoming increasingly clear that the efforts made so far are not sufficient to preserve the natural foundations of life effectively and to the required extent in the long term. The lack of environmental policy success in recent years, for example in the areas of climate action or air pollution control, probably contributes to this poor assessment.

It therefore seems understandable that the respondents perceive large discrepancies between the current requirements for action and the actual environmental and climate policy successes in central environmental policy areas. According to the respondents, those who could drive environmental protection and climate action forward the most in the individual fields are not doing enough. The majority of respondents believe that the federal and state governments in particular have a responsibility to do more for environmental protection and climate action; a large gap between expectation and action is seen especially with these actors. But the respondents also believe that economic actors such as the automotive industry should have more obligations to meet their environmental and climate policy responsibilities. Citizens also see it as their duty to make more contributions of their own. In essence, the overall aim must be an improved and, in particular, shared responsibility.

Nonetheless, it is policymakers who are seen as having the greatest responsibility here. They are called upon to establish ecologically sensible framework conditions and to set an example, especially in order to counter the danger of a disengagement of citizens, perhaps due to a feeling of resignation. The population is quite willing to make its own contributions. It often signals that it wants to become active itself and act responsibly, for example by investing in its own renewable energy facilities or by participating in community facilities such as residents' wind farms or solar parks. Many can also imagine taking part in initiatives for a more sustainable food supply, such as food sharing or solidarity agriculture.

Especially in the agricultural and transport sectors there are large discrepancies between the expectations of respondents and the perceived political priorities. Reducing these "imbalances" and putting environmental protection and climate action more strongly on the agenda are future tasks for government action. An acceleration of the energy transition is also being demanded, even if it is otherwise met with a high degree of approval by the people in Germany. The high level of support for political measures to reduce environmental pollution also indicates that there will be acceptance of policymakers playing a strong role in this process in the future. This can also be understood as an appeal to the government to assume political responsibility and to shape the framework conditions for an energy, agriculture and transport transition politically in line with environmental protection and climate action. Particular attention should be paid to issues of social justice.

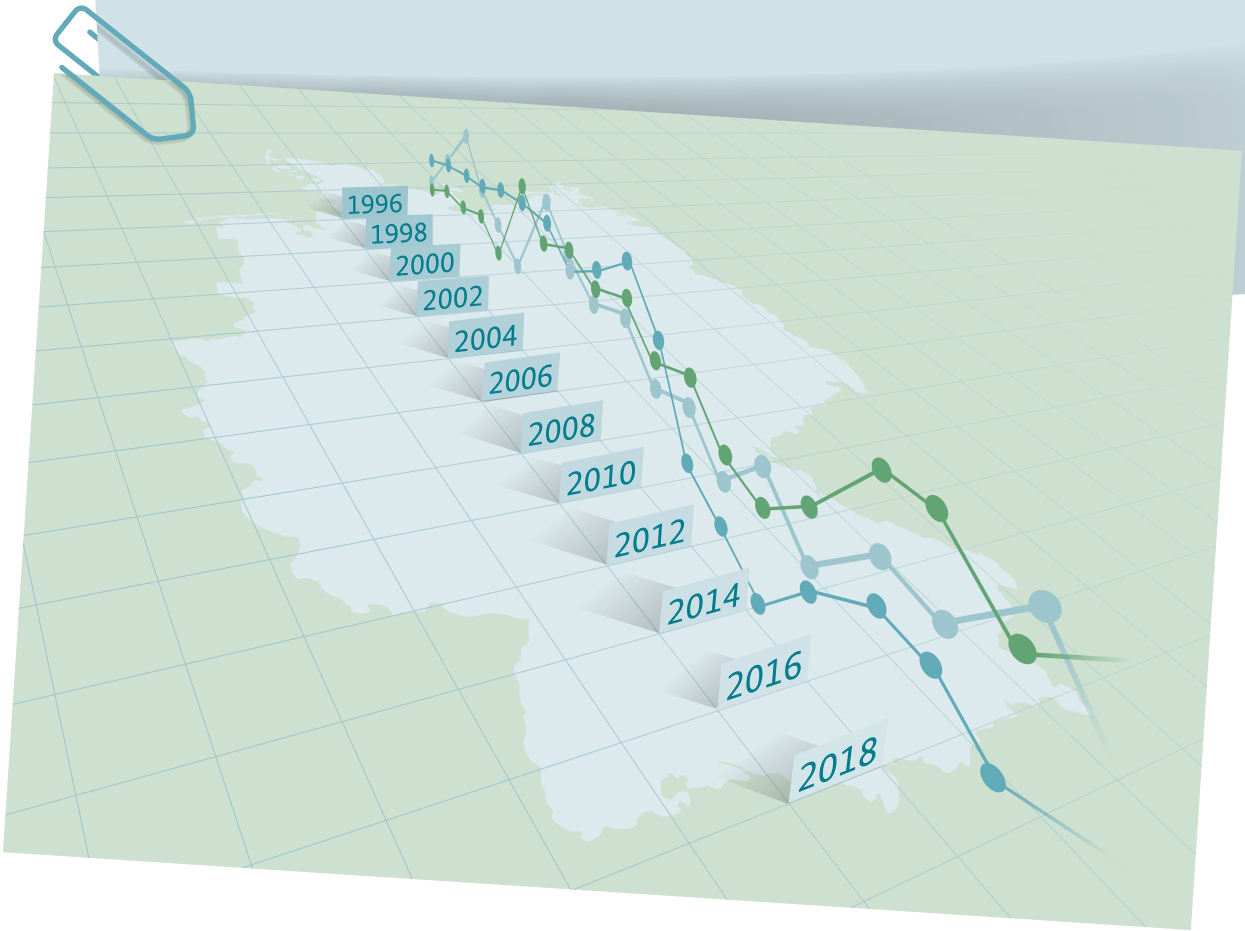
The twelfth Environmental Awareness Study

Since 1996, environmental awareness and environmentally conscious behaviour of the population in Germany has been studied every two years. The Environmental Awareness Studies contribute to providing a social-scientific basis for environmental policy and communication.

As with the studies in 2014 and 2016, the representative survey in 2018 was also conducted online. Persons who do not otherwise use the internet were interviewed with the help of tablets or set-top boxes provided to the household. The representativeness of the sample for the German-speaking population aged 14 and over is ensured methodically.

The representative survey was divided into two surveys and carried out in August and September 2018. In addition, a short follow-up survey was carried out in December 2018. A sample of around 2,000 people was included in each survey. The samples are identical in structure, but they are not the same persons. They are comparable in terms of sampling method and composition by gender and other characteristics.

Prior to the representative survey, a qualitative study was conducted in the format of extensive group discussions. Particularly environmental policy issues in the areas of transport, agriculture and energy as well as relevant responsibilities were intensively discussed with male and female participants from all Social Milieus and all age groups. The qualitative insights were used to formulate the questions of the representative survey and to interpret the data. In addition, two pre-tests with 500 respondents each were carried out prior to the representative survey. These were used to assess the key figures for describing environmental awareness and the newly developed questions.



Social Milieus as background for interpretation

For environmental policy and communication, it is important to know about the attitudes and expectations held by different social groups. For this reason, a Social Milieus model was integrated into the Environmental Awareness Study 2018, as in the previous studies since 2008. Social Milieus group together people who have similar attitudes and lifestyles.

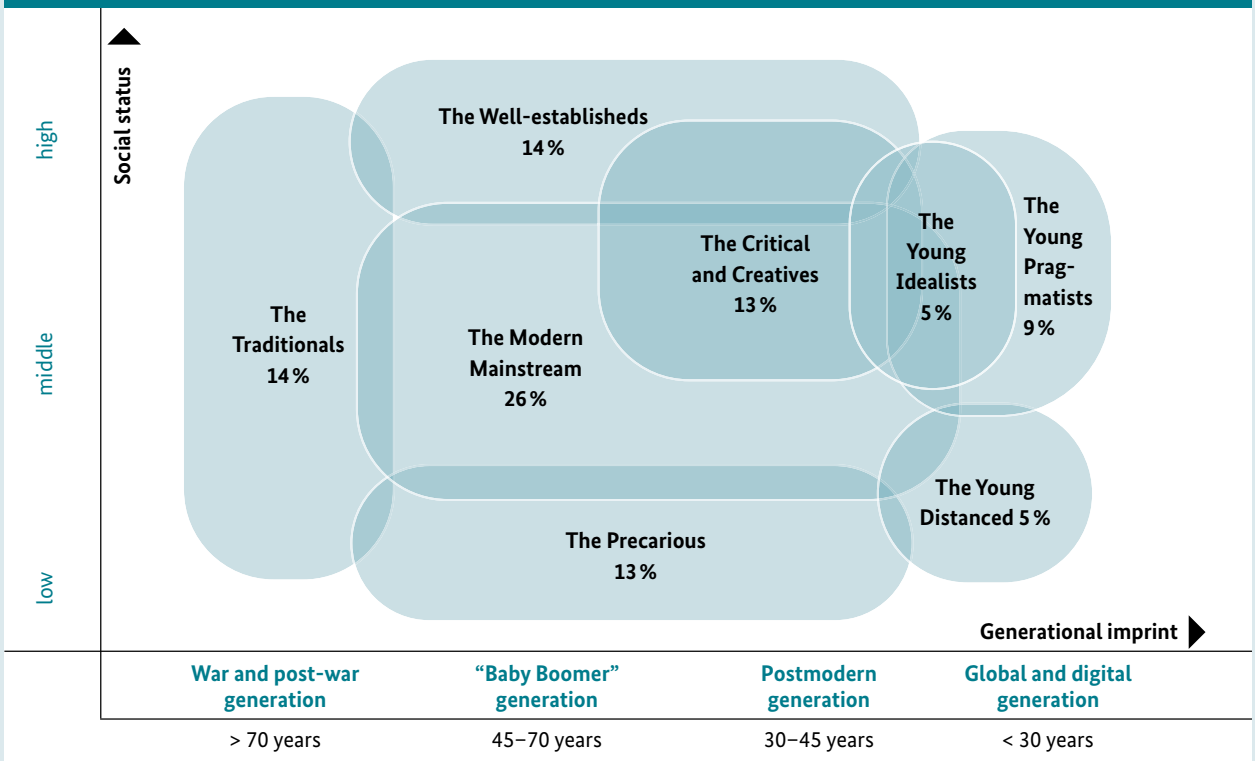
For the present study the Sociodimensions model of Social Milieus was used.[2] It takes into account the status of different social strata and the socio-historical experiences of different generations as well as fundamental attitudes and value orientations. In 2018 the model was further differentiated with regard to the younger generation, resulting in the inclusion of additional Social Milieu categories specifically for young people.

Figure 1 provides a graphic representation of the Social Milieus. The figure shows the segments positioned according to their emphases: on the vertical axis by social status and on the horizontal axis by generational imprint. Since social reality does not always allow every individual to be unambiguously assigned to a particular group, the diagram also shows overlapping areas that suggest that there are fluid transitions and mixed forms among Social Milieus.

The overview on page 15 outlines the basic orientations and lifestyles of the Social Milieus.[3] A comprehensive presentation of the results for the individual Social Milieus can be found in Chapter 7; individual milieu-specific findings on the key topics of energy, agriculture and transport are reported in the corresponding sections of the respective Chapters 3, 4 and 5.

→ **Chapters 3, 4, 5 and 7**

Figure 1: **Social Milieus in Germany 2018**

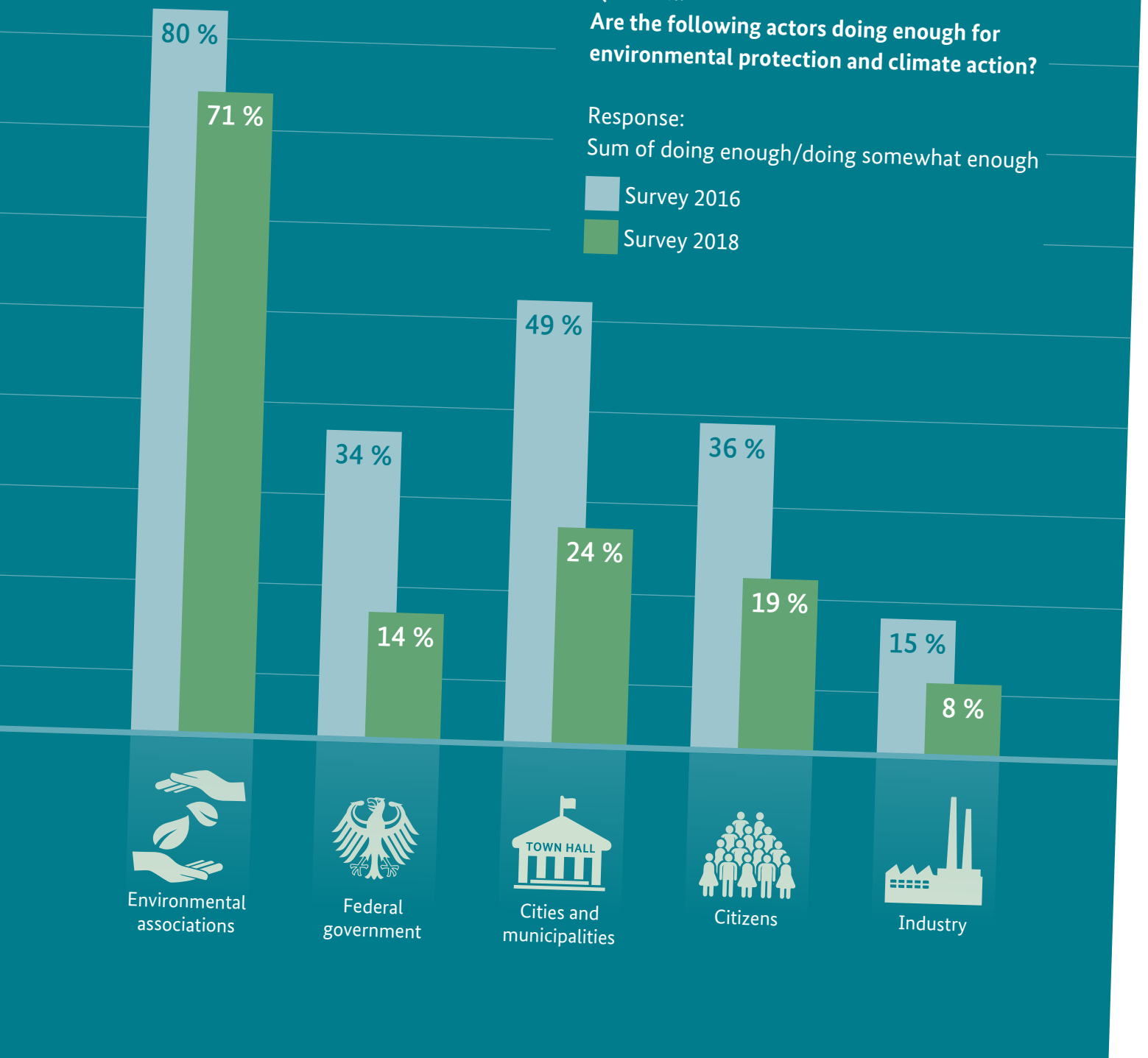


Representative survey of 4,038 respondents, 1st and 2nd survey wave aggregated, sample from 14 years of age
(shares of Social Milieus in the Sociodimensions model in per cent of the sample, deviations from 100 per cent due to rounding)

Milieu and life motto	Brief description
The Traditionals **"Hopefully everything stays as it is"**	Older persons (usually over 70 years of age); above-average number of women; different social status; sub-milieus: genteel-conservative, petty-bourgeois, traditional workers. Security, order and stability are important. Desire to preserve the familiar; frugal and willing to do without.
The Well-establisheds **"Be proud of what you've achieved and enjoy it"**	Intermediate and higher age groups aged 40 to 70; slightly more men; intermediate to high level of formal education and high to very high household incomes. See themselves as society's top performers. Professional success and a high standard of living are natural assertions; economic efficiency and competitiveness are important benchmarks.
The Modern Mainstream **"Belonging and being integrated"**	Mostly in middle social status; overrepresented in the age group from 40 to 70 years. Security and harmony in private life are important. Oriented towards comfort and convenience. Strong price-performance awareness. See themselves as the centre of society. Ready to perform to maintain social status, but increasingly fearful of social decline.
The Precarious **"Make ends meet and don't attract negative attention"**	Mostly basic formal education and very low to low incomes; age groups over 40 overrepresented. Participation in consumption and social life severely restricted. See themselves as losers of modernisation. Look pessimistically towards the future.
The Critical and Creatives **"Question things critically; live responsibly and meaningfully"**	Broad age spectrum from 30 to 70 years; intermediate and higher formal education; medium to high incomes; women significantly overrepresented. Enlightened, cosmopolitan and tolerant. Post-materialistic basic orientation. Striving for self-realisation and independence from norms and conventions. Great interest in social and cultural topics. See themselves as the critical conscience of society.
The Young Idealists **"Live sustainably and make the world a better place"**	Predominantly 14 to 30 years; significantly more young women; mostly high formal education. Mostly (still) low income or no own income, but parental homes with above-average income; predominantly metropolitan milieu. Tolerance, respect and diversity mean a lot to them. Sustainability and environmental awareness are essential components of their self-image. Ready to commit themselves socially and ecologically and, if possible, to combine this with their profession. They like to travel, want to get to know the world and have new experiences.
The Young Pragmatists **"Be flexible and seize opportunities"**	Age group 14 to 30 years; under-20-year-olds clearly overrepresented; more young men; intermediate or higher school-leaving certificate or still in school education; about one third employed. Majority still living in parental homes (often with above-average and higher incomes). Professional success and good living standards are important to them. Economic growth considered necessary to ensure good social conditions. The latest technology, cars, fashionable clothes and (long-distance) travel are important consumer demands for them.
The Young Distanced **"Doing my own thing as best I can"**	Age group 14 to 30; balanced gender ratio; overrepresented lower school-leaving certificate and intermediate school-leaving certificate; just under half are gainfully employed, focus on simple jobs; above-average number of unemployed; predominantly low income (both own and parents'). Reduced aspirations to what they consider to be essential: a flat, clothes, entertainment, car, holiday. Guided primarily by the price of products. Great distance to political and social issues.

2 Environmental protection and climate action in everyday awareness

Everyone must do more – satisfaction with responsible actors declines



2.1 Environmental protection and climate action among top challenges

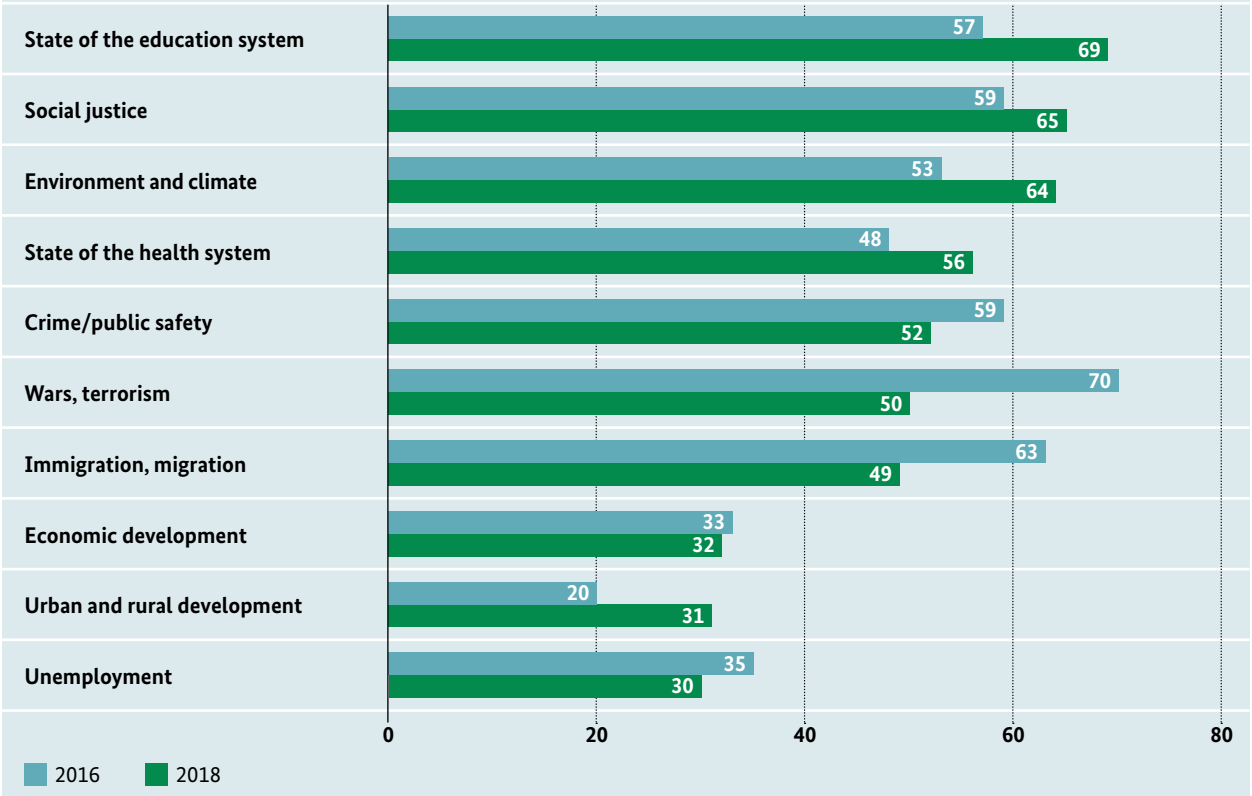
What importance do people attach to environmental protection and climate action in view of other pernicious problems? To capture this, respondents[4] were presented with a list of ten phenomena, developments and problems "facing our country today". Respondents were asked to evaluate how important each aspect is from their personal point of view. This form of survey records the significance of the topics mentioned in the list of suggestions against the background of the basic value orientations of the respondents on the one hand and their current everyday experiences on the other. Figure 2 shows the results including the changes since 2016.

Environmental and climate protection is one of the most important problems for two thirds of respondents

Around two thirds of those surveyed in 2018 consider environmental protection and climate action to be very important challenges that Germany is facing today. In the 14–19 age group, nearly four-fifths (78 per cent) of respondents hold this view. Environmental protection and climate action are thus assigned an importance that is almost as high as that of issues such as education and social justice. All three fields of action have increased in importance compared to 2016: environmental protection and climate action have increased by eleven percentage points, the state of the education system by twelve percentage points and social justice by six percentage points.

Figure 2: **Current most important problems 2016 and 2018 in comparison**[5]

Question: **This list shows various problems facing our country today. Please indicate in each case how important the problem is from your point of view.**
Response: **"very important"**



Representative survey of around 2,000 respondents per survey (2018: follow-up survey), sample from 14 years of age (data in per cent)

The state of the health system (56 per cent) and urban and rural development (31 per cent) are also cited as very important problems by more respondents than in 2016. Migration, wars and terrorism as well as crime and public safety remain very important issues for many; however, in the context of other challenges, their importance has declined significantly since 2016.

2.2 Environmental protection and climate action essential for solving future tasks

Positive effects of environmental protection and climate action expected for other tasks

In the opinion of the respondents, what role do environmental protection and climate action play with regard to other political tasks? The results are shown in Figure 3.

For two thirds (67 per cent) of the respondents, adequate environmental protection and climate action is an essential condition for mastering future tasks such as globalisation. More than half agree with this with regards to ensuring prosperity (57 per cent) and ensuring economic competitiveness (51 per cent). 46 per cent of the respondents also consider environmental protection and climate action to be essential for job creation.

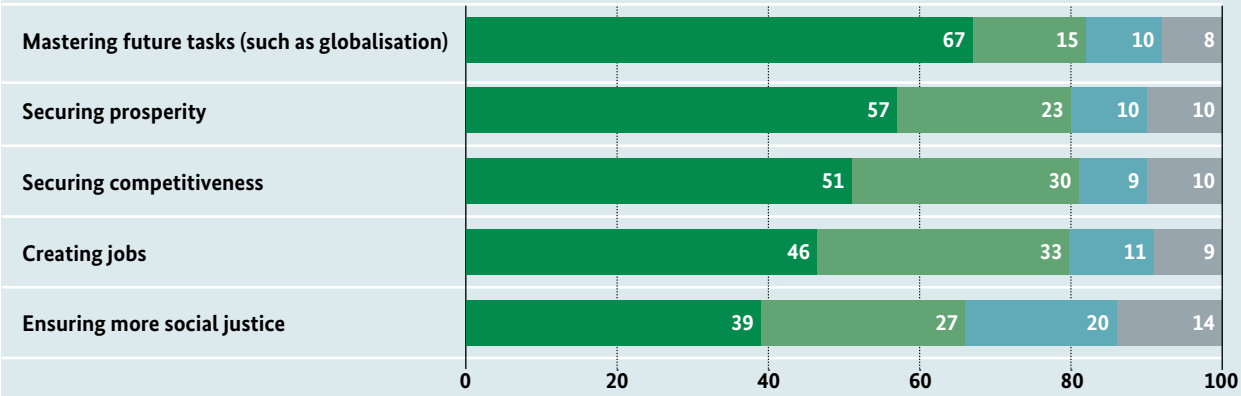
Whether environmental protection and climate action are essential for more social justice is viewed more sceptically, with 39 per cent saying yes and 27 per cent being of the opinion that compromises in environmental protection and climate action should sometimes be made for more social justice or that environmental protection and climate action should sometimes also take a back seat. A further 20 per cent state that there must first be fundamental progress in social justice before ecological aspects can be considered.

Environmental protection and climate action as problem solvers: Positive assessment stable

A time comparison (Figure 4) shows: The assessment that environmental protection and climate action are essential for progress in the five surveyed fields of action has remained at a fairly stable high level since 2014.[6] The respondents regard environmental pro-

Figure 3: **Importance of environmental protection and climate action for other fields of action**

Question: **In the following you can see various political tasks. In your opinion, what role do environmental protection and climate action play with regard to these tasks?**

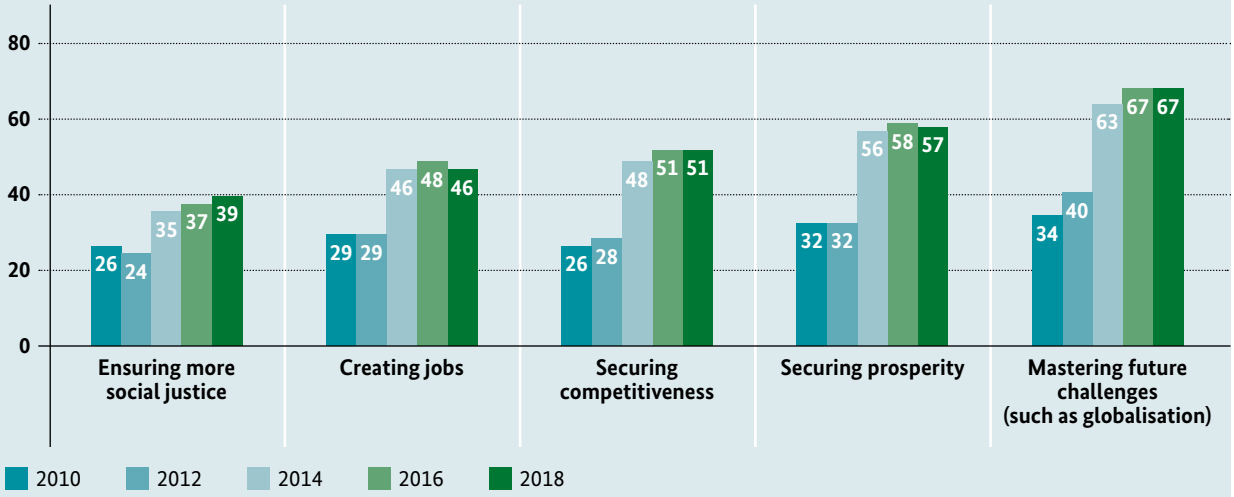


Adequate environmental protection and climate action are essential conditions for this task.
In this task, environmental protection and climate action must sometimes be restricted and compromises must be made.
There must be progress in this task before we can afford environmental protection and climate action.
I don't know / I can't decide.

Representative survey of 2,021 respondents, 1st survey wave, sample from 14 years of age
(figures in per cent, deviations from 100 per cent due to rounding)

Figure 4: **Time comparison: Environmental protection and climate action as a priority for political tasks**

Question: **In your opinion, what role do environmental protection and climate action play with regard to these tasks?**
Response: **Adequate environmental protection and climate action are essential conditions for this task.**



Representative survey of about 2,000 respondents per survey, "don't know" and "no information" responses omitted; 2018: 2nd survey wave, sample 2010 to 2012 from 18 years of age / since 2014 from 14 years of age
(in per cent)

tection and climate action as a field of activity with a relevant cross-sectional function and as essential for mastering future tasks such as globalisation. This statement also applies to the fields of action of securing prosperity and competitiveness. Somewhat fewer respondents associate environmental protection and climate action with job creation; compared to 2016, this figure fell slightly from 48 to 46 per cent.

The proportion of those who regard environmental protection and climate action as essential for greater social justice rose slightly to 39 per cent in 2018. At the same time, however, in 2018 more respondents (20 per cent) said that progress must first be made on social justice; in 2016 it was still 17 per cent. And the proportion of those who advocate compromise and occasional restrictions fell by six percentage points to 27 per cent compared with 2016.

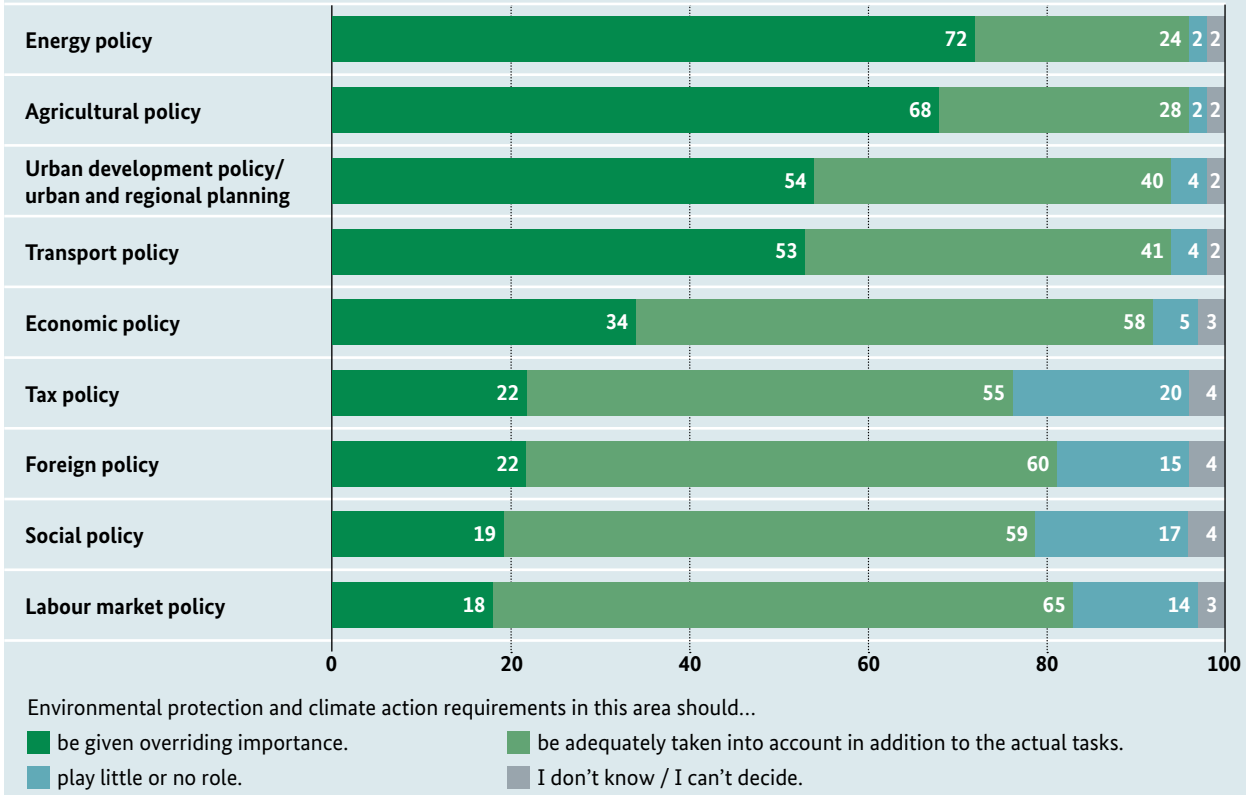
2.3 Environmental protection and climate action should be of overriding political importance

Ecological objectives should be given greater consideration, particularly in energy, agricultural and transport policy and in urban planning

Effectively meeting the requirements of future-oriented environmental protection and climate action requires a variety of efforts. The Federal Ministry for the Environment's Integrated Environmental Programme 2030 highlights the need for fundamental changes, particularly in the key areas of energy, agriculture and transport. How does the population feel about it? Do they feel that environmental protection and climate action concerns are sufficiently taken into account? The present study examined the extent to which people feel that it is necessary to give greater consideration to environmental protection and climate action concerns in the policies of other ministries (Figure 5).

Figure 5: **Consideration of environmental protection and climate action in other policy areas**

Question: **In your opinion, to what extent should environmental protection and climate action requirements be taken into account in the following areas?**



Representative survey of 2,017 respondents, 2nd survey wave, sample from 14 years of age (figures in per cent, deviations from 100 per cent due to rounding)

Majorities for an integrated environmental policy

More than two-thirds of the respondents believe that the requirements of environmental protection and climate action should take priority in energy and agricultural policy. Around a quarter of respondents would like environmental protection and climate action to be given appropriate consideration in these two policy areas. In transport and urban development policy as well as in urban and regional planning, more than half believe that ecological aspects should be given priority, and around 40 per cent argue for appropriate consideration. In these four areas, especially those under 20 years of age are in favour of environmental protection and climate action being given overriding importance.

A third of all respondents and almost half of those under 20 years of age believe that environmental protection and climate action should be our first priority in economic policy. It is remarkable that 58 per cent of respondents argue that economic policy should take appropriate account of environmental protection and climate action in addition to its actual tasks. Only five per cent think that environmental protection and climate action should play little or no role here.

In each of the other four policy areas surveyed, tax policy, foreign policy, social policy and labour market policy, the majority of respondents believe that environmental protection and climate action should be adequately taken into consideration in addition to the actual tasks. In these areas, the desire for a higher or lesser consideration of environmental protection and climate action is more or less equal.

The results show that a majority of society is in favour of environmental protection and climate action being given (considerably) greater consideration in other policy areas. This applies in particular to the policy fields of energy, agriculture, transport and urban development, which are central to environmental and climate policy.

2.4 Environmental quality considered to be worse than before

Focus on global environmental problems

How do the respondents rate the quality of the environment in their own city or municipality, throughout Germany and worldwide? Figure 6 shows the findings.

The respondents rate the environmental quality in their own city or municipality as the best: 63 per cent rate it as somewhat good, 14 per cent even as very good. For Germany as a whole, the assessment is more muted: 57 per cent rate the nationwide environmental quality as somewhat good and only four per cent as very good. More than one third of the respondents (36 per cent) rated it as somewhat bad. The overwhelming majority has a pessimistic view of environmental quality worldwide: Well over half (63 per cent) describe it as somewhat bad and just under a third (30 per cent) as very bad.

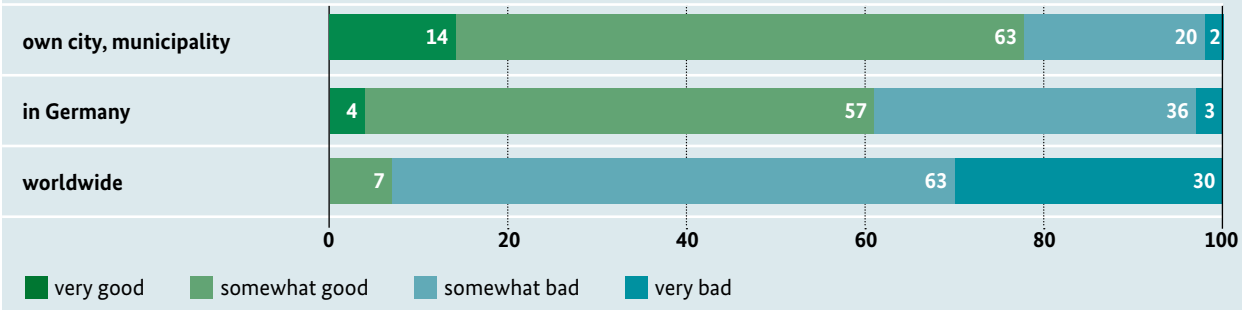
Assessment of local and national environmental conditions significantly deteriorated

A pessimistic assessment of global environmental conditions was shown in earlier studies, particularly since 2014. The current findings show that the respondents now also perceive the nationwide and local situation as worse (Figure 7). With regard to Germany, the number of positive assessments (the sum of very good and somewhat good) fell by 15 percentage points. Approximately one in seven feels that the environmental quality is now worse than it was two years ago. The environmental quality in one's own place of residence is also felt to be worse than in 2016 by eight per cent of the respondents. Respondents who live in households with a monthly net household income of less than 2,000 euros rate the local environmental quality particularly poorly.

> ***I also noticed that the bees are dying – the trees are blossoming like crazy, but there aren't any bees, that worries me a bit.***
> *Quote from group discussion*

Figure 6: **Assessment of environmental quality locally, in Germany and worldwide**

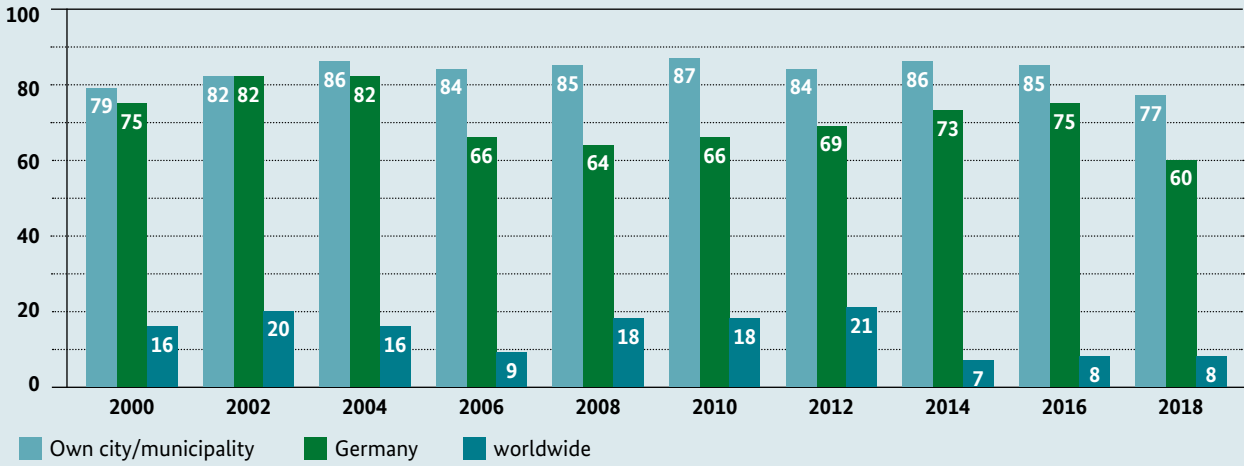
Question: **How would you assess the overall environmental quality in your city, your local municipality, in Germany and worldwide?**



Representative survey of 2,021 respondents, 1st survey wave, sample from 14 years of age, "don't know" and "no information" responses omitted (data in per cent, deviations from 100 per cent due to rounding)

Figure 7: **Assessment of environmental quality locally, in Germany and worldwide in a time comparison**

Question: **How would you assess the overall environmental quality in your city, your local municipality, in Germany and worldwide?**
Responses: Sum of **"very good"** and **"somewhat good"**



Representative survey of about 2,000 respondents per survey, "don't know" and "no information" responses omitted; 2018: 1st survey wave, sample 2010 to 2012 from 18 years of age / since 2014 from 14 years of age (in per cent)

2.5 Great dissatisfaction with the environmental commitment of relevant actors

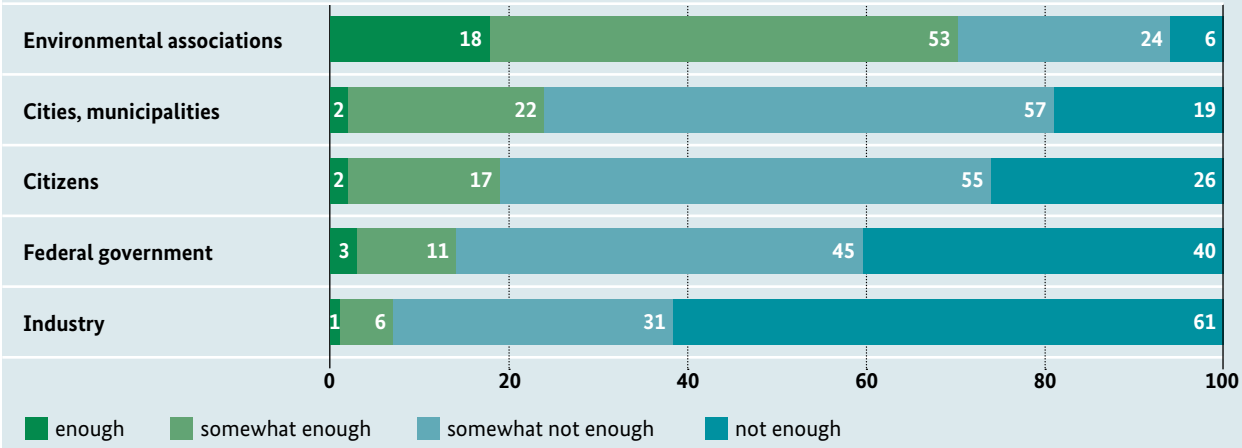
A cooperative effort is required to protect the environment and climate sustainably. State, economic and civil society actors, as well as individual citizens themselves, are called upon to contribute in their respective areas of influence and according to their abilities.

How do the respondents rate the commitment of various actors to environmental protection and climate action? The assessment of who does enough varies greatly (Figure 8). Seventy-one per cent of respondents believe that the environmental associations are doing enough or somewhat enough to protect the environment and the climate. The other actors follow only at a considerable distance: cities and municipalities (24 per cent), citizens (19 per cent), the federal government (14 per cent) and industry (eight per cent).[7] Conversely, this means that at present, 86 per cent of respondents feel that the federal government and 92 per cent that industry (somewhat) do not do enough for environmental protection and climate action. Across all the actors listed – apart from the environmental associations – only one to three per cent of the respondents gave a clearly positive assessment of their commitment ("does enough"). Nor do the respondents exclude their fellow citizens (and possibly themselves) from this highly critical view.

This critical assessment of the efforts of different actors becomes even more obvious when compared over time (Figure 9). While the assessment that the environmental associations are doing enough or somewhat enough fell quite moderately from 80 per cent in 2016 to 71 per cent in 2018, the figures for all other actors have roughly halved: Approval of the federal government's commitment to environmental protection and climate action fell by 20 percentage points. The figure is 25 percentage points lower for cities and municipalities and 17 percentage points lower for citizens. The number of respondents who feel that the environmental protection and climate action performance of industry is adequate has now dropped to just eight per cent.

Figure 8: **Assessment of the commitment of various actors to environmental protection and climate action**

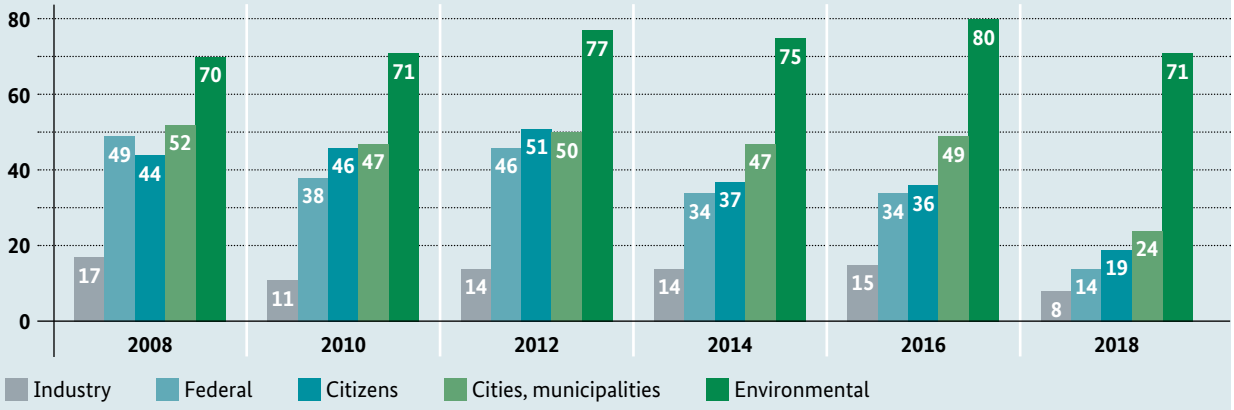
Question: **Are the following actors in Germany doing enough for environmental protection and climate action?**



Representative survey of 2,017 respondents, 2nd survey wave, sample from 14 years of age, "don't know" and "no information" responses omitted (data in per cent, deviations from 100 per cent due to rounding)

Figure 9: **Assessment of the commitment of various actors to environmental protection and climate action in a time comparison** [8]

Question: **Are the following actors in Germany doing enough for environmental protection and climate action (2008 to 2012: climate action)?**
Responses: Sum of **"doing enough"** and **"doing somewhat enough"**



Representative survey of about 2,000 respondents per survey, "don't know" and "no information" responses omitted; 2018: 2nd survey wave, sample 2008 to 2012 from 18 years of age / since 2014 from 14 years of age (in per cent)

2.6 Social Milieus: Different assessments

Compared to 2016, the assessment of the commitment to environmental protection and climate action has deteriorated significantly for all actors. However, the various Social Milieus differ in their assessments (Table 1).

The Critical and Creatives and Young Idealists view actors more critically ...

Significantly, the Well-establisheds and Young Pragmatists assess the ecological commitment, especially of cities and municipalities, the federal government and industry, far more positively than the average of the respondents. The Critical and Creatives and Young Idealists, on the other hand, are far more critical of all actors with the exception of the environmental associations than members of other milieus. Among the Precarious, however, the behaviour of citizens is assessed more positively than average.

... rate the quality of the environment as worse ...

The quality of the environment worldwide, in Germany and in one's own city or municipality, also tends to be assessed by the Critical and Creatives and Young Idealists as worse. For Germany, half of these two milieus assess the environmental quality as either somewhat or very poor; with regard to the global situation, almost no one in these two groups considers the worldwide environmental quality to be very good or somewhat good, at one per cent each. The Well-establisheds and Young Pragmatists, on the other hand, rate the environmental quality in Germany more positively: three quarters to two thirds are of the opinion that it is at least somewhat good.

Table 1: **Assessment of the commitment of various actors to environmental protection and climate action in the Social Milieus**

Question: **Are the following actors in Germany doing enough for environmental protection and climate action?**
Responses: Sum of **"doing enough"** and **"doing somewhat enough"**

	Environmental associations	Cities, municipalities	Citizens	Federal government	Industry
Total sample	**71**	**24**	**19**	**14**	**8**
The Traditionals	66	24	15	15	7
The Well-establisheds	76	30*	19	26**	12*
The Modern Mainstream	70	26	22	15	7
The Precarious	61*	27	34**	13	9
The Critical and Creatives	69	12**	9**	4**	1**
The Young Idealists	82	15	10*	3**	2*
The Young Pragmatists	78	31*	17	22**	14**
The Young Distanced	77	16	18	6*	10

Significant deviations from the average of the respondents

significantly overrepresented | about average/differences not significant | significantly underrepresented

* significant in 95 per cent confidence interval ($p < .05$)

** significant in 99 per cent confidence interval ($p < .01$)

For further information on significance tests see Chapter 8, page 85.

Representative survey of 2,021 respondents, 1st survey wave, sample 14 years and older, shares of mentions in the respective Social Milieus (in per cent)

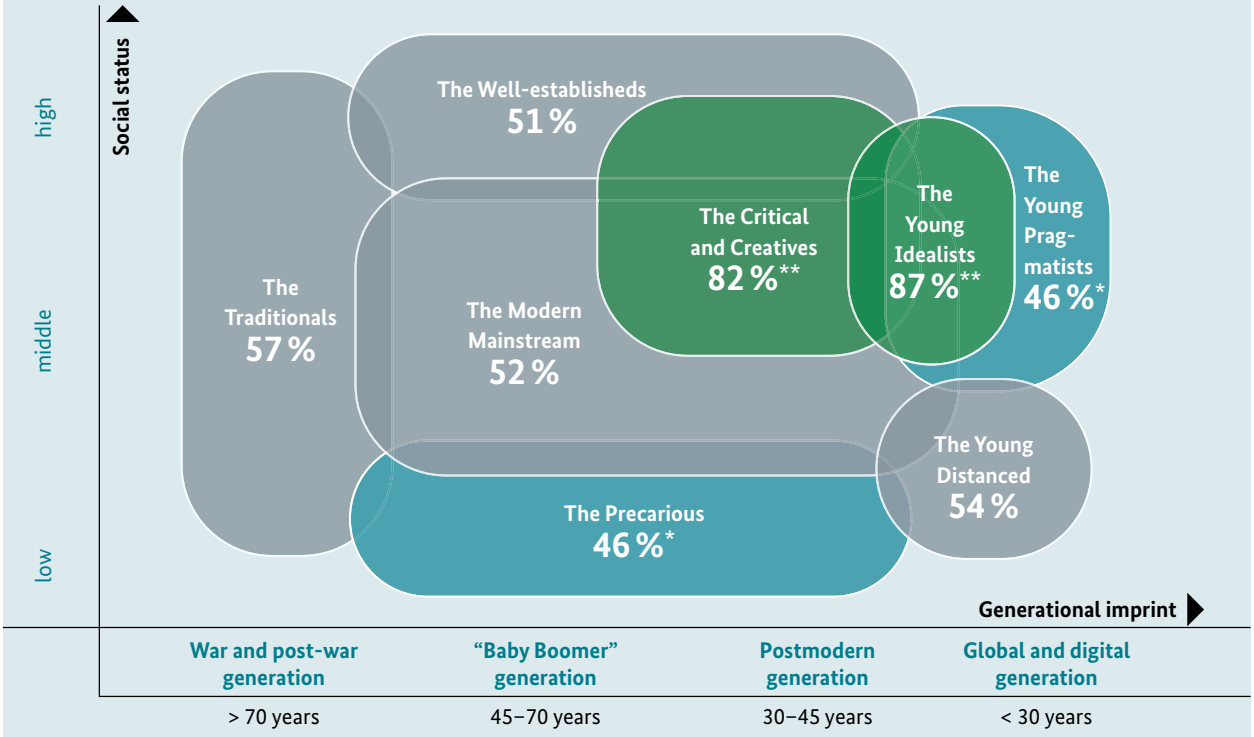
… and see environmental protection and climate action as preconditions for solving other challenges

How do different milieus view the contribution of environmental protection and climate action to solving central future tasks? Overall, the Critical and Creatives and Young Idealists tend to regard environmental protection and climate action as preconditions for meeting challenges in other areas as well. This is particularly evident in the task of "securing prosperity" (Figure 10).

While on average slightly more than half of the respondents (57 per cent – Figure 3) regard environmental protection and climate action as prerequisites for securing prosperity, this opinion is shared by four fifths of the Critical and Creatives and by almost nine tenths of the Young Idealists. The Precarious and Young Pragmatists, on the other hand, take this view much less frequently.

Figure 10: **Environmental protection and climate action as conditions for safeguarding prosperity in the Social Milieus**

Question: **In your opinion, what role do environmental protection and climate action play with regard to the task of safeguarding prosperity?** (Order of priority)
Response: **Adequate environmental protection and climate action are essential conditions for this task.**
(This response averaged 57 per cent.)



Significant deviations from the average of the respondents

significantly overrepresented | about average/differences not significant | significantly underrepresented

* significant in 95 per cent confidence interval ($p < .05$)

** significant in 99 per cent confidence interval ($p < .01$)

For further information on significance tests see Chapter 8, page 85.

Representative survey of 2,021 respondents, 1st survey wave, sample from 14 years of age, percentages of mentions in the respective Social Milieus

Similar patterns can also be seen in the other tasks surveyed. With regard to the majority of future challenges (such as globalisation), securing competitiveness, creating jobs and social justice, the milieus of the Critical and Creatives and Young Idealists also tend to regard environmental protection and climate action more strongly as preconditions for overcoming the challenges. The Precarious and Young Distanced in particular, on the other hand, tend to see this less so.

In addition, in all the fields of action surveyed, the Well-established and Young Pragmatists tend to believe that environmental protection and climate action should sometimes be restricted in order to achieve other goals, or that compromises are necessary here.

2.7 Summary – Desire for more environmental protection and climate action

The respondents named environmental protection and climate action, together with education and social justice, as one of the three top challenges from a list of suggestions. In times of international political upheavals, 'fake news', climate change denials and global power shifts, this is a remarkable result. It should also be noted that environmental protection and climate action increased by eleven percentage points compared to the 2016 survey. It is also among the top issues of the young generation, among other things because they see their future prospects threatened by climate change.[9]

> ***It's a central thing for me, because I think: If I want to have children later, what kind of environment will we have?***
> *Quote from group discussion*

The fact that more people perceive environmental protection and climate action as a priority challenge goes hand in hand with a more critical assessment of the state of the environment locally and in Germany among the respondents, which compared to 2016 they consider to be worse. This suggests that respondents are experiencing global problems such as climate change and species extinction in their immediate personal environment and that they see a need for political action. It seems that it is becoming generally accepted that the extent of environmental and climate problems, worldwide, here in Germany and in the immediate surroundings, is greater than respondents have long perceived.

This sensitisation explains the demand on policymakers to take greater account of environmental protection and climate action and to also consider it in central policy areas. A large majority of the respondents see the need to give priority to environmental protection and climate action in transport, energy and agricultural policy as well as in urban development and urban and regional planning. This demonstrates the necessity for an integrative environmental policy, as also emphasised in the Integrated Environmental Programme 2030 of the Federal Ministry for the Environment.

In other policy areas, the desire for environmental protection and climate action to be taken into account is less; however, it is becoming apparent, particularly in economic policy, that respondents want environmental protection and climate action to be at least adequately taken into account. This indicates that economic policy strategies and programmes should have more courage to take up environmental protection and climate action more strongly and to take these more into account in political deliberation processes. In the policy fields of tax, foreign, social and labour market policy, respondents do not seem to attribute any significant role to environmental protection and climate action; here, one task of the political field could be to make the links clearer.

The demand to take greater account of environmental protection and climate action stands in stark contrast to people's assessment of the commitment of relevant actors. The ecological actions of all actors, with the exception of environmental associations, have never been rated as poorly since this question has been included in the survey.

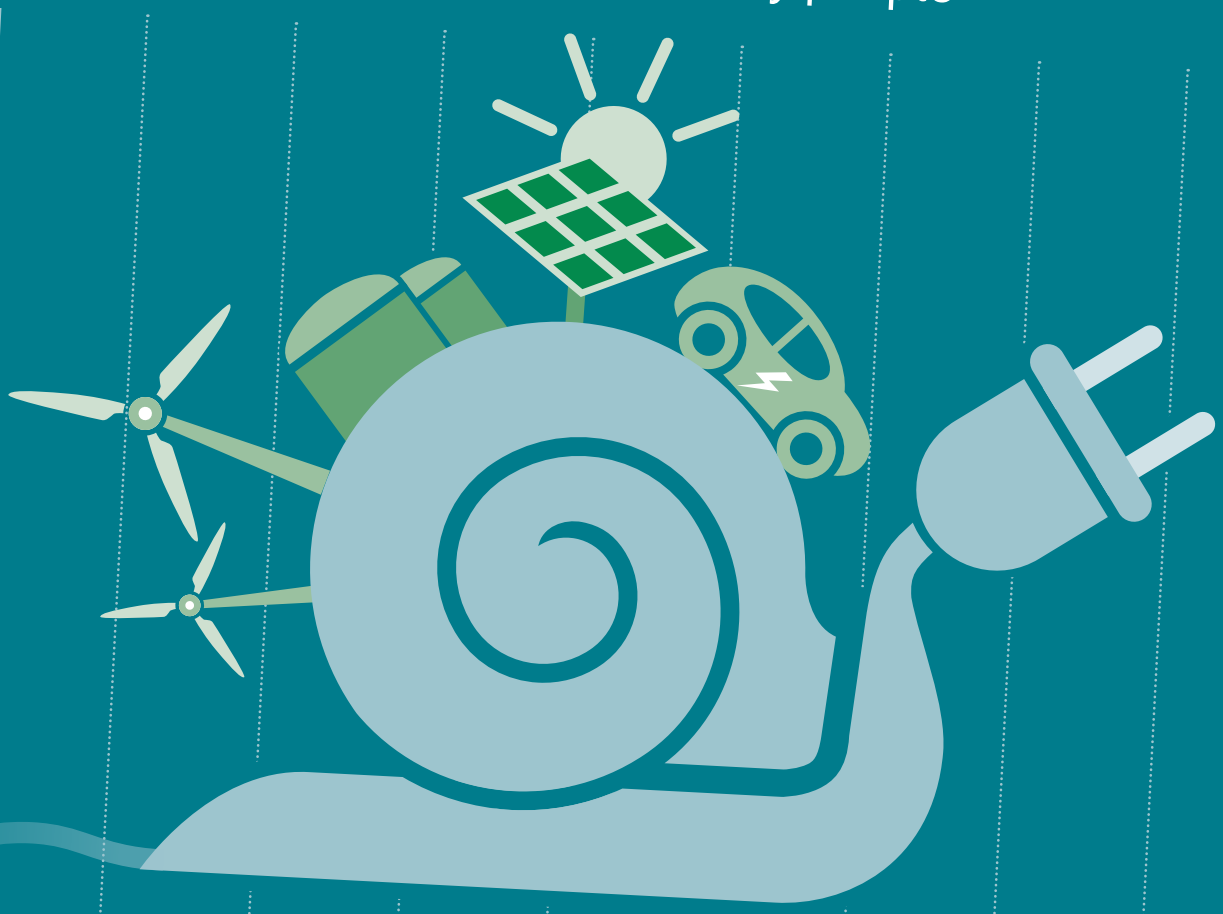
Depending on the group of actors, this may have different causes. A general criticism of the government style in the survey period could play a role with regard to the federal government, as could insufficient environmental policy solutions in important fields of action such as climate targets, coal phase-out, air pollution control or water and soil protection. Cities and municipalities, to which almost half of the respondents still attested in 2016 that they do (somewhat) enough, may have lost approval because they were unable to provide the population with sufficiently forward-looking environmental policy strategies for solving the problem of air pollution (above all particulate matter, nitrogen oxides). For a long time now, people in Germany have rated the commitment of industry to the environment as insufficient. The rating in the 2018 survey is likely to have been poor particularly due to the installation of fraudulent software in diesel vehicles and the reluctance to pay compensation.

The evaluation of the commitment of the citizens themselves also reaches an all-time low in 2018. Perhaps the growing impression that all other actors are becoming increasingly less involved has led to people, despite their own efforts and contributions, becoming dissatisfied, alarmed and perhaps even perplexed. Ultimately, this could also point to resignative retreat tendencies, along the lines of: "The others aren't doing anything anyway". Conversely, if a trend reversal in the commitment of the other actors were to take place, citizens could also be encouraged anew to become active and to lead the way with their own commitment.

It can be deduced from the survey results that citizens would like to see more dependable and consistent action in environmental protection and climate action (but also in other areas). People expect a lot from politics in particular; from the respondents' point of view, it is necessary to act politically courageously, especially in the central transformation fields of energy, agriculture and transport.

3. Energy transition – the transformation of the energy system

The German “energy transition” is good for the climate, but is happening too slowly for many people



60 % I (somewhat) agree that the energy transition contributes to the reduction of greenhouse gases in Germany.

81 % I agree (somewhat) that the energy transition is happening too slowly.

Clear vote: Rapid and comprehensive transformation of energy supply systems

The term "Energiewende" stands for a fundamental turnaround in the energy supply in Germany by 2050 and an increase in energy efficiency. Electricity and heat will then be generated primarily from renewable energies that replace nuclear and fossil fuels. At the same time, primary energy consumption is to be reduced overall by increasing energy efficiency. This is supported by companies, public administration and also private households, for example with efficient production facilities, energy-saving appliances in households and offices, insulated façades and modern heating systems. The entire process is an "integrated energy transition". It covers a wide range of measures in the sectors of electricity, heat production and transport as well as the energy efficiency of buildings. And it also includes the conversion from internal combustion engines to electric drive in motor vehicles. Expanding transmission and distribution networks and developing new storage technologies.

The switch to renewable energies is one of the supporting pillars of the energy transition. More than 36 per cent of Germany's gross electricity consumption was covered by renewable energies in 2017.[10] The main recommendations of the Commission on "Growth, Structural Change and Employment" ("Coal Commission") are to increase this share to 65 per cent by 2030 and to phase out coal-fired power generation by 2038 at the latest.[11] So far, the expansion of electricity generation capacities on the basis of renewable energies has created more than 300,000 jobs in Germany.[12] Between 1990 and 2016, energy-related greenhouse gas emissions fell by 26 per cent.[13] However, the energy sector remains by far the largest emitter of greenhouse gases in Germany and accounts for almost 85 per cent of all emissions.[14]

3.1 Implementation of the energy transition is too slow and the costs not fairly distributed

Survey respondents support the reduction of energy consumption and the expansion of renewable energies

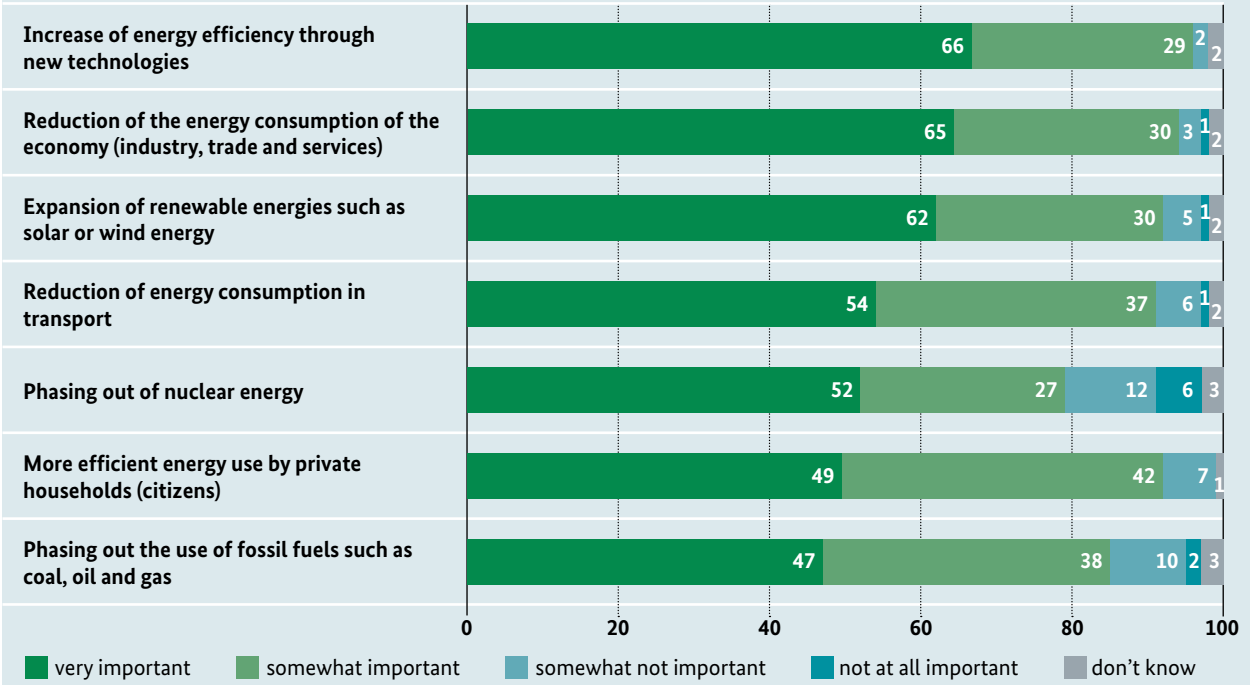
Overall, approval in Germany of all the goals of the energy transition is very high.[15] About two thirds of the respondents consider energy efficiency through new technologies, lower energy consumption in the business sector and the expansion of renewable energies such as solar or wind energy to be very important. These results show strong support for a reduction in energy consumption (Figure 11).

The reduction of energy consumption in transport, more efficient energy use by private households and the phasing out of nuclear energy and fossil fuels are considered to be slightly less important, but overall also of great importance.

> ***Great stuff, I'm all for it [the energy transition]. (...) It's not impossible, especially since a lot has already happened, and it also has great potential and I hope it will work.***
> *Quote from group discussion*

Figure 11: **Importance of different goals for a successful energy transition**

Question: **How important do you think it is to achieve the following goals for a successful energy transition?**



Representative survey of 2,017 respondents, 2nd survey wave, sample from 14 years of age (figures in per cent, deviations from 100 per cent due to rounding)

More climate action and social justice expected from energy policy

What aspect of the energy transition is most important to the respondents? Is it the reduction of greenhouse gases, a socially equitable distribution of costs or a positive contribution to economic development? When asked about these three aspects, half of the respondents state that a significant and rapid reduction in greenhouse gas emissions in Germany is most important (Figure 12). That the costs of the energy transition should be distributed in a socially equitable way is considered by 35 per cent of the respondents to be the most important and by 43 per cent of the respondents the second most important aspect. Only a small minority of eleven per cent considers it most important that the energy transition has a positive effect on economic development and on companies in Germany.

Respondents perceive energy policy to be more effective for protecting the climate – but with limitations

The study also examined which priorities are perceived in current energy policy. A total of 60 per cent of those surveyed agree (16 per cent of them completely and a further 44 per cent somewhat) that the energy transition will contribute towards a significant reduction of greenhouse gas emissions in Germany. They therefore assess energy policy as effective for protecting the climate (Figure 13). In this respect, the perceived priorities of current energy policy are largely in line with citizens' expectations.

The situation is different with regard to cost allocation; here, a large discrepancy can be observed between the population's desire for a socially equitable distribution of the costs of the energy transition (Figure 12) and their assessment of the current situation. Only six per cent of the respondents completely agree and only twelve per cent somewhat agree that the costs of the energy transition are distributed in a socially equitable way.

Figure 12: **Greenhouse gases, cost distribution, economic development – Expectations concerning the energy transition**

Question: **In which order of importance do you rate the following aspects of the energy transition?** (Order of priority)

Representative survey of 2,017 respondents, 2nd survey wave, sample from 14 years of age (figures in per cent, deviations from 100 per cent due to rounding and "don't know")

Criticism: energy transition is too slow and costs are distributed unequally in society

The population is in favour of a consistent and rapid implementation of the energy transition. 81 per cent of the respondents (43 per cent completely, 38 per cent somewhat) agree with the statement that the energy transition in Germany is progressing too slowly to effectively protect the climate (Figure 14).

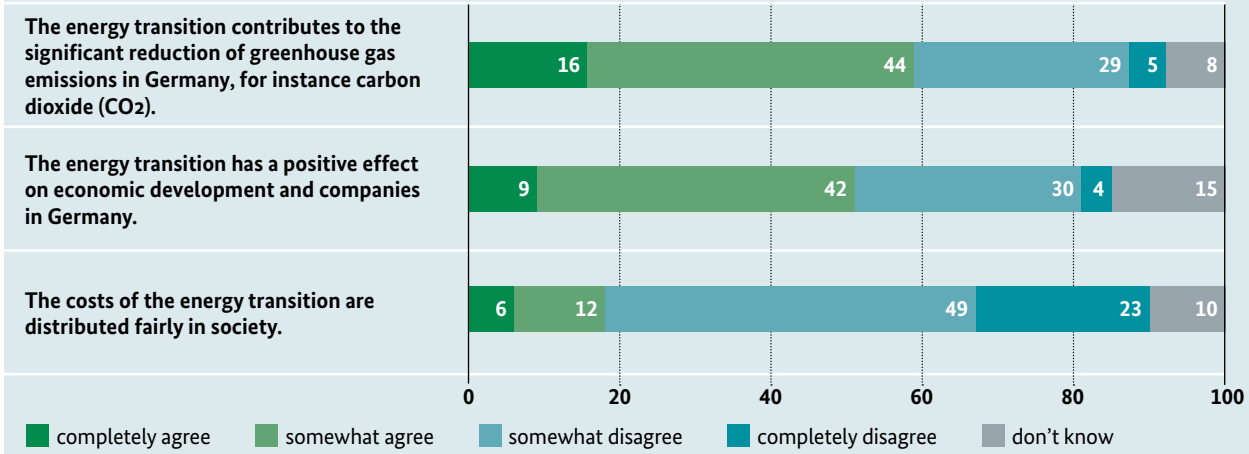
> *"It will never go too fast in politics. (...) Well, I don't know how long it'll take, it's been talked about for ages.*
> *Quote from group discussion*

82 per cent of respondents are concerned that many people in Germany are not taking the energy transition seriously enough (37 per cent completely agree, 45 per cent somewhat). 88 per cent of respondents think it is acceptable if individual branches of industry are restructured as a result of the energy transition, for example coal mining (49 per cent completely, 39 per cent somewhat).

In this survey of political statements on the energy transition, 39 per cent of those surveyed also completely agree that the costs of the energy transition in Germany are too unequally distributed (Figure 14). Together with those who somewhat agree with this statement, it is even 76 per cent. This result is in line with previous findings (Figure 13).

Figure 13: **Perception of current energy policy**

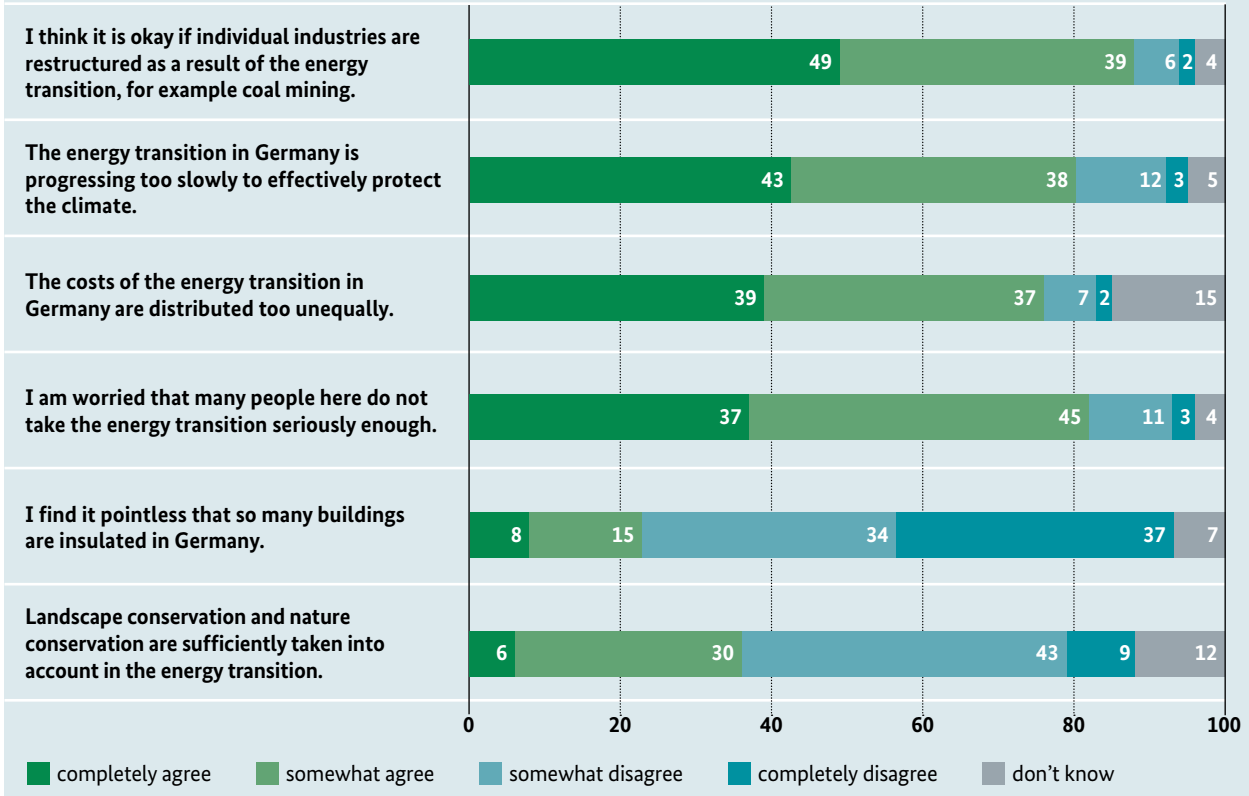
Question: **What do you think applies to energy policy in Germany?**



Representative survey of 2,017 respondents, 2nd survey wave, sample from 14 years of age
(figures in per cent, deviations from 100 per cent due to rounding)

Figure 14: **Agreement with political statements on the energy transition**

Question: **In the following you see some more statements on the energy transition. To what extent do you agree with these statements?**



Representative survey of 2,017 respondents, 2nd survey wave, sample from 14 years of age
(figures in per cent, deviations from 100 per cent due to rounding)

Insulating buildings to save heating energy is widely accepted. Only very few find it pointless (eight per cent completely, 15 per cent somewhat).

As far as landscape and nature conservation are concerned, however, many are sceptical. Only one third of those surveyed believe that this has been sufficiently taken into account in the energy transition (six per cent completely, 30 per cent somewhat).

Clear demand for a socially equitable approach to the energy transition and approval of economic incentive instruments

In the study, the respondents were asked to assess nine political measures with regard to their significance for the energy transition (Figure 15). In addition to the expectation of many respondents that the energy transition should as a priority contribute to reducing greenhouse gas emissions quickly and significantly (Figure 12), 94 per cent consider it very or somewhat important for policymakers to pay close attention to an affordable energy supply for all when shaping the energy transition. There is also strong support for the creation of new jobs in regions affected by the coal phase-out; 92 per cent consider this to be very important or somewhat important.

88 per cent of the respondents rate the state support for energy saving in residential buildings as a very important (48 per cent) or somewhat important (40 per cent) policy measure in the energy transition.

In addition, the clear majority of respondents consider certain economic incentives to be very and somewhat important for energy transition, even if they place a greater financial burden on companies and consumers. This is first and foremost a reduction in climate-damaging subsidies (90 per cent), followed by an increase in the price of CO_2 emission rights (86 per cent) and higher taxes on products that are particularly harmful to the climate (84 per cent).

3.2 Government, industry and population: energy transition only succeeds as a joint effort

Governments at federal and state level most important for the energy transition to succeed

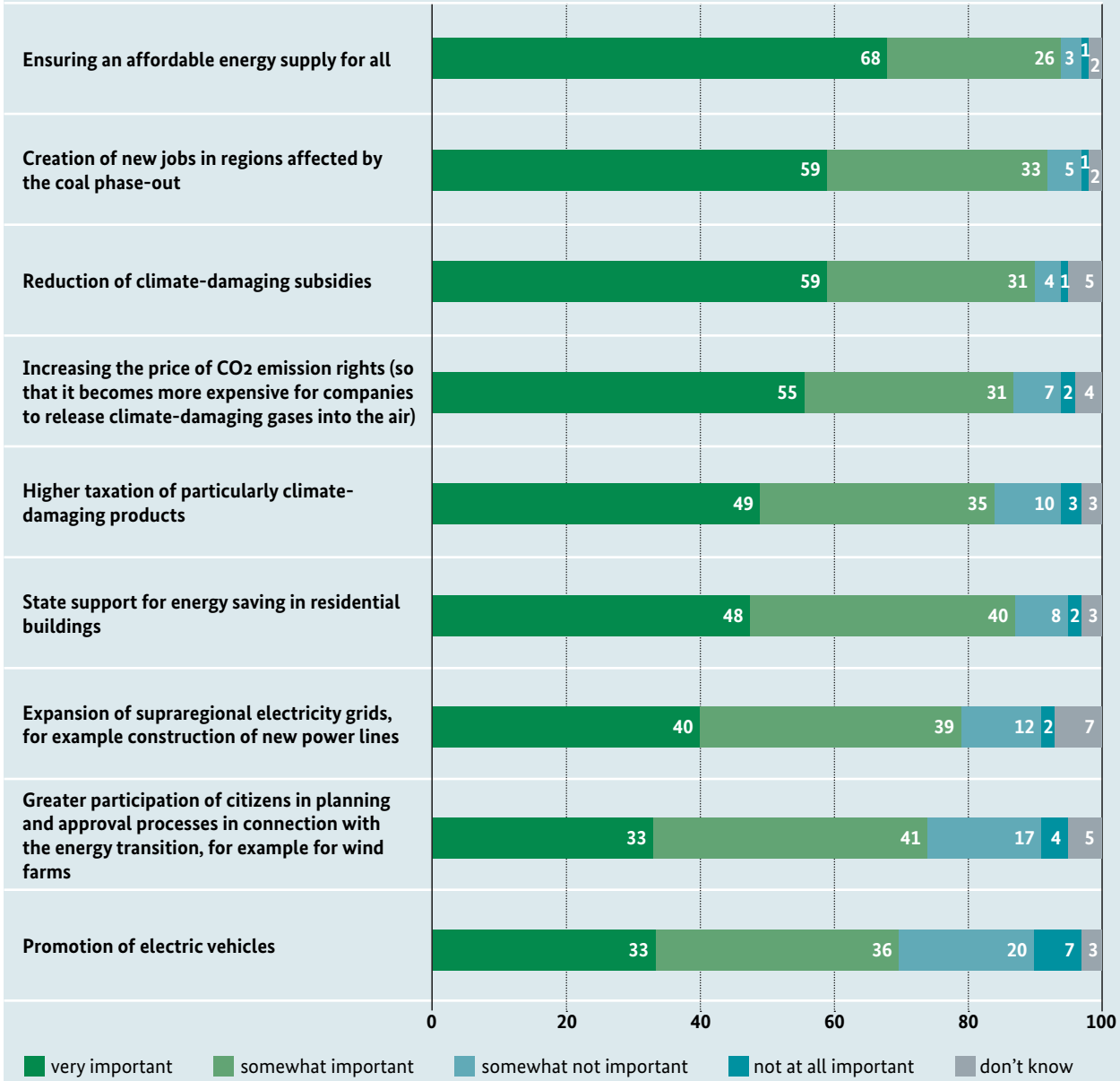
The ethics commission "Secure Energy Supply", which Chancellor Angela Merkel established after the reactor accident in Fukushima in 2011, deliberately called its statement a "joint effort" and thus made it clear that the contributions of all actors are indispensable for a successful energy transition.[16]

70 per cent of respondents consider the contributions made by federal and state governments to be important if the energy transition is to succeed. This responsibility is also attributed to industrial companies with high energy consumption (44 per cent) and power companies (41 per cent). Nearly half of the respondents consider each and every individual to be one of the three most important actors in contributing to a successful energy transition (Figure 16).

> ***I'd be very happy if you were to get more involved and take to the streets so the government can see that the people want the energy transition.***
> *Quote from group discussion*

Figure 15: **Significance of various policy measures in the energy transition**

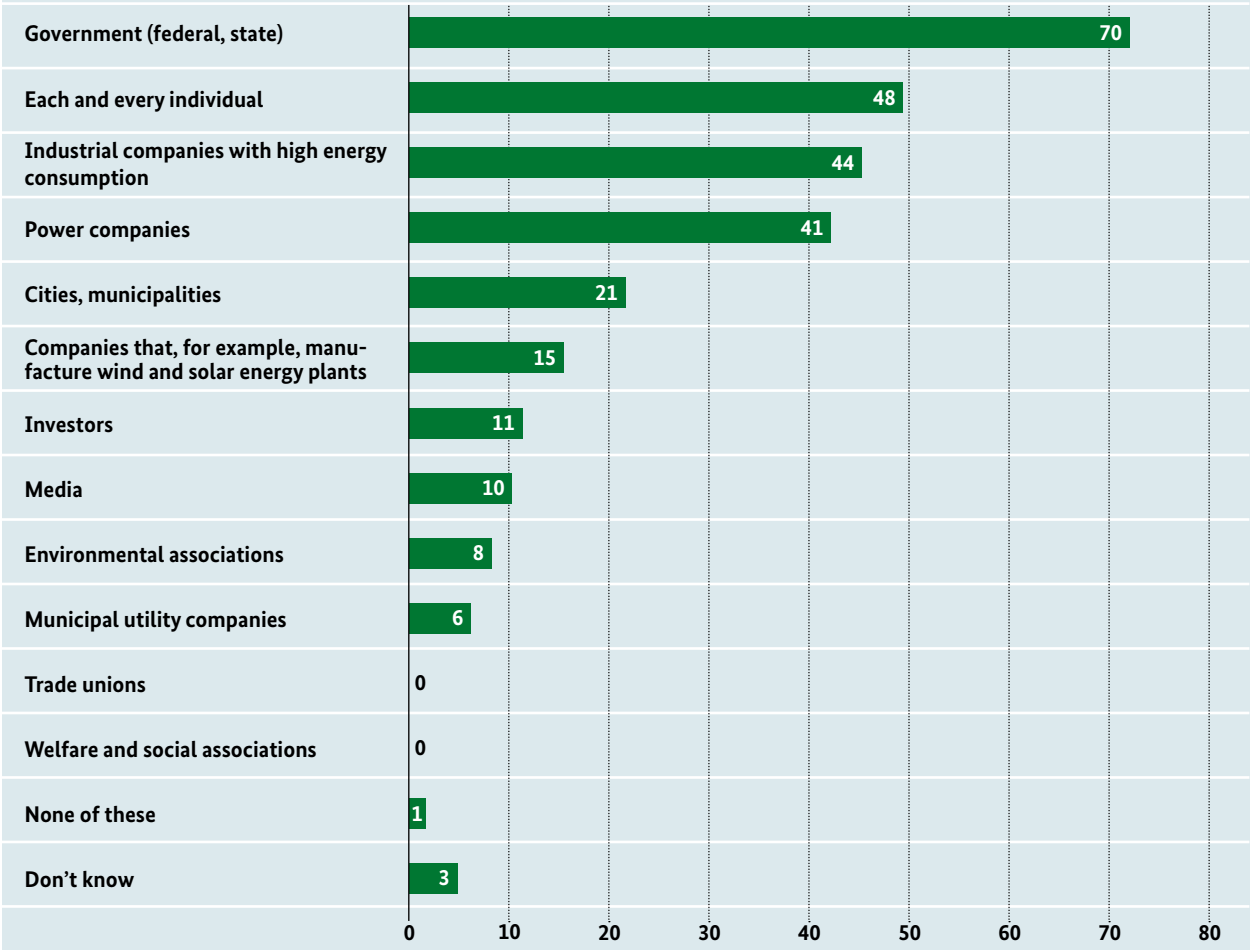
Question: **Various measures are being discussed and planned in the course of the energy transition. How important do you consider the following measures to be?**



Representative survey of 2,017 respondents, 2nd survey wave, sample from 14 years of age
(figures in per cent, deviations from 100 per cent due to rounding)

Figure 16: **Actors with responsibility for a successful energy transition**

Question: **In your opinion, who can make an important contribution to the success of the energy transition in Germany?** (Nominate a maximum of three important actors)



Representative survey of 2,017 respondents, 2nd survey wave, sample from 14 years of age (data in per cent)

3.3 Commitment to energy transition so far limited, but at the same time manifold potentials available

The respondents know that each and every individual can and must contribute a great deal to the energy transition. One of the prerequisites for this is to be sensitive to one's own power consumption and to potential savings. The findings indicate considerable information deficits (not shown). For example, only slightly more than one third of the respondents know the electricity consumption in their own homes. Almost ten per cent of those surveyed either find it too tedious to monitor their electricity consumption or consider this knowledge to be less important, or do not know how to find out the power consumption of their own appliances. Only 18 per cent of the respondents indicate that they own only energy-saving appliances.

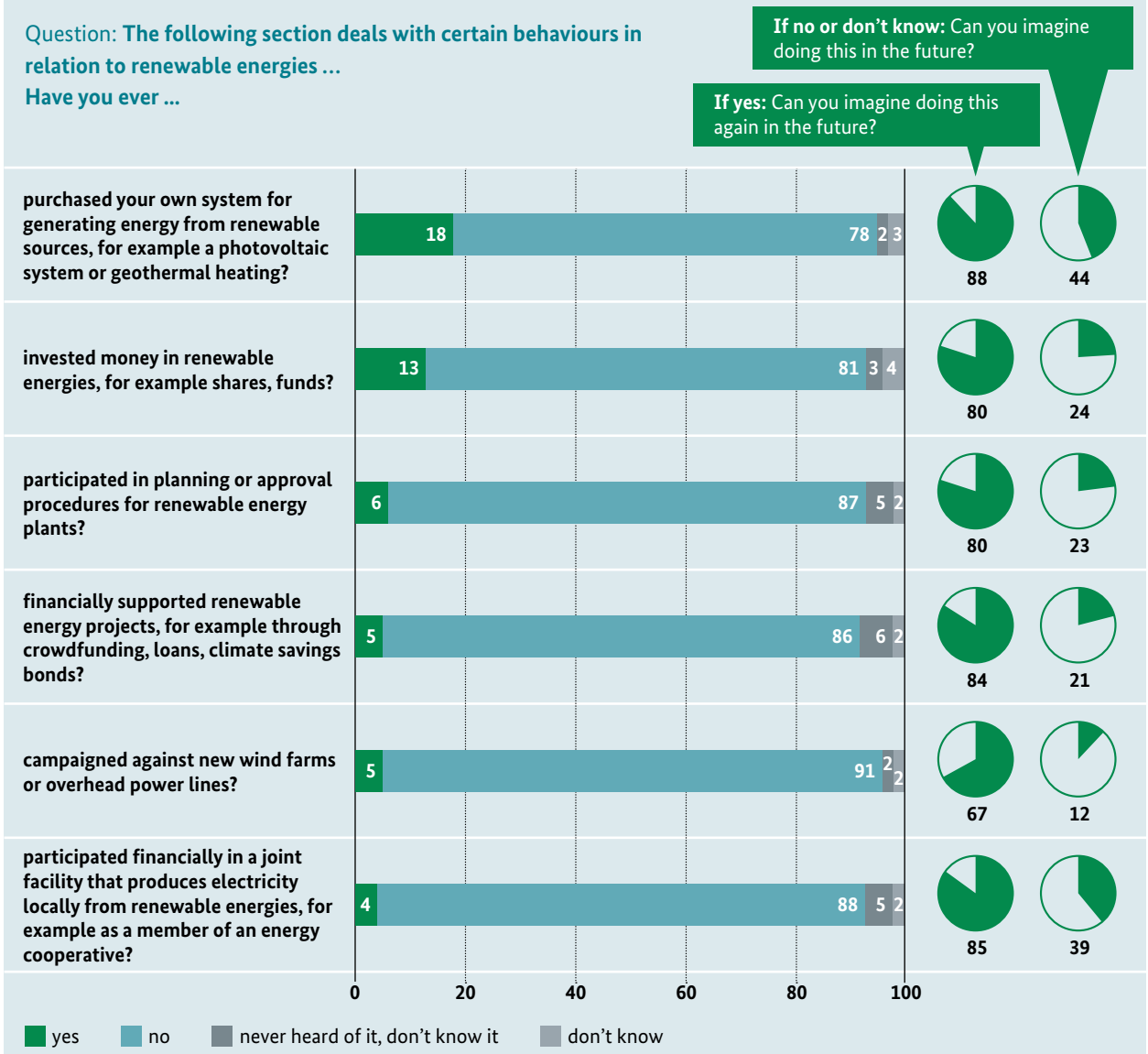
Citizens are also interested in financial benefits and savings opportunities

Figure 17 shows the extent to which respondents have so far been active in the field of renewable energies and the energy transition and whether they would do it again or try it out in the future. Some of the respondents have already supported renewable energies financially, for example through green financial investments (13 per cent) or through financial support for projects (five per cent). 18 per cent of respondents purchased their own plant for generating energy from renewable sources and

four per cent state that they had already made a financial contribution to a community power plant that produces electricity from renewable sources. More than 80 per cent of those who have already done this can imagine doing so again. But even those who have not yet invested in renewable energies are open to it: 44 per cent can imagine purchasing their own renewable energy system and 39 per cent can imagine participating financially in a community system in the future.

A quarter to half of the respondents with a residential property[17] indicate that they have already invested in energy efficiency measures for their property. This concerns, for example, the optimisation of the heating system with highly efficient heating pumps (37 per cent of respondents with residential property), the installation of a heating system based on renewable energy sources (24 per cent) and also measures to save thermal energy through insulation, heat insulation glazing or similar measures (50 per cent). Around half of those surveyed with a residential property who have not yet implemented any of these measures can imagine doing so in the future. These findings show that there is some potential for an energy transition with regard to buildings.

Figure 17: **Behavioural patterns in renewable energies – to date and in future**



Representative survey of 2,017 respondents, 2nd survey wave, sample from 14 years of age (figures in per cent, deviations from 100 % due to rounding)

3.4 Social Milieus: Approval in principle, but diverging views on energy transition

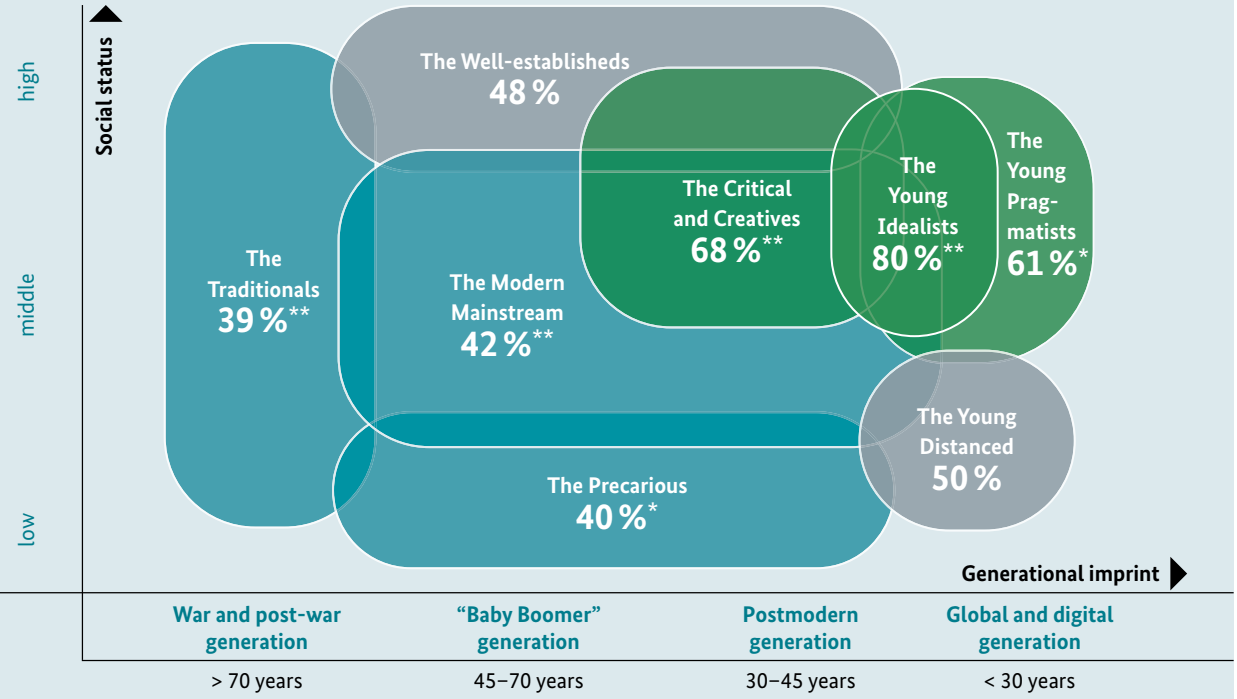
There is a clear majority among the population who feel that ecological aspects should be given overriding importance, especially in energy policy. 72 per cent of all respondents agree with this view (Figure 5). The majority of respondents are therefore (still) strongly in favour of the energy transition in Germany.[18] Between the Social Milieus, however, attitudes towards the energy transition sometimes differ considerably.

Figure 18 shows the preferences in the individual Social Milieus for a rapid and significant reduction in greenhouse gas emissions through the energy transition (as their top priority / most important goal; see Figure 12). This is of above-average importance to the members of the Critical and Creatives as well as the Young Idealists and the Young Pragmatists. The fact that in this statement, in addition to the sustainability-oriented Critical and Creatives and Young Idealists, the Young Pragmatists are also represented at an above-average degree shows the importance of climate action for the younger generation as a whole. The Modern Mainstream and the Precarious, on the other hand, regard the climate action aspect of the energy transition as less important than members of other Social Milieus.

The attitudes in the Social Milieus also differ with regard to various political statements on the energy transition (Table 2). For example, the Critical and Creatives and Young Idealists are clearly more often than not of the opinion that the energy transition in Germany is progressing too slowly to effectively protect the climate. The Well-establisheds and the Modern Mainstream agree with this much less frequently. For

Figure 18: **Preference in the Social Milieus for a rapid and significant reduction in greenhouse gas emissions**

Question: **What is most important to you with regard to the energy transition overall (order of priority)?**
Response: **That the emission of greenhouse gases such as carbon dioxide (CO_2) in Germany decreases rapidly and significantly.** (This response averaged 50 per cent.)



Significant deviations from the average of the respondents

significantly overrepresented | about average/differences not significant | significantly underrepresented

* significant in 95 per cent confidence interval ($p < .05$) ** significant in 99 per cent confidence interval ($p < .01$)

Representative survey of 2,021 respondents, 2nd survey wave, sample from 14 years of age, percentages of mentions in the respective Social Milieus

the Traditionals and the Precarious, it is also particularly important that the energy supply remains affordable for all. Members of these two Social Milieus as well as of the Modern Mainstream are also clearly above average of the opinion that the costs of the energy transition in Germany are distributed too unequally.

Much more than the members of other Social Milieus, the Critical and Creatives and the Young Idealists support the restructuring of individual branches of industry such as coal mining in the course of the energy transition. Members of the Modern Mainstream and the Precarious agree with such measures much less strongly. But all Social Milieus agree completely or somewhat with such a structural change.

Table 2: **Attitudes towards the energy transition in the Social Milieus**

a) Question: **In the following you see some more statements on the energy transition. To what extent do you agree with these statements?**
Response: **"completely agree"**

b) Question: **Various measures are being discussed and planned in the course of the energy transition. How important do you consider the following measures to be?**
Response: **"very important"**

	The energy transition in Germany is progressing too slowly to effectively protect the climate [a]	The costs of the energy transition in Germany are distributed too unequally [a]	I think it is acceptable if individual branches of industry are restructured as a result of the energy transition, for example coal mining [a]	Ensuring an affordable energy supply for all [b]
Total sample	**43**	**39**	**49**	**68**
The Traditionals	42	50**	58*	79*
The Well-establisheds	32**	33	45	57*
The Modern Mainstream	31**	45*	36**	74
The Precarious	41	52**	35**	81**
The Critical and Creatives	69**	38	71**	59
The Young Idealists	75**	16**	78**	51*
The Young Pragmatists	42	17	44	57
The Young Distanced	43	30	60	57

Significant deviations from the average of the respondents
significantly overrepresented | about average/differences not significant | significantly underrepresented
* significant in 95 per cent confidence interval ($p < .05$)
** significant in 99 per cent confidence interval ($p < .01$)

Representative survey of 2,021 respondents, 1st survey wave, sample 14 years and older, shares of mentions in the respective Social Milieus (in per cent)

3.5 Summary – Population in favour of energy transition and structural change

A very large majority of the population supports the energy transition: 85 per cent of the respondents consider the phase-out of fossil fuels to be somewhat or very important, almost 90 per cent of the respondents are in favour of restructuring certain branches of industry such as coal mining. This shows that citizens agree with the goals of the energy transition. However, 81 per cent of those surveyed are (somewhat) dissatisfied with the pace of the energy transition: They feel that progress is too slow to effectively protect the climate.

The general opinion is that the main responsibility for the success of the energy transition lies with the federal and state governments. The respondents demand a clear commitment of the governments to the energy transition, and half of the respondents attach particular importance to the rapid reduction of greenhouse gases. 60 per cent of respondents completely or somewhat agree that the energy transition is already helping to reduce greenhouse gas emissions. In this respect, the majority of respondents perceive energy policies as effective.

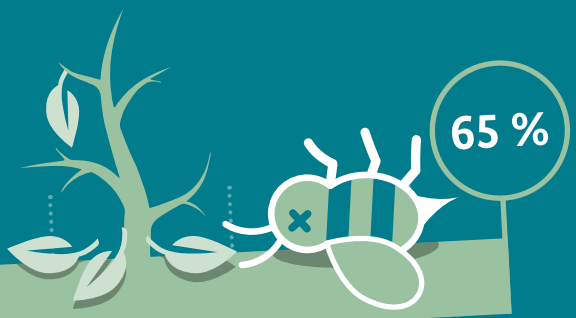
The situation is different with regard to the allocation of costs for the energy transition. For 35 per cent of those surveyed, a socially equitable distribution of costs is of the greatest importance, but only six per cent feel that the costs of the energy transition are currently distributed socially equitably. Whether and how an affordable energy supply can be ensured is something that many people in Germany think about. Elsewhere, too, the findings show that respondents expect policymakers to shape the energy transition and the associated transformation processes in a socially acceptable way. For instance, the majority considers it important to create new jobs in regions affected by the coal phase-out. At the same time, 88 per cent of those surveyed think it is completely or somewhat acceptable if individual branches of industry, such as coal mining, are restructured as a result of the energy transition. The social groups most likely to be affected therefore expect the energy transition to be structured in a way that includes fair cost distribution and an affordable energy supply.

Citizens also see themselves as responsible for actively shaping the energy transition. They are interested in becoming financially involved, for example through green investments, investments in the energy efficiency of buildings or through financial participation in renewable energy systems such as locally owned and operated wind parks or solar parks.

The clear majority of respondents (84 to 90 per cent) very much or somewhat support changes to certain economic framework conditions and classify these as essential, target-oriented policy measures for the energy transition. The high approval ratings relate to, among other things, the reduction of climate-damaging subsidies, an increase in the price of CO_2 emission rights, a higher taxation of particularly climate-damaging products (CO_2 pricing) and state subsidies for energy savings in residential buildings.

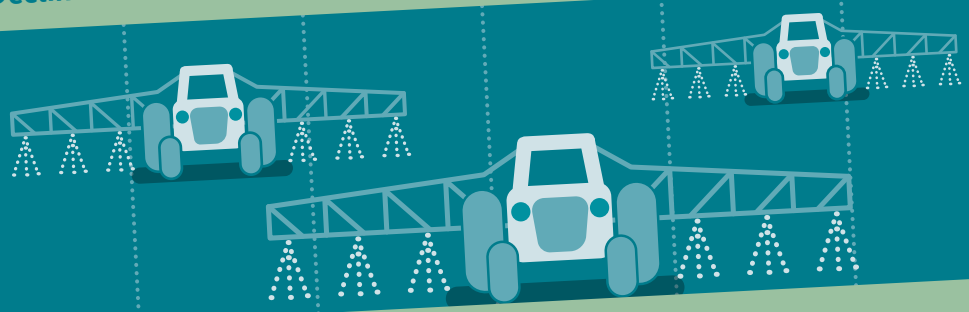
4. Agriculture

Very serious environmental problems of domestic agriculture include the ...



65 %

Decline in biodiversity of plants and animals



63 %

Environmental impact of pesticides

56 %

Pollution of water bodies and drinking water through overfertilisation/slurry

53 %

Poorer soil quality due to overfertilisation or monocultures

Agriculture: Victim of and contributor to environmental and climate change, but also problem solver

The hot and dry summer of 2018, with its drought and crop failures, clearly demonstrated the dependence of agriculture on weather and climate. Agriculture is directly affected by the effects of climate change, i.e. increases in droughts or heavy rainfall, but it also contributes to climate change. According to the German government's 2050 Climate Action Plan, around eight per cent of greenhouse gas emissions in Germany are attributable to agriculture.[19]

Agriculture is undergoing a momentous structural change. The number of farms declined from over one million in 1970 to 275,400 in 2016. During the same period, the average farm size has increased significantly. Fewer and fewer farmers are cultivating ever larger areas. Animal husbandry is also taking place in increasingly larger units. International trade now also plays a major role for German agriculture. In terms of agricultural exports and imports, Germany ranks third in the world. Meat exports in particular have risen sharply. Export orientation and production for the world market are declared goals of German agricultural policy.[20]

Modern, intensive and highly specialised agriculture causes a number of environmental problems. The intensification of agricultural land use has led in many places to the disappearance of the traditional, diverse cultural landscape. Animal and plant species that depend on diversely structured habitats have become rare or have disappeared completely. In addition, high nutrient surpluses in some regions are having a negative impact on soil, climate, air, water and biological diversity.[21]

However, ecologically oriented agriculture is able to provide a variety of benefits for the environment and the climate.[22] At the end of 2017, eleven per cent of agricultural enterprises in Germany were operating in accordance with the EU regulations for organic farming. Together they manage over eight per cent of land used for agriculture – almost 1.4 million hectares.[23] However, strong interests prevent a real shift towards more sustainable agriculture, as shown by the recent dispute over the herbicide glyphosate.

4.1 Strong criticism of negative environmental impacts of agriculture

Many environmental problems are attributed to agriculture

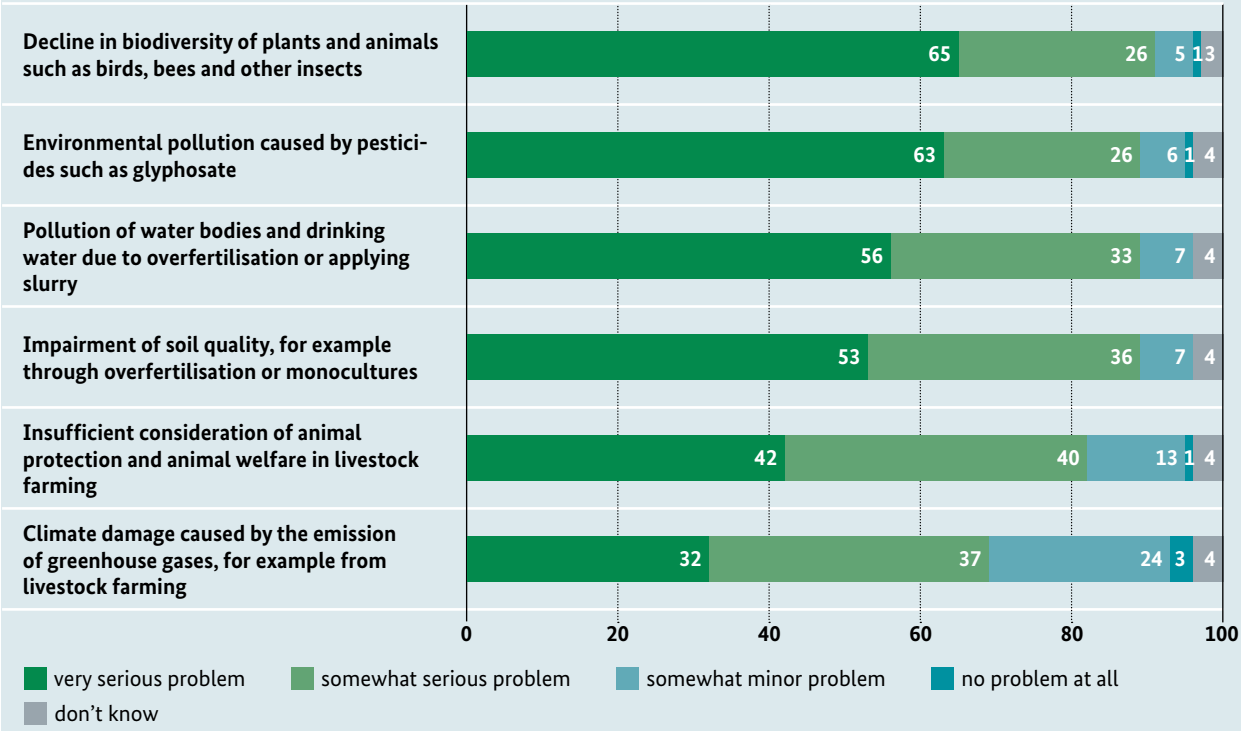
Agriculture is more reliant on nature than almost any other field of work. For this reason, it is particularly important for agriculture to strike a balance between the efficient use of natural resources and their sustainable management. Many people, however, have the impression that this balance has been lost and regard the impact of agriculture on the environment as negative. The results shown in Figure 19 document the great dissatisfaction.[24]

More than 60 per cent of those surveyed consider the decline in species diversity among plants and animals and the environmental pollution caused by pesticides to be very serious problems. In addition, there is the impact on water and soil quality, for example through the use of fertiliser that is not appropriate for the site, which more than half of those surveyed regard as very serious problems. Putting together those who perceive these as very serious and somewhat serious problems, the figures add up to around 90 per cent. Many respondents furthermore see serious problems in livestock husbandry, especially inadequate animal protection and animal welfare policies. About one third of those surveyed also regard greenhouse gas emissions in agriculture as a very serious problem.

[Agriculture today] ...is mass production. In the olden days there was the farmer who had his farm, and today it's just factory farming. We gorge ourselves on chicken. It's become factory food.
Quote from group discussion

Figure 19: **Assessment of environmental problems caused by agriculture**

Question: **Agriculture has various impacts, including on the environment. Please indicate whether you see the following effects as a very serious problem, a somewhat serious problem, a somewhat minor problem, or no problem at all.**



Representative survey of 2,021 respondents, 1st survey wave, sample from 14 years of age (figures in per cent, deviations from 100 per cent due to rounding)

4.2 Other priorities expected from agriculture and agricultural policy

Central expectations: High-quality and healthy foods, animal welfare, environmental protection

Agriculture has to meet very different social requirements. These include securing the population's food supply, the production of industrial raw materials and energy sources, the economic development of rural regions, the conservation of natural resources and many more. This can result in conflicting objectives. In order to identify priorities, respondents were asked to choose three tasks that they consider to be particularly important for society from a list of different agricultural tasks.[25] The results are shown in Figure 20.

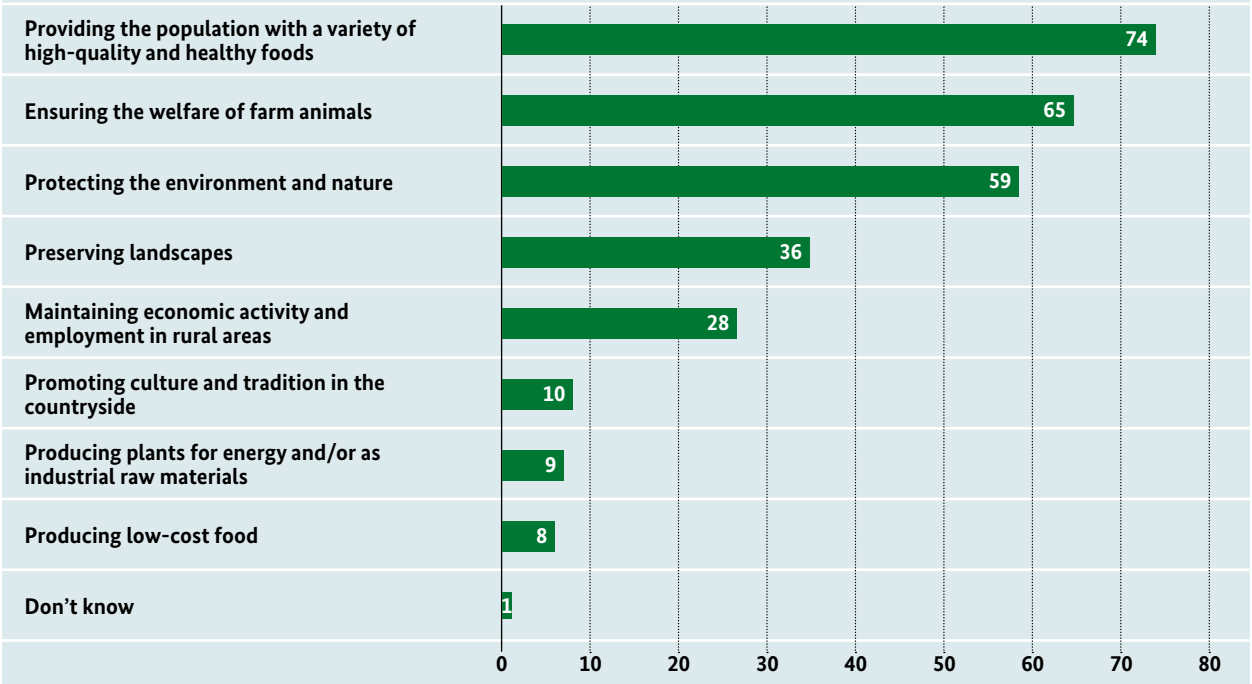
The most relevant task is to provide the population with a variety of high-quality and healthy foods. A large majority of 74 per cent of the respondents rank this task among the three most important. This is followed by the welfare of farm animals (65 per cent) and environmental protection and nature conservation (59 per cent). All other tasks follow some way behind. Only eight per cent of those surveyed consider the production of reasonably priced food to be one of the three most important tasks of agriculture.[26]

For older respondents in particular, environmental protection, nature conservation and animal welfare are above average among the three most important tasks. Animal welfare also has a higher priority for female respondents and for residents of smaller towns.

> *I want sustainable agriculture that is environmentally friendly and animal-friendly And I prefer products that are produced in an environmentally friendly way.*
> *Quote from group discussion*

Figure 20: **The most important societal tasks of agriculture**

Question: **What should be the most important tasks of agriculture in our society? Please select the three most important ones from your point of view.**



Representative survey of 2,021 respondents, 1st survey wave, sample from 14 years of age (data in per cent)

Agriculture receives poor marks for tasks considered particularly important

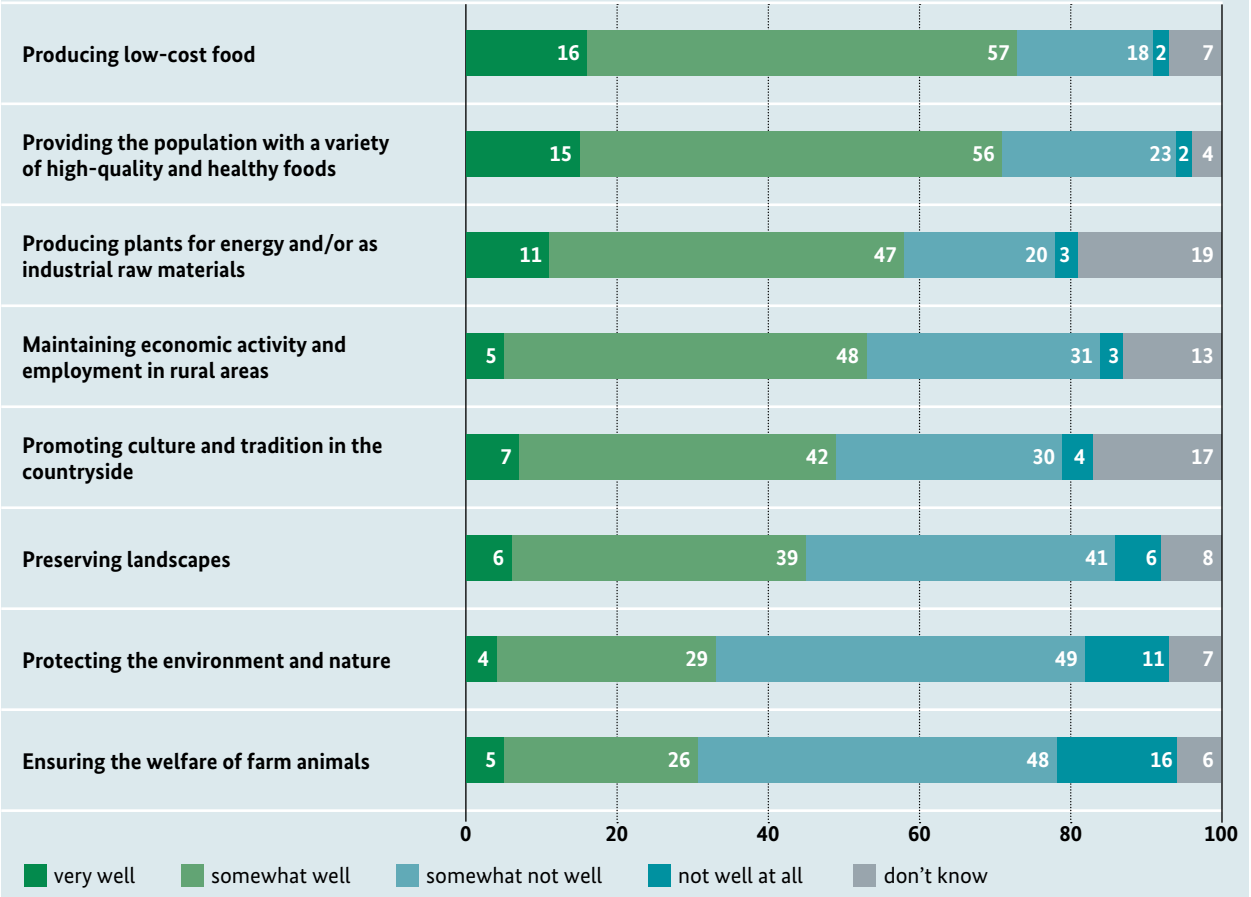
Figure 21 shows the respondents' assessment of how well the agricultural sector fulfils its societal tasks. According to the survey, it is best at producing low-cost foods and providing the population with a variety of high-quality and healthy foods.

If one compares the tasks that the respondents find particularly important (Figure 20) with the assessment of how well agriculture fulfils them (Figure 21), then there is only one clear match: providing the population with a variety of high-quality and healthy foods. This task comes first in terms of relevance and second in terms of the fulfilment of the task. More than 70 per cent of respondents believe that agriculture performs this task very well or somewhat well.

For all other tasks there are serious discrepancies. With regard to their importance, the welfare of farm animals and the protection of the environment and nature are in second and third place – but come last and second to last with regard to the fulfilment of these tasks by agriculture. This shows that many respondents find that the agricultural sector does not perform these tasks well enough. However, respondents indicate that they consider those tasks which are clearly less important from the respondents' point of view to be somewhat well fulfilled to very well fulfilled, such as the production of low-cost foods and plants for energy generation or as industrial raw materials.

Figure 21: **How well does agriculture fulfil societal tasks**

Question: **In your opinion: How well does agriculture today fulfil the following societal tasks?**



Representative survey of 2,021 respondents, 1st survey wave, sample from 14 years of age (figures in per cent, deviations from 100 per cent due to rounding)

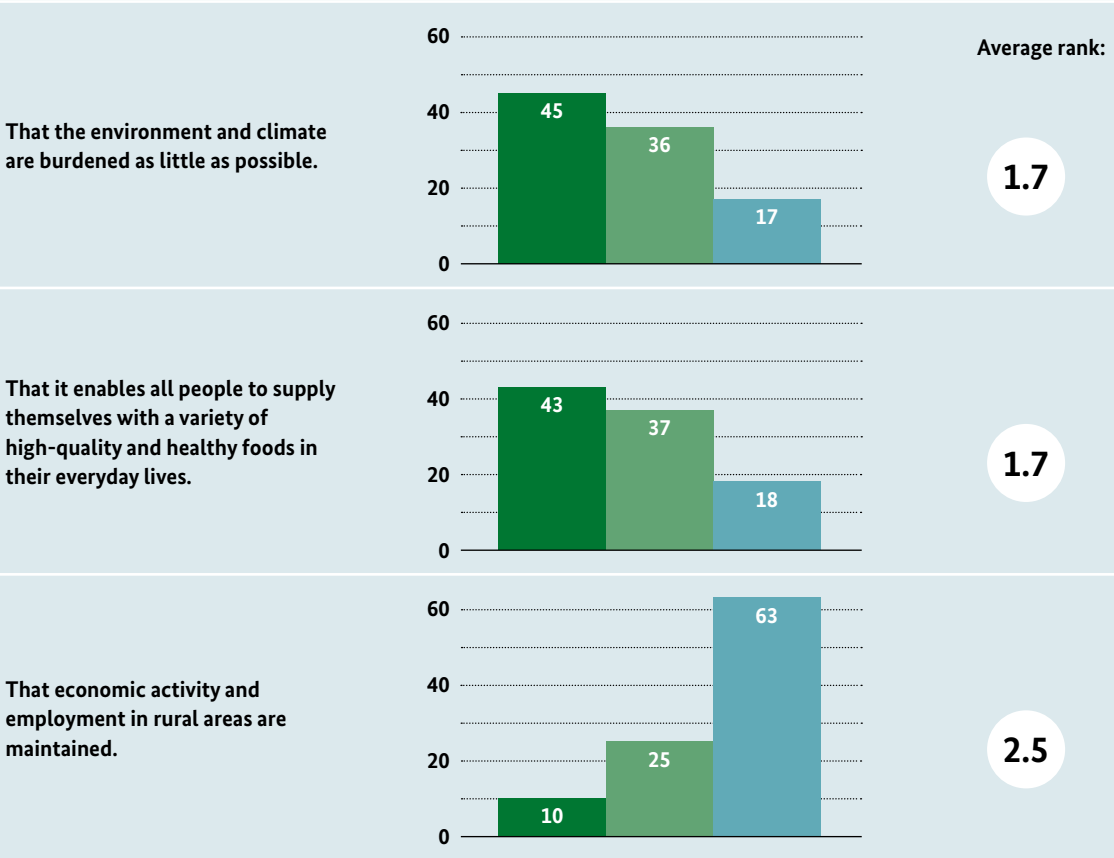
Clear plea: Environmental protection and climate action must be given greater priority in agriculture

How should agriculture develop in the future? Figure 22 shows that, when presented with a selection of three possible responses, just under half of the respondents rate either the lowest possible impact on the environment and climate (45 per cent) or the supply of a wide variety of high-quality and healthy foods to all people (43 per cent) as most important. Only a small minority of ten per cent consider it most important to maintain economic activities and employment in rural areas.

These results confirm that for a large majority of the respondents (68 per cent), the requirements of environmental protection and climate action should be given overriding importance in agricultural policy; a further 28 per cent want these to be adequately considered in addition to the actual tasks (see Chapter 2.3, Figure 5).

Figure 22: **Preferences for the future development of agriculture**

Question: **What is most important to you with regard to the future development of agriculture? Please put the following statements in order.** (Order of priority)



Representative survey of 2,021 respondents, 1st survey wave, sample from 14 years of age (figures in per cent, deviations from 100 per cent due to rounding and "don't know")

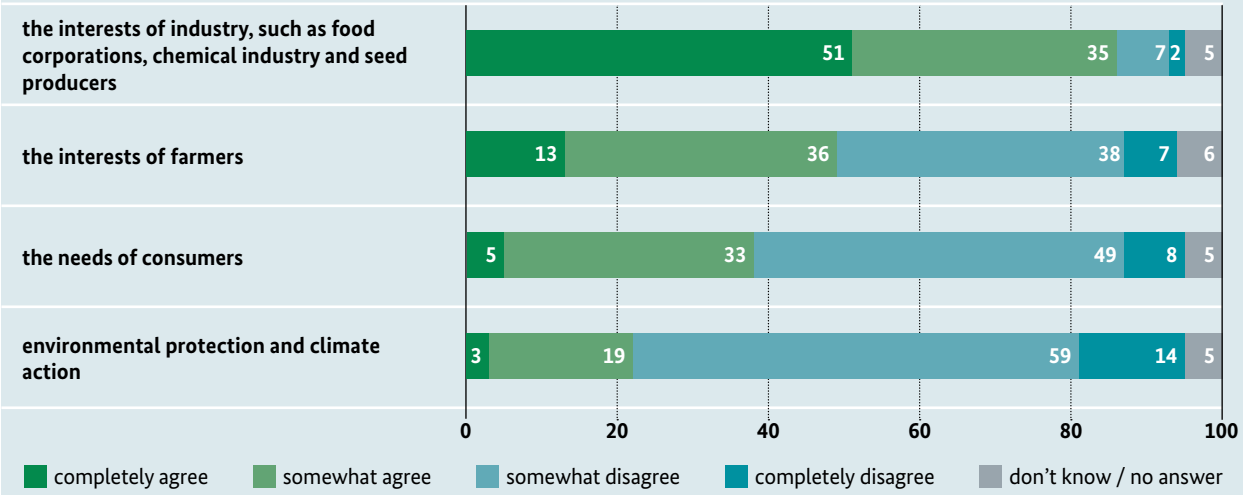
The perceived priorities of current agricultural policy do not correspond to the expectations of the respondents

From the respondents' point of view, current agricultural policy is barely oriented towards environmental protection and climate action (Figure 23). A majority is of the opinion that agricultural policy is currently primarily oriented towards the interests of industry, for example food corporations, the chemical industry or seed producers.

Furthermore, from the perspective of the respondents, current agricultural policy takes relatively little account of the interests of farmers or the needs of consumers. And only about three per cent of those surveyed completely agree with the statement that agricultural policy in Germany is primarily oriented towards environmental protection and climate action aspects. Particularly younger people and people with a higher education want agriculture to be less polluting in the future. They particularly perceive a notably one-sided orientation of agricultural policy towards the interests of industry.

Figure 23: **Perceived priorities of agricultural policy**

Question: **In the following you will see various statements on agricultural policy in Germany. Please indicate to what extent you agree with each statement. Agricultural policy in Germany is primarily oriented towards ...**



Representative survey of 2,021 respondents, 1st survey wave, sample from 14 years of age (figures in per cent, deviations from 100 per cent due to rounding)

4.3 Commitment of influential actors for sustainable agriculture critically assessed

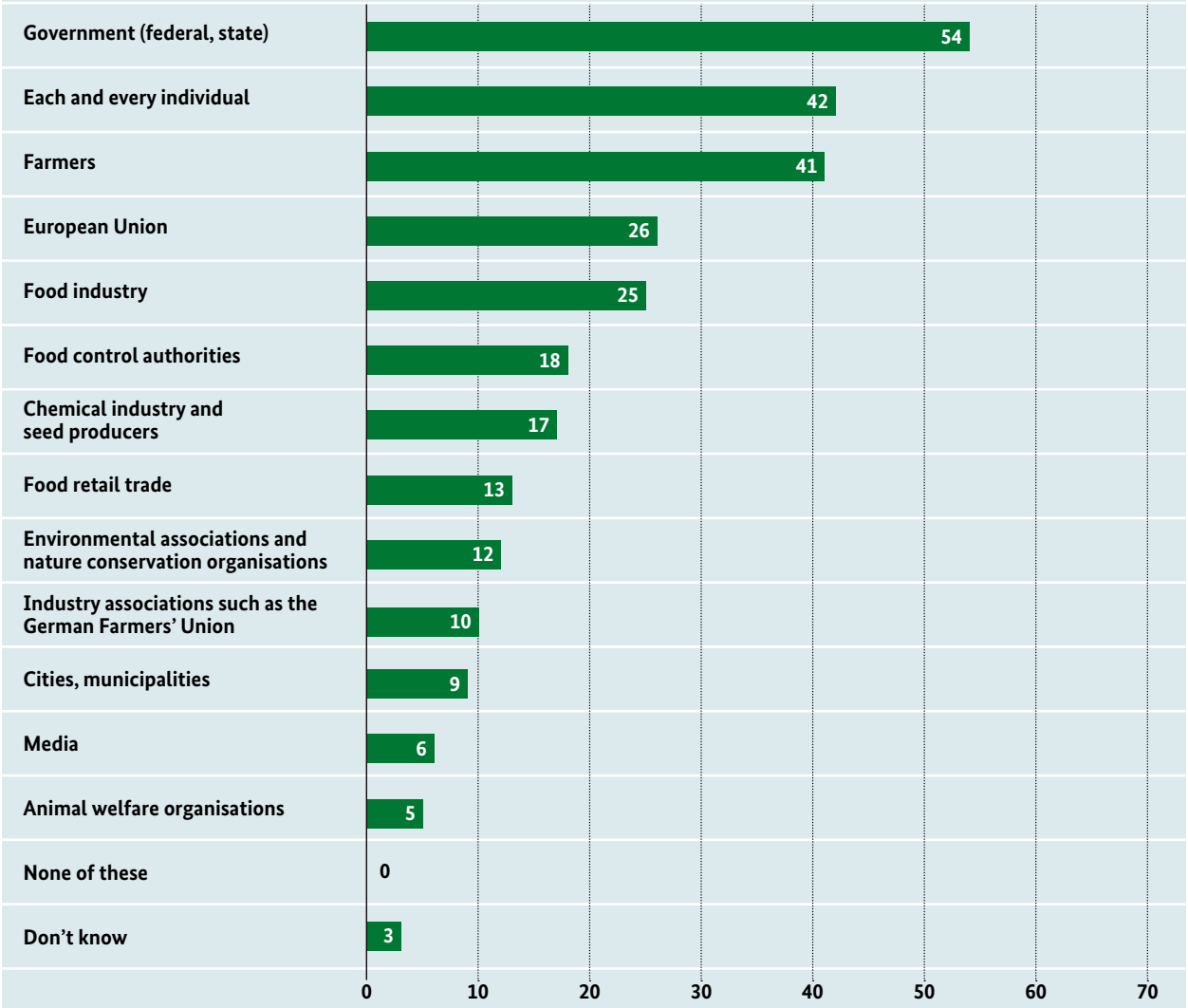
The federal and the state governments are attributed with the greatest scope for exerting influence

From the respondents' point of view, who can best contribute to making agriculture in Germany more environmentally friendly? From a list of possible actors, a maximum of three should be selected who can best contribute. Figure 24 shows the results.

The government is the clear leader on this issue: 54 per cent of the respondents believe that the federal and state governments are among those who can make an important contribution to a more environmentally friendly agricultural sector in Germany. This is followed by each and every individual (42 per cent) and farmers (41 per cent). At some distance, a quarter of those surveyed cite the European Union and the food industry. Other actors are attributed less scope to exert influence.

Figure 24: **Actors for a more environmentally friendly agricultural system**

Question: **Who do you believe can best contribute to making agriculture in Germany more environmentally friendly?** (State a maximum of three important actors)



Representative survey of 2,021 respondents, 1st survey wave, sample from 14 years of age (data in per cent)

If one compares the assessment of the potential influence of different actors on a more environmentally friendly agriculture (Figure 24) with the general assessment of their commitment to the environment and climate (see Chapter 2.3, Figure 8), it becomes apparent: In the view of the respondents, those who can make an important contribution to a more environmentally friendly agriculture by virtue of the influence attributed to them are not doing enough to protect the environment and the climate. This concerns in particular the federal government, but also individual citizens.[27]

> ***I see the lobby of the German Farmers' Association, they all have their offices in Brussels, that's where decisions are made, that's where the big corporations Monsanto, Bayer, Glyphosate are, and those are the big corporations that make the decisions. And the farmers who try to produce organically, that's David versus Goliath.***
> *Quote from group discussion*

4.4 Strong support for policy measures for more environmentally friendly agriculture

Various measures can be taken to reduce the environmental impact of agriculture. Figure 25 shows which measures respondents are in favour of.

Stricter requirements, controls and penalties are particularly well received. Around two thirds of respondents fully support stricter controls and higher penalties for breaches of environmental laws, higher environmental standards or stricter approval procedures for plant protection products and fertilisers as well as stricter rules regarding animal welfare in livestock farming.

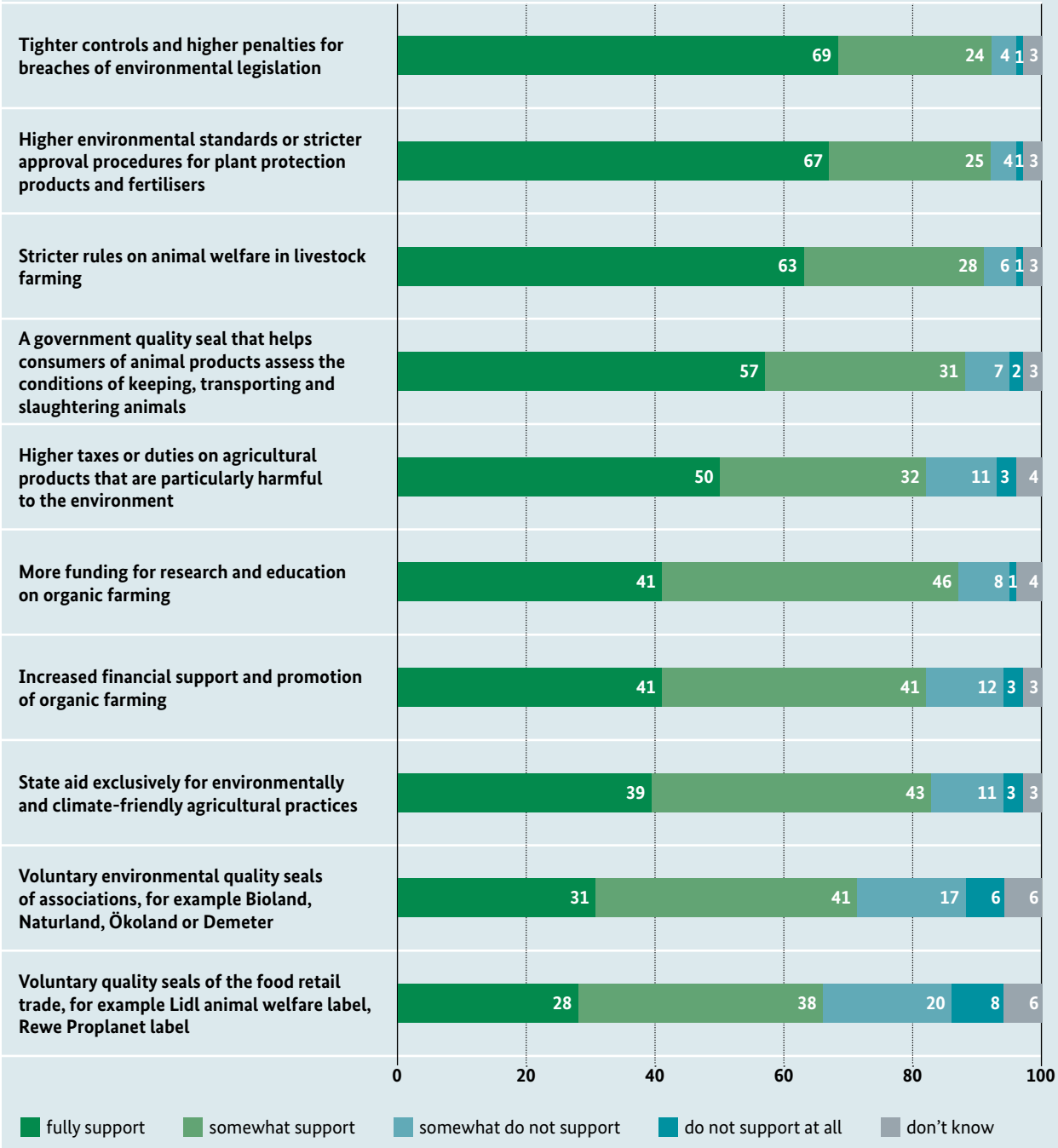
Half of the respondents fully support higher taxes or customs duties on particularly polluting agricultural inputs or products. When questioned, the majority of them consider in particular levies on fertilisers and on plant protection products to be sensible measures (not shown). On the other hand, only a minority of those surveyed felt that it made sense to increase the VAT on animal products such as meat, milk or cheese from seven to 19 per cent.

However, the state should not only reduce the environmental impact of the agricultural sector by means of stricter controls. Targeted financial aid should also be used for this purpose. 41 per cent of respondents fully support the idea that more financial resources should be made available for research and education in organic farming. Another 41 per cent fully support the view that organic farming should be given greater financial support and assistance. Thirty-nine per cent of the respondents are in favour of state aid being provided solely for agricultural methods that are environmentally and climate-friendly. And, according to the respondents, quality labels can also contribute to making it easier for consumers to recognise and select environmentally friendly products. The respondents particularly support a government animal welfare label. Such a label is more strongly supported than voluntary labels by the food retail trade or associations.

Female respondents were generally more positive about measures to reduce the environmental impact of agriculture. More frequently than male respondents, they particularly support stricter regulations on animal welfare in livestock farming, financial support for organic farming and quality labels. In addition, women feel more often than men that state aid should be paid exclusively for environmentally and climate-friendly agricultural methods.

Figure 25: **Measures to reduce the impact of agriculture on the environment**

Question: **Various measures can reduce the environmental impact of agriculture. Please indicate to what extent you support the measure in question.**



Representative survey of 2,021 respondents, 1st survey wave, sample from 14 years of age (figures in per cent, deviations from 100 per cent due to rounding)

4.5 Influencing sustainability in nutrition and food purchasing

Consumers can also make a substantial contribution to more environmentally friendly agriculture. The purchase of organic or regional and seasonal foods can contribute to a more environmentally and climate-friendly agriculture. And the changeover to a reduced-meat or meat-free diet can improve one's own climate footprint.[28] Compared to the Environmental Awareness Studies of 2016 and 2014, there has been little change in the frequency of the consumption of organic food and meat.[29]

Opinions differ sharply on vegan and vegetarian diets

As Figure 26 shows, slightly more than a quarter of respondents indicate that they have already temporarily or permanently given up meat or other animal-based foods. And it becomes evident: The majority of those who have already eaten vegan or vegetarian food would do so again in the future. Of those who have not yet tried it, only a quarter can imagine changing their eating habits in this way. The barriers to doing without meat or changing one's diet to a purely plant-based diet seem to be quite high. The situation is very similar with plant-based substitutes for meat or cow's milk, many of which have come onto the market in recent years. Those who have already tried these products would usually do so again. But those who have no experience with them can hardly imagine trying them in the future.

Gender differences play a role in meat consumption: Approximately one third of the female respondents have already given up eating animal-based foods at times or have a permanent vegetarian and vegan diet; among the male respondents the figure is only 23 per cent. Younger age groups and people with higher education are also more often open to vegetarian and vegan diets.

In addition to vegetable substitutes, other alternatives to conventional meat can be food derived from insects or so-called in-vitro meat (not shown).[30] The acceptance of vegetable meat substitutes is highest in relative terms; 15 per cent consider them a good substitute for conventional meat and 26 per cent would at least try them. However, only five or six per cent of respondents consider insect-based or in-vitro meat-based food products a good substitute, and 25 or respectively 27 per cent would try these. Scepticism and rejection increase with the current rate of individual meat consumption. Young people with a higher education are most likely to be open-minded.

> ***Well, in other countries it's quite normal, and I can also imagine what it's like, it probably looks like a normal cereal bar. And then there are probably grasshopper farms, they'll certainly be intensively farmed. But generally, that's okay.***
> *Quote from group discussion*

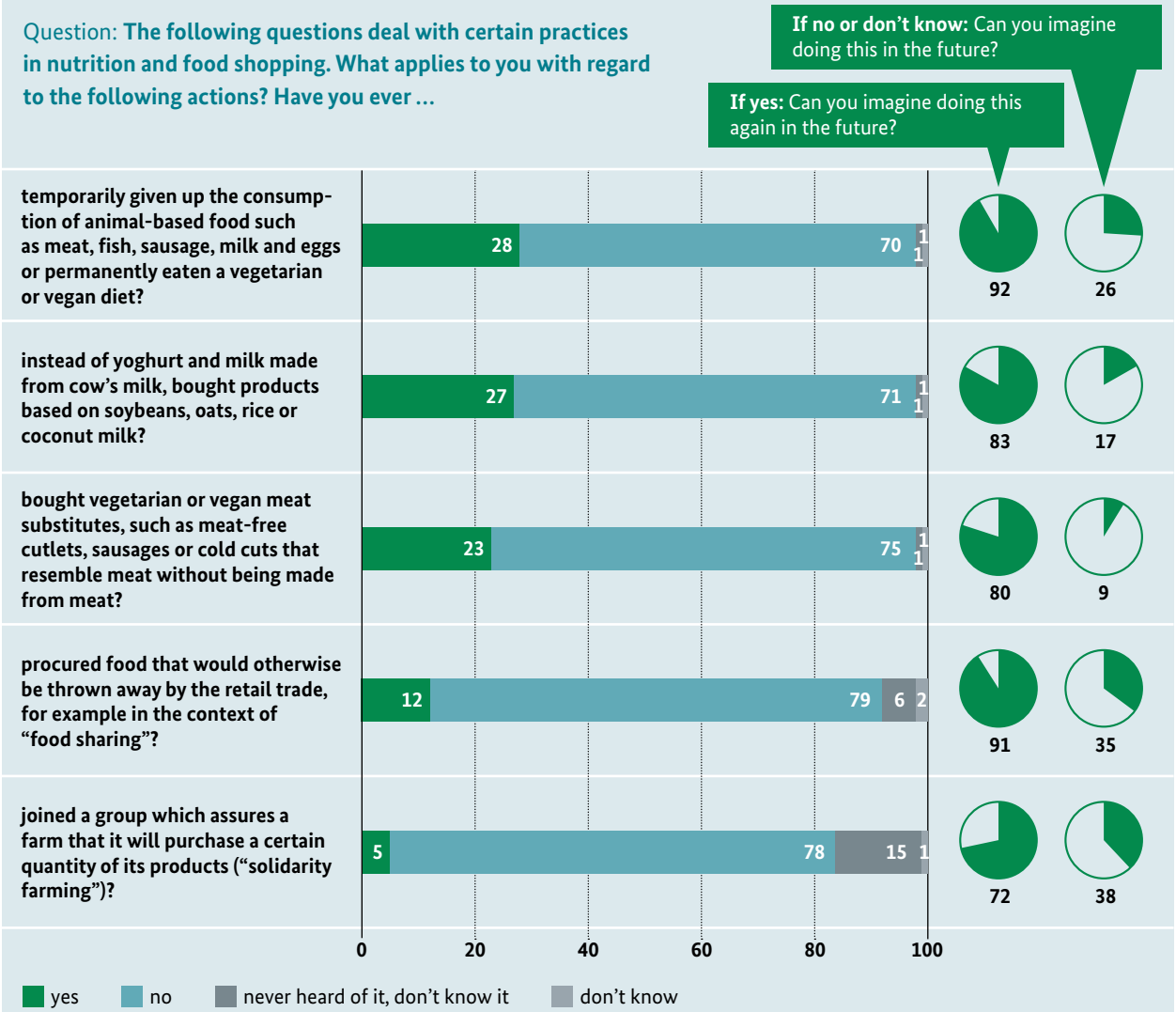
Alternatives to retail grocery shopping: Practised by few, but interesting for many

In recent years, a variety of ideas and initiatives have emerged to reinforce more sustainable behaviours in nutrition and food purchasing. Normally, consumers have little contact with agricultural production in their everyday lives.[31] Most people do their shopping at grocery stores and use products from the food industry. Through product selection, prices, offers and advertising, trade and industry have an influence on purchasing decisions that should not be underestimated.

Some initiatives aim to test and establish new production and trade relationships. Examples of these include growing one's own food, such as in urban gardening, urban farming or a renaissance of the allotment garden. Other initiatives aim to change purchasing or procurement behaviour. Activities such as food sharing or solidarity farming have so far only been practised by small minorities (Figure 26). The vast majority of respondents have not done this yet or are unfamiliar with it. However, these activities also arouse a comparatively high level of interest among those who do not yet have experience with them. More than a third can imagine doing something like that in the future. Younger people with a higher education are particularly interested in new practices in food supply.

Figure 26: **Behavioural patterns in nutrition and food shopping – to date and in the future**

Question: **The following questions deal with certain practices in nutrition and food shopping. What applies to you with regard to the following actions? Have you ever ...**



Representative survey of 2,021 respondents, 1st survey wave, sample from 14 years of age (figures in per cent, deviations from 100 per cent due to rounding)

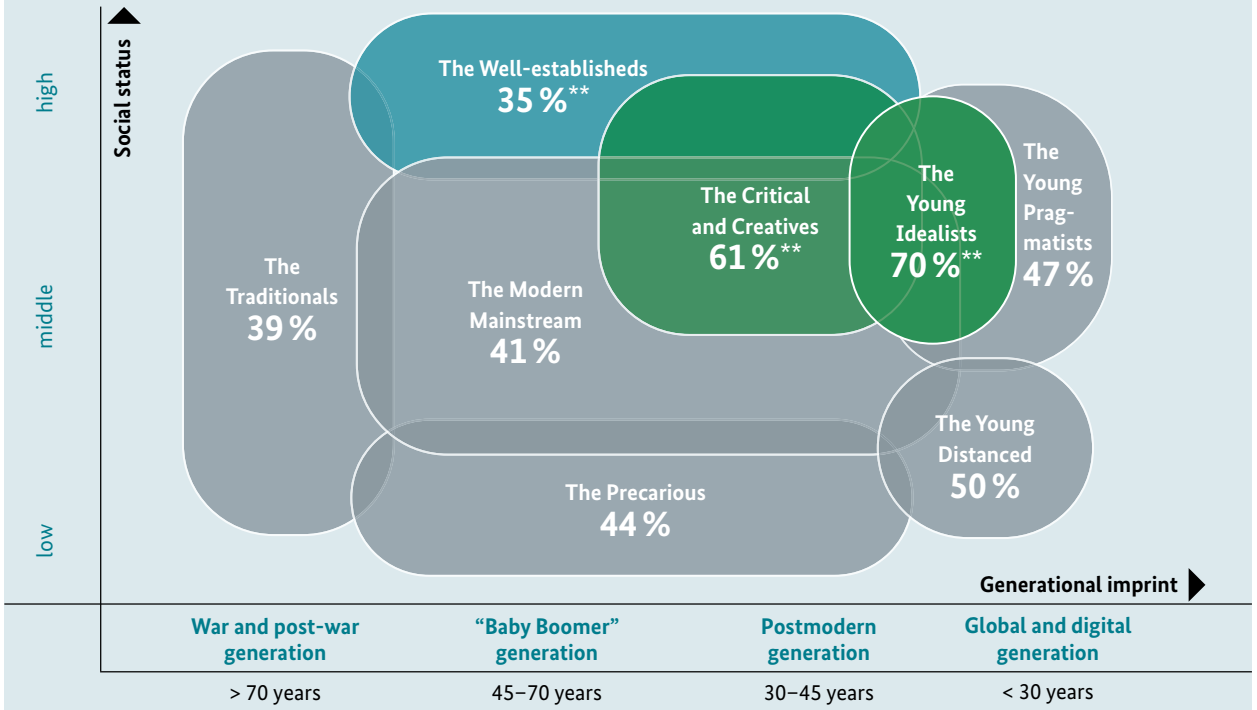
4.6 Differing expectations about agriculture in the Social Milieus

People also think differently about agriculture. A look at the importance of environmental protection and climate action in the agricultural sector, differentiated by Social Milieus, reveals some significant differences (Figure 27).

Members of the Critical and Creatives and the Young Idealists often consider it to be of the utmost importance that agriculture has as little impact as possible on the environment and climate (see Section 4.2 and Figure 22). However, this is considered to be much less important among the Well-establisheds. Table 3 shows which specific tasks are particularly important to the individual Social Milieus. It presents a selection of those tasks for which there are particularly relevant differences in attitudes depending on the Social Milieu (the tasks surveyed can be found in Figure 20).

Figure 27: **Environmental protection and climate action as the most important tasks of agriculture in the Social Milieus**

Question: **What is most important to you with regard to the future development of agriculture (order of priority)?**
Response: **That the environment and climate are burdened as little as possible.**
(This response averaged 45 per cent.)



Significant deviations from the average of the respondents

significantly overrepresented | about average/differences not significant | significantly underrepresented

** significant in 99 per cent confidence interval (p < .01)

Representative survey of 2,021 respondents, 1st survey wave, sample from 14 years of age, percentages of mentions in the respective Social Milieus

Providing the population with a variety of high-quality and healthy foods is of above-average importance, especially among the Critical and Creatives; among the Precarious, on the other hand, this task is often regarded as less important than average. The welfare of livestock is an important concern right across the Social Milieus; only for the Young Pragmatists is this of below-average relevance.

The extent to which agriculture has the task of protecting the environment and nature is seen very differently in the Social Milieus: The Traditionals, the Critical and Creatives and the Young Idealists are more frequently than average of the opinion that environmental protection and nature conservation are among the most important tasks of agriculture. The Well-establisheds, the Young Pragmatists and the Young Distanced, on the other hand, are well below average. Opinions in the other Social Milieus are roughly average.

The production of low-cost food is one of the three most important tasks of agriculture for only eight per cent of all respondents. Most Social Milieus here are close to the average. However, at 17 per cent, a significantly above-average number of Young Distanced are of the opinion that the production of low-cost food is one of the most important tasks of agriculture; of the Critical and Creatives, on the other hand, almost none name this as one of the three top tasks of agriculture.

Table 3: **Assessment of most important tasks of agriculture in the Social Milieus**

Question: **What should be the most important tasks of agriculture in our society? Please select the three most important ones from your point of view.**

	Providing the population with a variety of high-quality and healthy foods	Ensuring the welfare of farm animals	Protecting the environment and nature	Producing low-cost food
Total sample	**74**	**65**	**59**	**8**
The Traditionals	70	72	68*	5
The Well-establisheds	82	58	47**	8
The Modern Mainstream	71	65	57	9
The Precarious	62*	69	60	8
The Critical and Creatives	86*	72	77**	0**
The Young Idealists	81	70	74*	2
The Young Pragmatists	73	51*	46*	11
The Young Distanced	76	62	41*	17**

Significant deviations from the average of the respondents

significantly overrepresented | about average/differences not significant | significantly underrepresented

* significant in 95 per cent confidence interval ($p < .05$)

** significant in 99 per cent confidence interval ($p < .01$)

Representative survey of 2,021 respondents, 1st survey wave, sample 14 years and older, shares of mentions in the respective Social Milieus (in per cent)

4.7 Summary – Making agriculture more compatible with environmental protection and climate action

The study shows that the German population is very concerned about the negative impacts of agriculture on nature and the environment. A large majority of the respondents feel that agriculture fulfils the task of providing the population with a variety of high-quality and healthy foods very well or rather well. For other tasks, however, there are some large discrepancies between the expectations of the respondents on the one hand and the fulfilment of tasks by agriculture on the other. Many people feel that agriculture today deals far too little with what they consider to be tasks that are important for society as a whole, and that it particularly fails to sufficiently fulfil its tasks with regard to environmental protection, nature conservation and the welfare of livestock.

But not only the current practice of agriculture itself is worth improving, according to many people. The political course for the future of agriculture also does not correspond to the expectations of many respondents. In their view, agricultural policy is currently primarily geared towards the interests of food companies, the chemical industry and seed producers, rather than the interests of farmers or the needs of consumers. Only a small minority of respondents believe that current agricultural policy in Germany is primarily oriented towards environmental protection and climate action.

However, a large majority of respondents feel that, particularly in agriculture, high, or even the highest importance, should be given to the requirements of environmental protection and climate action. Political decision-makers at federal and state level are therefore expected to take ambitious measures in favour of more environmentally friendly agriculture. Many respondents advocate higher environmental and animal welfare requirements as well as stricter approval procedures for particularly environmentally harmful equipment. Many also call for compliance with environmental and animal welfare requirements to be monitored more closely and for any infringements to be sanctioned more severely.

However, a consistently sustainability-oriented agricultural transition must by no means run counter to the economic interests of farmers. Target-oriented financial support for animal, environmental and climate-friendly measures can create attractive business incentives. Farmers who make particular efforts for environmental protection and nature conservation should have a legitimate entitlement to appropriate subsidy payments. A majority of respondents are in favour of greater financial support for farmers who actively pursue climate action as well as environmental and animal protection on their farms.

The European Union's Common Agricultural Policy (CAP) is the most comprehensive management and financing instrument for environmental protection and climate action in agriculture. More than one third of the EU budget is currently spent on agricultural subsidies. EU agricultural aid could have a significant steering effect if attached to appropriate environmental conditions.[32] The federal government should therefore actively advocate an ambitious, environmentally compatible reorientation of European agricultural funding policy and make use of national scope for action for more environmental and animal protection as well as climate action in agriculture.

A sustainable reorientation of agricultural production in Germany is only possible if the nutritional and consumer behaviour of the population also changes. The production of animal-based food in particular produces climate-damaging greenhouse gases; the excess nutrients from livestock farming pollute soil and air, ground and surface waters. The consumption of animal-based foods in Germany remains at a high level. The survey results show that, on the one hand, it is not (yet) conceivable for many people to do without meat and other animal-based products. On the other hand, many are also open-minded and interested in changing their eating habits in a direction that is beneficial for the environment, climate, animals and, last but not least, human health.

5. Transport

Taking joint responsibility for a transport transition

There is broad consensus among the population that mobility behaviour must change significantly if Germany is to achieve its climate targets.

Nevertheless, the transition towards a sustainable transport system is struggling to make headway. Why? Some of the reasons for this are the adherence to motorised private transport, i.e. the car, poor public transport, particularly in rural regions, and barriers to the use of bicycles. But there are signs of a rethink. All actors, in particular from government and politics, are called upon to live up to their responsibility for more environmentally friendly transport.

5.1 Germany needs a transport transition to achieve its climate targets

Transport is one of the most important areas of environmental and climate impact. At present, the transport sector accounts for almost one fifth of total greenhouse gas emissions.[33] Transport is the only sector in Germany in which emissions have not fallen since 1990.[34] Reasons for this include more passenger and freight traffic on the roads and a trend towards larger and heavier passenger cars.[35] In recent years, a growing number of commuters with longer journeys have made a major contribution to increasing passenger traffic on the roads.[36]

The German government's climate action plan envisages reducing greenhouse gas emissions from transport by 40 to 42 per cent by 2030 compared with 1990 levels.[37] Considerable efforts are still needed to achieve this. Possible approaches include: traffic avoidance, modal shift, improvement of the technical efficiency of means of transport and conversion to alternative propulsion systems (including electric mobility). In addition to the impact on the climate, transport also has other negative environmental impacts, such as health impacts caused by noise, particulate matter and nitrogen oxides, as well as accidents and land and resource consumption.

Calls for more environmental protection and climate action in transport policy

The fact that respondents believe that environmental protection and climate action should play a major role in questions of transport policy was already evident in the assessment of priorities in various political fields of action (see Chapter 2.1, Figure 5). For example, 53 per cent believe that environmental protection and climate action should be given overriding importance in transport policy and 41 per cent say that it should be taken into account appropriately in addition to the actual tasks. With regard to urban and regional planning, 54 per cent believe that environmental protection and climate action should be given overriding importance, while a further 40 per cent argue that it should be given appropriate consideration in addition to the actual tasks involved. The reduction of noise, exhaust fumes and particulate matter in road traffic is considered to be very important by 45 per cent and somewhat important by another 44 per cent (Figure 28). Almost as many (39 per cent) consider it very important that fewer natural areas are turned into traffic and settlement areas in future, a further 43 per cent find this somewhat important.

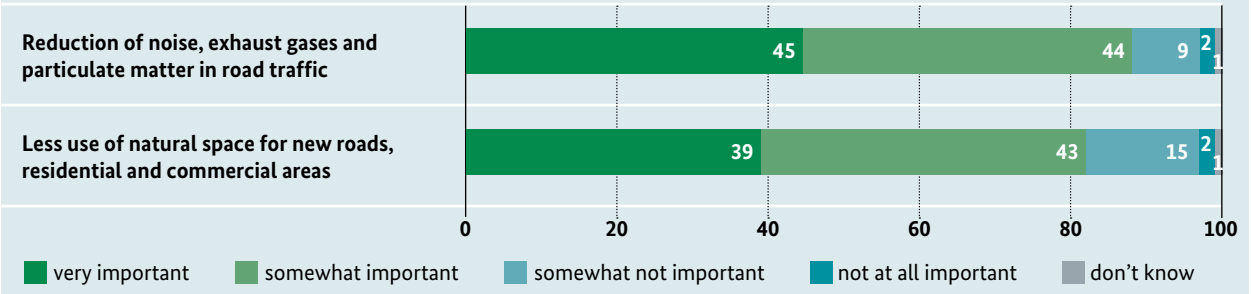
5.2 Use of cars remains constant, use of public transport and bicycles increases slightly

The self-owned car is the most frequently used means of transport for everyday journeys (Figure 29),[38] seventy per cent use it regularly (which here and in the following means the summary of the categories 'daily' and 'several times a week'). About two thirds of the respondents also walk regularly.[39] A third of them ride their bicycles regularly, and this is the most used means of transport in the age group up to 29 years. In addition, 22 per cent of the respondents regularly use public transport. Furthermore, motorised bikes are used regularly by four per cent, carpools by five per cent and e-bikes by six per cent. Carpools tend to be more frequent in the younger Social Milieus.

The frequency of car use has hardly changed since the last survey in 2016. The regular use of bicycles has increased by two percentage points. There has also been a slight increase in the use of public transport.[40]

Figure 28: **Assessment of tasks for environmentally and climate-friendly mobility**

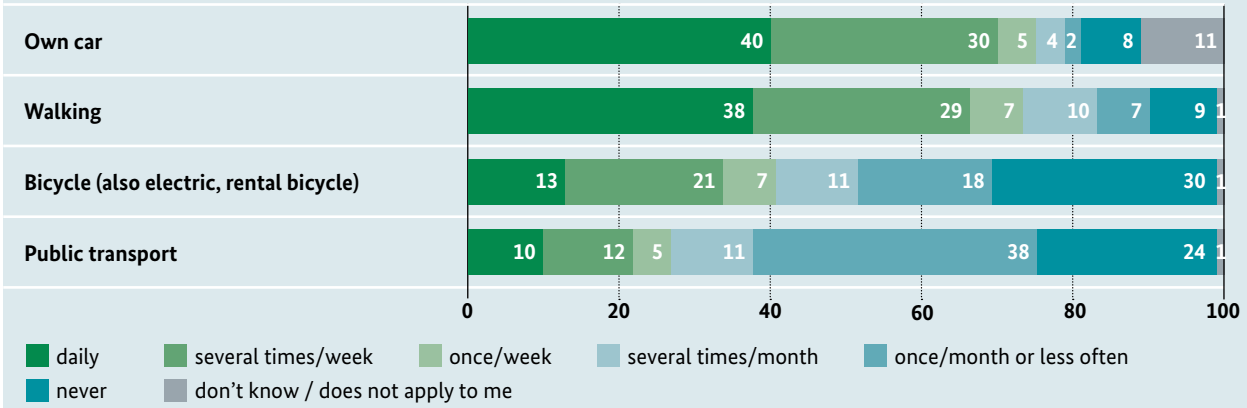
Question: **This list contains various tasks in environmental protection. Please indicate in each case how important the respective task is from your point of view.**



Representative survey of 2,017 respondents, 2nd survey wave, sample from 14 years of age (figures in per cent, deviations from 100 per cent due to rounding)

Figure 29: **Use of means of transport for everyday journeys**

Question: **How often do you normally use the following means of transport for your everyday journeys?**



Representative survey of 2,021 respondents, 1st survey wave, sample from 14 years of age (figures in per cent, deviations from 100 per cent due to rounding)

5.3 Choice of means of transport highly dependent on place of residence

The means of transport that people use most often differ depending on place of residence. More than half of the respondents from large cities use public transport daily or several times a week. In small communities with less than 5,000 people, however, the figure is less than ten per cent. Less than half of people in large cities use their cars regularly, but almost nine tenths of respondents from smaller towns (fewer than 50,000 inhabitants) do. However, carpooling tends to be more widespread in smaller communities. People are more likely to walk or cycle regularly in (large) cities, less so in smaller communities.

Distances to the workplace and to the nearest major city relevant for selection of means of transport

In addition to the size of the place of residence, the selection of the means of transport also depends on the distance from the workplace. The evaluations show that regular users of public transport work on average 14 kilometres away from their home. For respondents who get into their cars every day, the average distance to work is 21 kilometres; for those who drive very rarely, it is only seven kilometres. If you get on your bike every day, you live on average ten kilometres away from work; those who never ride a bike work on average 19 kilometres away from home. Whether car or public transport are used also depends on the distance to the nearest major city; the further away this is, the less often respondents get on buses or trains. In contrast, the distance to the nearest major city plays hardly any role for the frequency of bicycle use.

There are only weak links to distances to other institutions. The distance to supermarkets or discounters, general practitioners, pharmacies or primary schools (according to respondents' own information) hardly differs between those who regularly drive their own cars and those who use public transport. Those who cycle or walk frequently usually (according to their own statements) have to cover only slightly shorter distances than those who never or only rarely do so. Even the distance to a public transport stop has little to do with how often buses or trains are used.[41]

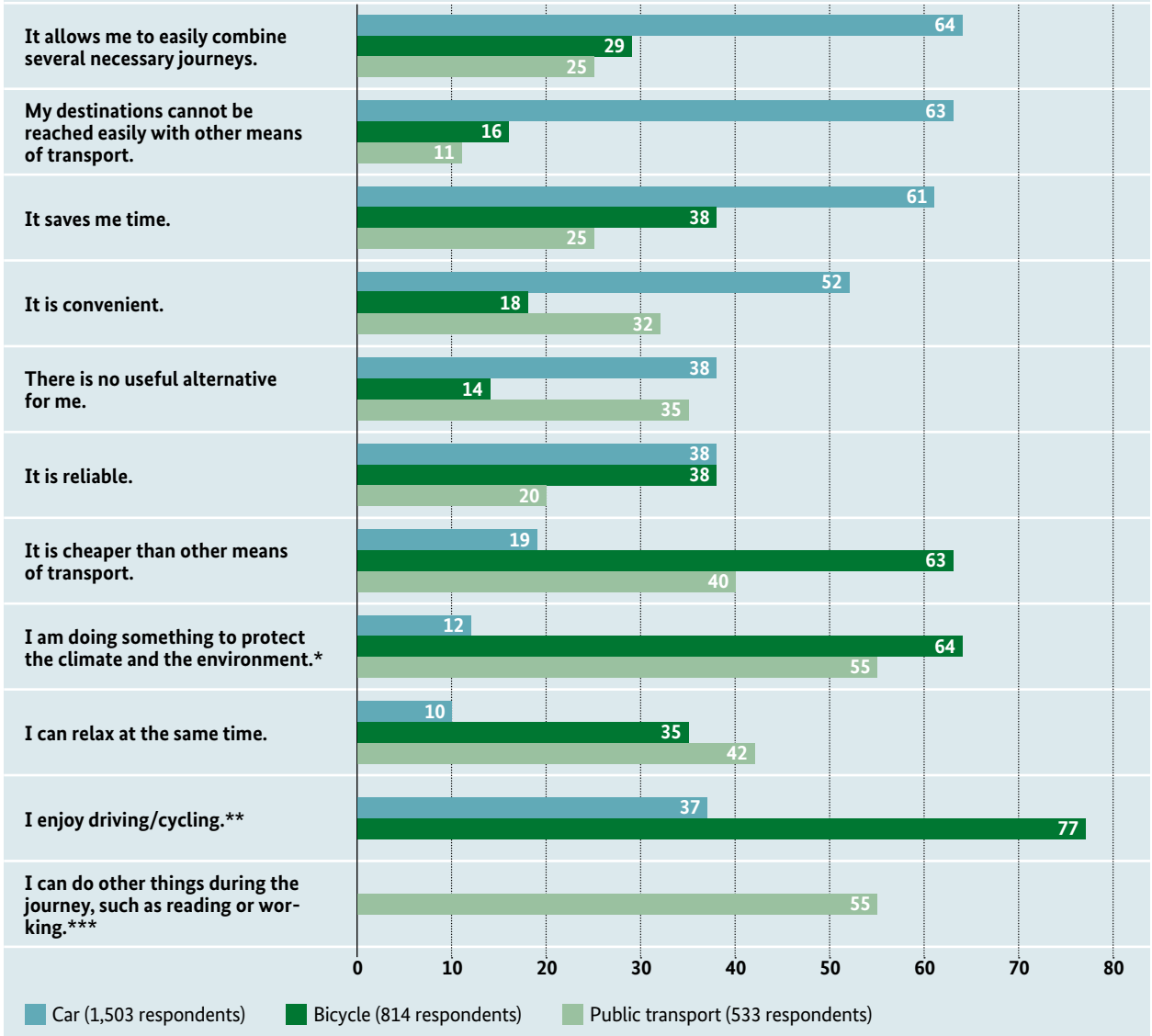
5.4 Car, bicycle or public transport? The motives differ

The reasons for using the different means of transport clearly differ. Figure 30 compares the reasons why respondents use cars, bicycles or public transport more frequently, i.e. at least once a week.

More than 60 per cent of those who drive regularly justify this with practical everyday requirements: You can combine different journeys and save time. Or the destinations are difficult to reach with other means of transport. 52 per cent of respondents cite convenience as a reason for going by car. The pleasure of driving plays a role for about one third.

Figure 30: **Cars, bicycles, public transport – Comparison of reasons for using means of transport**

Question: **Why do you use the means of transport for your everyday journeys?** (multiple responses)



* *Instead of this question, when using a car the following statement was presented: "I drive an economical or environmentally friendly car and have little impact on the environment and climate."*

** *"Enjoyment" only surveyed for bicycle and car use*

*** *Only surveyed when using public transport (as "enjoyment" equivalent)*[42]

Representative survey, number of respondents see legend, 1st survey wave, sample from 14 years of age, proportion of respondents using the respective means of transport at least once a week (figures in per cent)

> *Childcare is rather limited until 5 o' clock – picking up the children on time is just not possible without a car.*
>
> *I live relatively far out. There is no public transport at the time I have to leave, and by car it takes me 30 minutes; it would take me two-and-a-half hours by train.*
>
> *And I used to take the train from [A] to [B] – but now that my little one is here, there's not enough time. I just wouldn't be able to manage otherwise.*
>
> *Quotes from group discussions*

Cycling and public transport – do something good for yourself and for the environment

More than three-quarters (77 per cent) of cyclists say that they also ride their bike because they enjoy it. Health and fitness (not in the figure) are further motives for cycling for 82 per cent, environmental protection and climate action for 64 per cent and low costs for 63 per cent. The younger generation tends to cite cost reasons more frequently.

The fact that travel times can be used for other purposes, such as reading or working, is in favour of public transport. And at the same time, one is doing something positive for the environment and climate. Respectively 55 per cent cite these two reasons. 42 per cent say that they can relax well in public transport and 40 per cent cite cost reasons. What is striking is that low-income earners are more likely to cite costs as a reason to go by car than as a reason to use public transport.

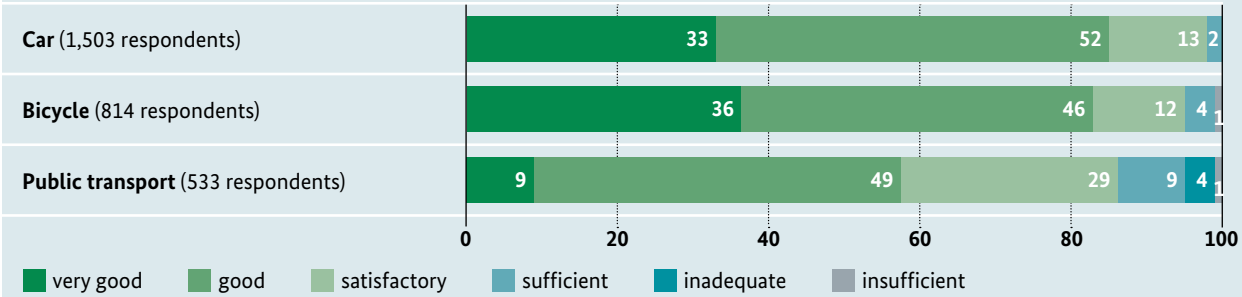
Car and bicycle users mostly satisfied, public transport less well rated

Figure 31 shows what rating the respondents give their experiences with the various means of transport they use at least once a week. Large majorities of over 80 per cent give very good or good marks to their own car and bicycle. Public transport is predominantly rated as good (49 per cent) or satisfactory (29 per cent). Only nine per cent award public transport the top mark – just as many rate it as sufficient, four per cent find it inadequate and one per cent insufficient.

The poorer rating of public transport compared to cars and bicycles can be seen in connection with the reasons for using the mode of transport (Figure 30). The fact that cars and bicycles are reliable is cited by respectively 38 per cent as a reason for their choice; in public transport, on the other hand, only 20 per cent cite their reliability as a reason for use.

Figure 31: **Car, bicycle, public transport – school marks for the means of transport**

Question: **All in all, how do you rate your experience with the use of the means of transport for your everyday journeys? Please award school marks for this.**



Representative survey, number of respondents see axis labelling, 1st survey wave, sample 14 years and older, Percentage of respondents using the respective means of transport at least once a week (figures in per cent, deviations from 100 per cent due to rounding)

5.5 Strong support for increased promotion of public transport and cycling

59 per cent of the respondents completely agree with the statement that public transport must become much cheaper, and a further 32 per cent somewhat agree (Figure 32). Furthermore, 49 per cent completely agree and 41 per cent somewhat agree that more must be done for public transport as a matter of urgency. Respondents also widely agree that the cycling infrastructure must be improved. More safety on cycle paths is in the foreground: 47 per cent completely agree with this and a further 38 per cent somewhat agree. And 44 per cent agree completely and 36 per cent somewhat that more cycle paths and cycle lanes are needed.

It would be better to expand local public transport, even into rural areas.

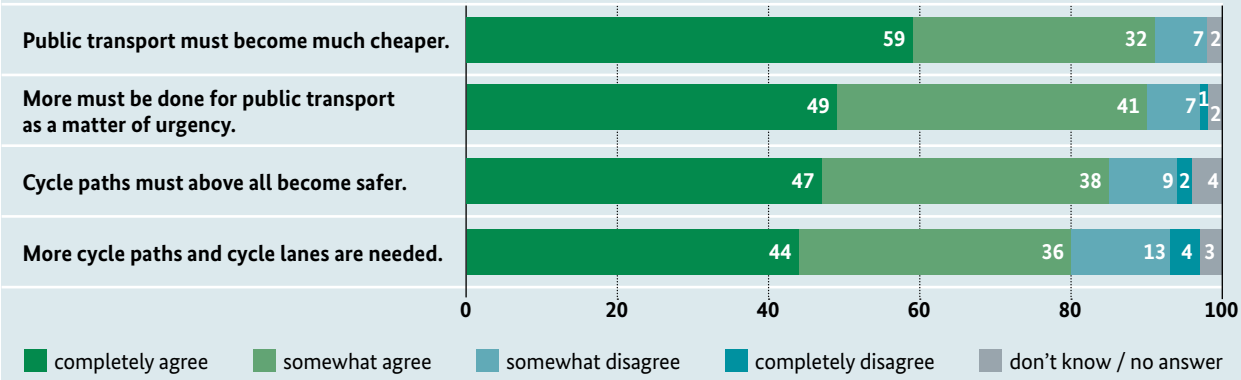
You can get anywhere in the city, but in peripheral areas it's just awful.

I'm in favour of wider cycle paths. Cycle paths have to be upgraded and extended so that it's less dangerous to ride a bike.

Quotes from group discussion

Figure 32: **Attitudes towards measures for public transport and cycling**

Question: **In the following you will see various statements on transport and mobility. Please indicate to what extent you agree with each statement.**



Representative survey of 2,021 respondents, 1st survey wave, sample from 14 years of age (figures in per cent, deviations from 100 per cent due to rounding)

Lower environmental and climate impacts from transport have priority for respondents

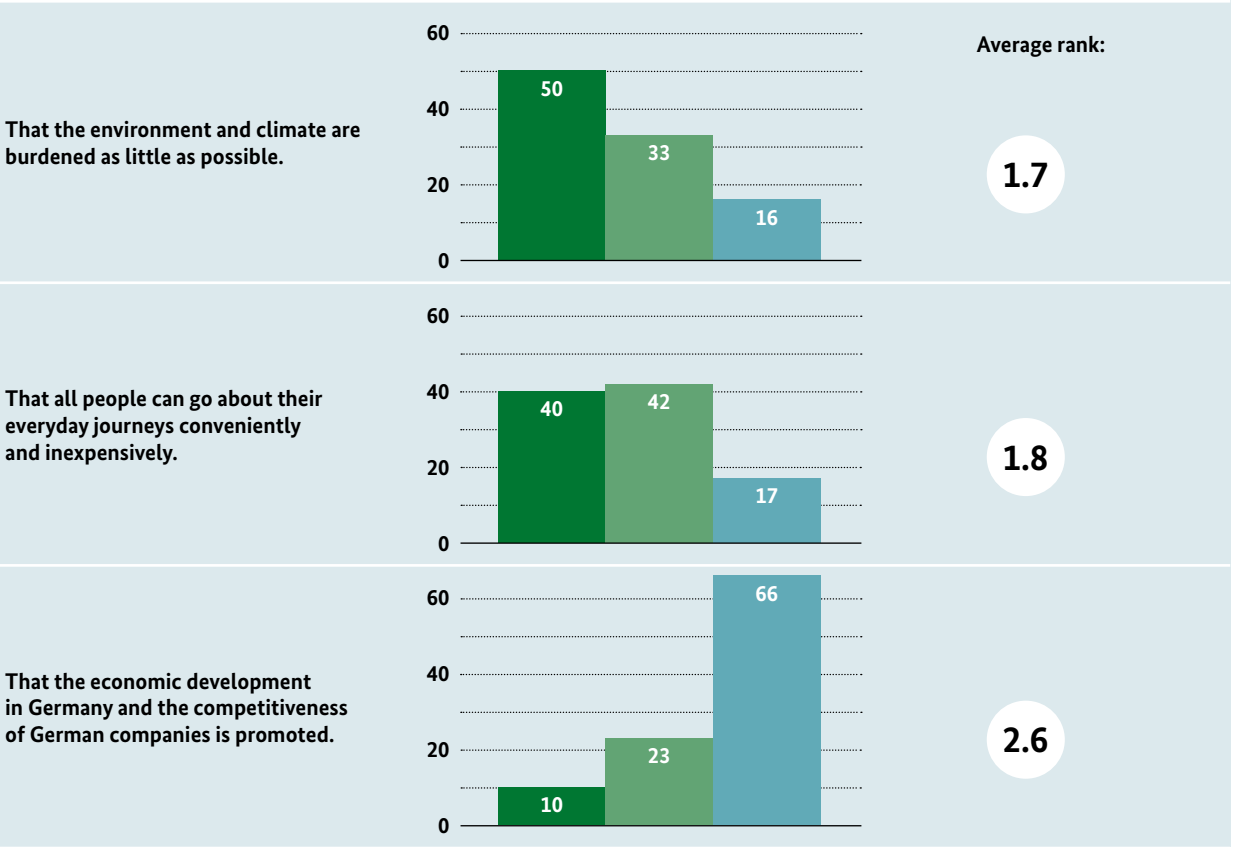
A clear picture emerges when respondents have to prioritise environmental protection, convenient and low-cost everyday mobility and the competitiveness of the economy (Figure 33): For half of them, environmental protection and climate action have the highest priority. For another third, this target ranks second. For 40 per cent, the top priority is for all people to be able to go about their everyday journeys conveniently and inexpensively. For a little more, namely 42 per cent, this is the second most important priority. On the other hand, only ten per cent set 1st priority and 23 per cent 2nd priority on economic development and the competitiveness of German companies. For two thirds, this objective is secondary to the other two.

Transport policy is oriented more towards the interests of the economy than towards environmental protection and climate action or the needs of people

A comparison of these personal preferences with how respondents currently perceive transport policy reveals a completely different picture (Figure 34): 52 per cent completely agree with the statement that transport policy is oriented towards the interests of the economy; a further 37 per cent somewhat agree with this statement. On the other hand, only one in twenty completely agrees that transport policy is oriented towards environmental protection and climate action; even to a limited ("somewhat") extent, only one in five respondents agrees with this statement. This stands in striking contrast to the fact that the 50 per cent want environmental protection and climate action to come

Figure 33: **Preferences for the future development of transport**

Question: **What is most important to you with regard to the future development of transport?**
(Order of priority)



Representative survey of 2,021 respondents, 1st survey wave, sample from 14 years of age (figures in per cent, deviations from 100 per cent due to rounding and "don't know")

first and a further 33 per cent second among traffic policy goals (Figure 33). Only three per cent completely agree with the statement that the current transport policy in Germany is oriented towards the needs of the citizens, while 18 per cent somewhat agree.

Protagonists of the transport transition: Government, automotive industry, but also each and every individual

Figure 35 shows who the respondents expect to make an important contribution to more environmentally friendly transport in Germany. About two-thirds believe that the federal and state governments as well as the automotive industry can do a lot to help. Half also see this responsibility with each and every individual, i.e. themselves or their fellow citizens. One third see an important role in public transport companies as well as cities and municipalities.

> *We've got some big car manufacturers here; they screwed up, they must be taken to task more.*
> *Quote from group discussion*

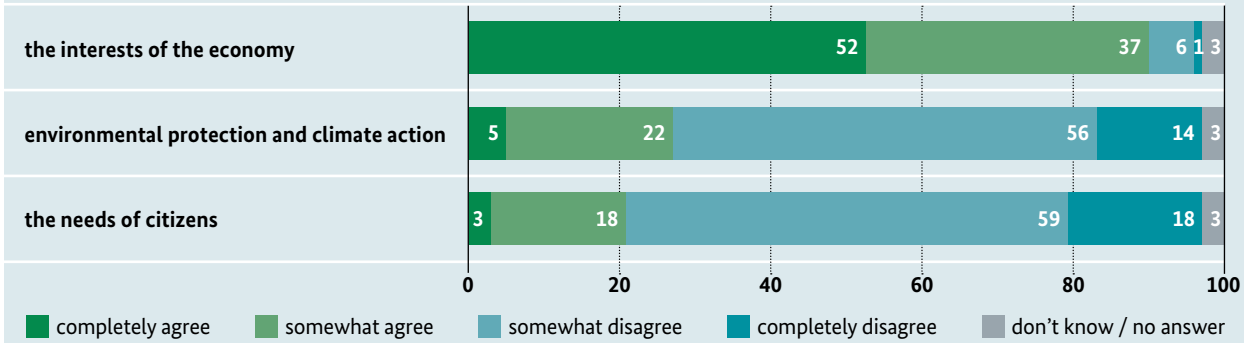
The main actors involved in a transport transition do not live up to their responsibilities

If one compares the expectations of actors' contributions to environmentally friendly transport (Figure 5) with the general assessment of their commitment to the environment and climate (see Chapter 2.5, Figure 8), the picture that emerges appears to have been turned upside down – the most relevant actors, in particular government and industry, are not considered by many to be doing (somewhat) enough for environmental protection and climate action.

But the respondents also give their fellow citizens (and possibly themselves) a rather poor verdict: Four-fifths believe that they are not doing enough to protect the environment and the climate. The contribution of cities and municipalities seems comparatively appropriate to the respondents.

Figure 34: **Which priorities are perceived in the current transport policy**

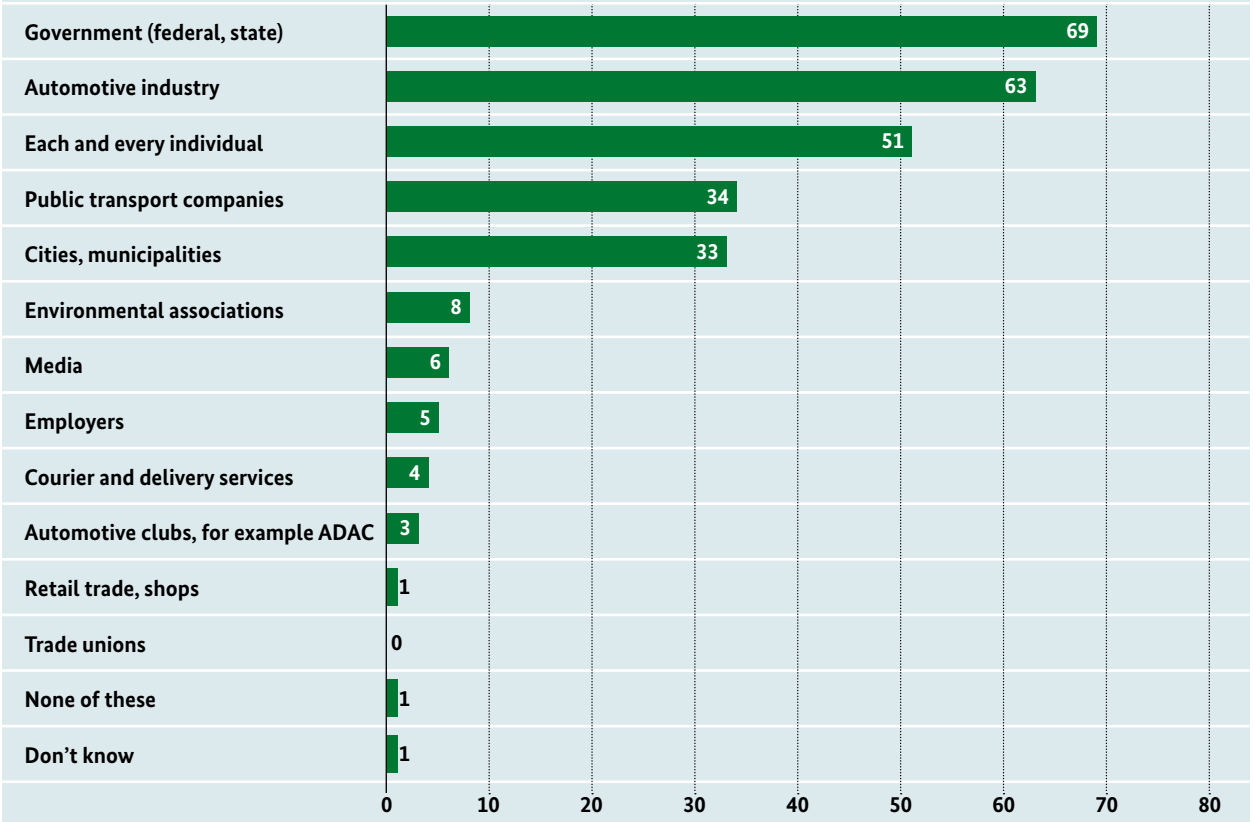
Question: **In the following you will see various statements on transport policy in Germany. Please indicate to what extent you agree with each statement. Transport policy in Germany is primarily oriented towards ...**



Representative survey of 2,021 respondents, 1st survey wave, sample from 14 years of age
(figures in per cent, deviations from 100 per cent due to rounding)

Figure 35: **Actors who can contribute to greener transport**

Question: **In your opinion, who can make an important contribution to making transport in Germany more environmentally friendly?** (State a maximum of three important actors)



Representative survey of 2,021 respondents, 1st survey wave, sample from 14 years of age (data in per cent)

5.6 Social Milieus: Different attitudes and behaviours related to mobility

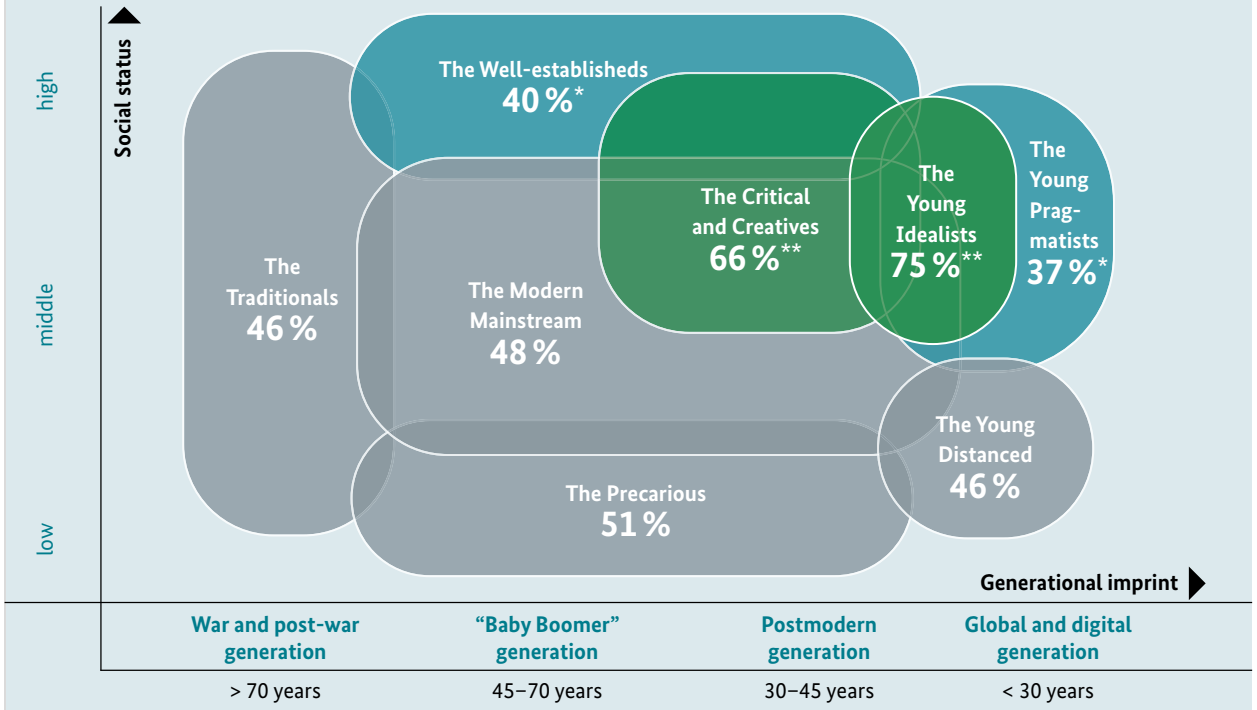
For half of all respondents, the highest priority is to ensure that transport has as little impact as possible on the environment and climate in the future (Figure 33). This opinion varies considerably from one Social Milieu to another, as Figure 36 shows.

Environmentally friendly transport has top priority among the Critical and Creatives and the Young Idealists

The Traditionals, the Precarious, the Modern Mainstream and the Young Distanced do not deviate significantly from the average (50 per cent) in their priorities. In contrast, the Well-establisheds and the Young Pragmatists are much less likely to rank environmental protection and climate action first in terms of their importance for future transport development. Conversely, among the Critical and Creatives (two-thirds) and the Young Idealists (three-quarters), a significantly above-average number of respondents believe that the environmental protection and climate action should have the highest priority in the future shaping of transport.

Figure 36: **Priority for environmental protection and climate action as the most important tasks of transport policy / transport development in the Social Milieus**

Question: **What is most important to you with regard to the future development of transport (order of priority)?**
Response: **That the environment and climate are burdened as little as possible.**
(An average of 50 per cent gave this response)



Significant deviations from the average of the respondents

significantly overrepresented | about average/differences not significant | significantly underrepresented

* significant in 95 per cent confidence interval ($p < .05$)

** significant in 99 per cent confidence interval ($p < .01$)

Representative survey of 2,021 respondents, 1st survey wave, sample from 14 years of age, percentages of mentions in the respective Social Milieus

Public transport and bike used most in young Social Milieus, car use most prevalent among the Well-establisheds and in the Modern Mainstream

There are also clear differences in the choice of means of transport, some of which are milieu-specific. All three young Social Milieus make distinctly above-average use of public transport and below-average use of an own car (Table 4); this also applies to the Young Idealists and Young Distanced, if the respondents are over 17 years old and have a driving licence. Among Young Pragmatists, car use tends to increase when it comes to people with a driving licence: 94 per cent, and thus more than the average for the age group between 17 and 29, have a driving licence in this Social Milieu; 72 per cent of these regularly use their own car.

Table 4: **Which means of transport are used in the Social Milieus?**

Question: **How often do you normally use the following means of transport for your everyday journeys?**
Responses: Sum of **"daily"** and **"several times a week"**

	Own car	Public transport	Bicycle (also electric, rental bicycle)
Total sample	**70**	**22**	**34**
The Traditionals	72	15*	35
The Well-establisheds	82**	17	32
The Modern Mainstream	82**	11**	26**
The Precarious	70	20	30
The Critical and Creatives	68	24	38
The Young Idealists	28**	56**	53**
The Young Pragmatists	57**	37**	46**
The Young Distanced	40**	47**	37

Significant deviations from the average of the respondents

significantly overrepresented | about average/differences not significant | significantly underrepresented

* significant in 95 per cent confidence interval ($p < .05$)

** significant in 99 per cent confidence interval ($p < .01$)

Representative survey of 2,021 respondents, 1st survey wave, sample 14 years and older, shares of mentions in the respective Social Milieus (in per cent)

The car is most frequently used by the Well-established and the Modern Mainstream. Among the Critical and Creatives and the Precarious, all means of transport are used roughly in line with the average. Among the Traditionals, people travel much less by public transport, but regularly by car. At the same time, however, they ride their bicycles more frequently – which is particularly evident in their significantly above-average use of electric bicycles. The perspective of Social Milieus shows that although social and structural conditions such as income, family and professional situation or place of residence have an important influence on the choice of means of transport, everyday cultural factors and value orientations also play a role.

5.7 Summary – There is still a long way to go before a transport transition

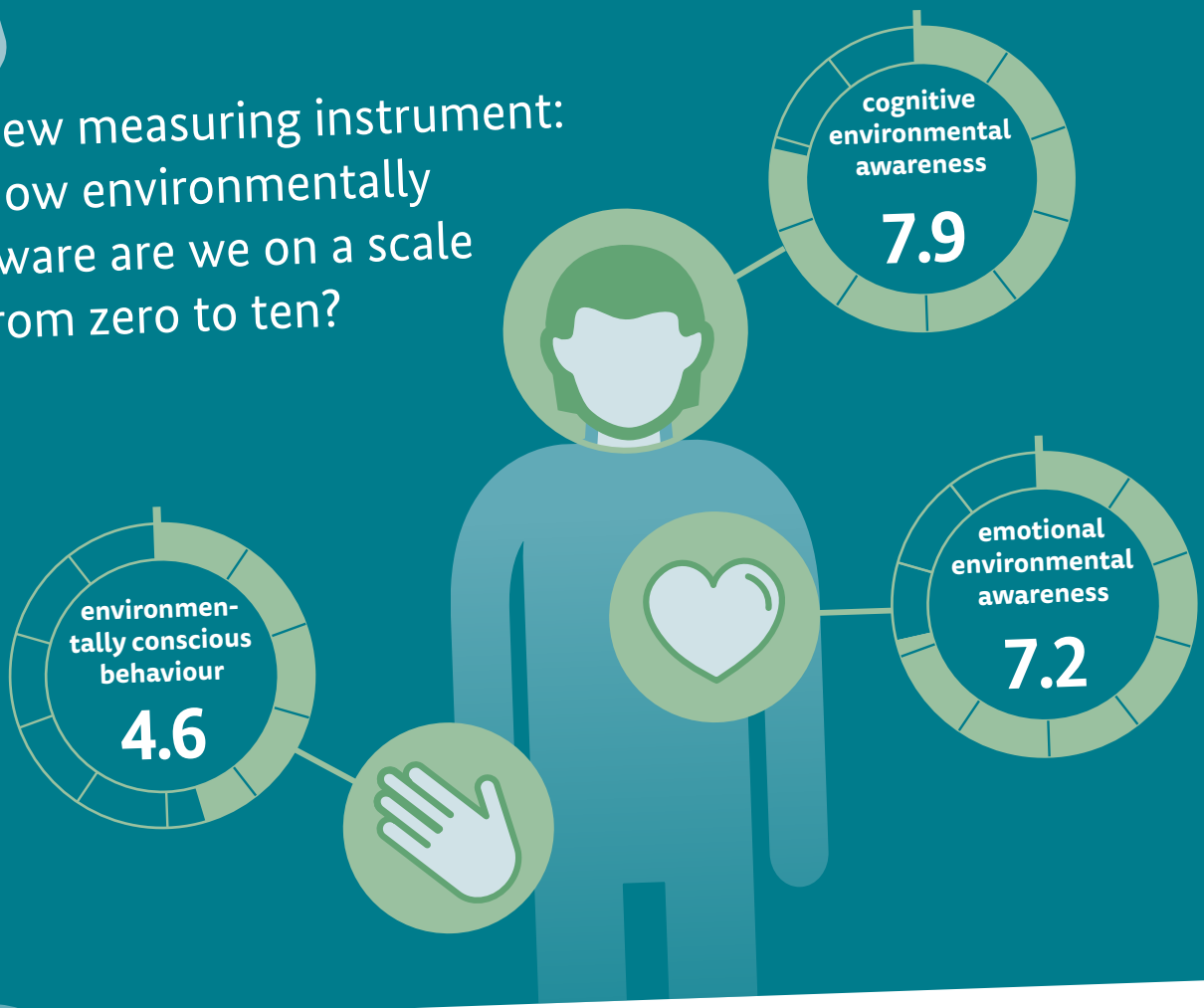
A transport transition is essential for effective environmental protection and climate action, but also for people's health and quality of life. The population is aware of the need to make transport more environmentally and climate-friendly, and a majority is in favour of ecological goals being given priority in the future design of transport in Germany. Many people approve of increased support and funding for public transport and cycling. In everyday behaviour, however, motorised private transport continues to dominate. Especially in the "rush hours of life", when gainful employment, family commitments and leisure interests must be combined, many consider their own car to be indispensable. In addition to the requirements for flexibility, infrastructural conditions in many places – especially in rural areas – also mean that the car remains the primary mode of transport. A transport transition will therefore only be successful if it succeeds in establishing a climate-friendly motorised private transport system (for example through new engines), in line with the endeavour to improve technical efficiency.

But at least as important are the other approaches to traffic avoidance and the shift from motorised individual transport to modes of transport within the environmental network. To this end, public transport and cycling must be strengthened as a matter of urgency. And there are many good reasons for this. Travel times spent in public transport can be used meaningfully, for example for reading, working or relaxing. Cycling is good for your health and can be very enjoyable if you have the right cycling infrastructure. In addition, the reassurance of acting in an ecologically responsible manner speaks for both modes of transport. Transport services that address these motives can contribute considerably to making more environmentally friendly forms of transport more attractive. The perceived low reliability of public transport and its comparatively poor rating, on the other hand, are barriers that, at present, still stand in the way of a more intensive use.

Many people find it important that public and bicycle traffic is expanded, that noise, exhaust fumes and particulate matter from road traffic are reduced and that less natural space is used for traffic. Environmental protection and climate action must be given a much higher priority in transport policy than is currently the case. The fact that respondents believe that environmental protection and climate action should play a major role in questions of transport policy was already evident in the assessment of priorities in various political fields of action (see Chapter 2.1, Figure 5). For example, 53 per cent believe that environmental protection and climate action should be given an overriding importance in transport policy and 41 per cent say that it should be taken into account appropriately in addition to the actual tasks. People feel that the federal and state governments and the automotive industry have the greatest power to implement such a transport transition. But these actors do not live up to their responsibility to make transport more environmentally friendly – so the general opinion. Rather, the perception that transport policy is primarily oriented towards the interests of the economy and not the needs of the people or environmental protection and climate action prevails. In this context, however, the respondents self-critically acknowledge that they as citizens have so far also not been very environmentally friendly when it comes to transport.

> ***We must not wait any longer, it is already far too late, policymakers have really missed the boat, not just the car manufacturers.***
> *Quote from group discussion*

New measuring instrument: How environmentally aware are we on a scale from zero to ten?



6. Key figures for describing environmental awareness

6.1 What is environmental awareness and how can it be measured?

The term environmental awareness was first defined in 1978 in a report by the German Advisory Council on the Environment.[43] According to the definition, environmental awareness corresponds to the "understanding of the threat to man's natural environment by man himself, combined with the willingness to remedy this danger". Various further definitions of environmental awareness have emerged subsequently, which differ above all in whether they regard environmental awareness one-dimensionally, as a general attitude, or multidimensionally, as the sum of different subcategories such as attitudes and behaviour.[44]

Environmental awareness can be surveyed in different ways. For example, people can be asked about their environmental attitudes, feelings and behaviour in order to find out how environmentally conscious they are.[45] For the Environmental Awareness Study 2018, a survey tool was developed that allows the uniform collection of environmental awareness data in the future.[46] This means that developments can be better observed in time comparisons or differences between different population groups, for example differentiated by Social Milieu or gender. Some of the questions were taken from previous Environmental Awareness studies, others were revised and updated, some were newly developed. Based on a multidimensional understanding of environmental awareness, the measuring instrument comprises three sub-areas:

Affective component

Attitudes that focus on emotional reactions to environmental issues. The questions usually contain positive or negative emotional statements (for example: "I'm happy", "it makes me angry").

Cognitive component

Attitudes in which factual statements on environmental issues are assessed, for example in relation to the use of resources or the responsibility for the environmental situation of future generations.

Conative component

Statements on our own behaviour in various environmentally relevant areas of life such as nutrition, consumption, everyday mobility; also self-reported involvement in environmental protection and climate action.

Each of these three sub-areas of environmental awareness is surveyed with a set of seven to eight attitude statements or behavioural self-reports, which the respondents answer using predefined responses.[47] The responses for each sub-area can be aggregated into total values, called key figures (see Section 6.2). Figure 37 shows the statements on the affective and cognitive components for the individual response categories collected in the representative survey of 2018. Figure 38 shows the findings on environmentally conscious behaviour (the conative component).

In addition, two further survey instruments were used: a short series of questions on environment-related factual and practical knowledge and also various questions on the assessment of the personal climate footprint with regard to CO_2 emissions. These instruments were used to investigate how central key figures describing environmental awareness are related to environmental knowledge on the one hand and to self-induced negative environmental impact on the other.

6.2 Strong links between the affective and cognitive components, weaker links with the conative component

In order to express the findings for the affective, cognitive and conative components in compact indicators, the questions for each sub-area were condensed into total mean values.[48] For each of the three sub-areas a mean value on a scale from zero to ten was calculated, which expresses the respective key figure describing environmental awareness. Table 5 shows the specific statistical values.

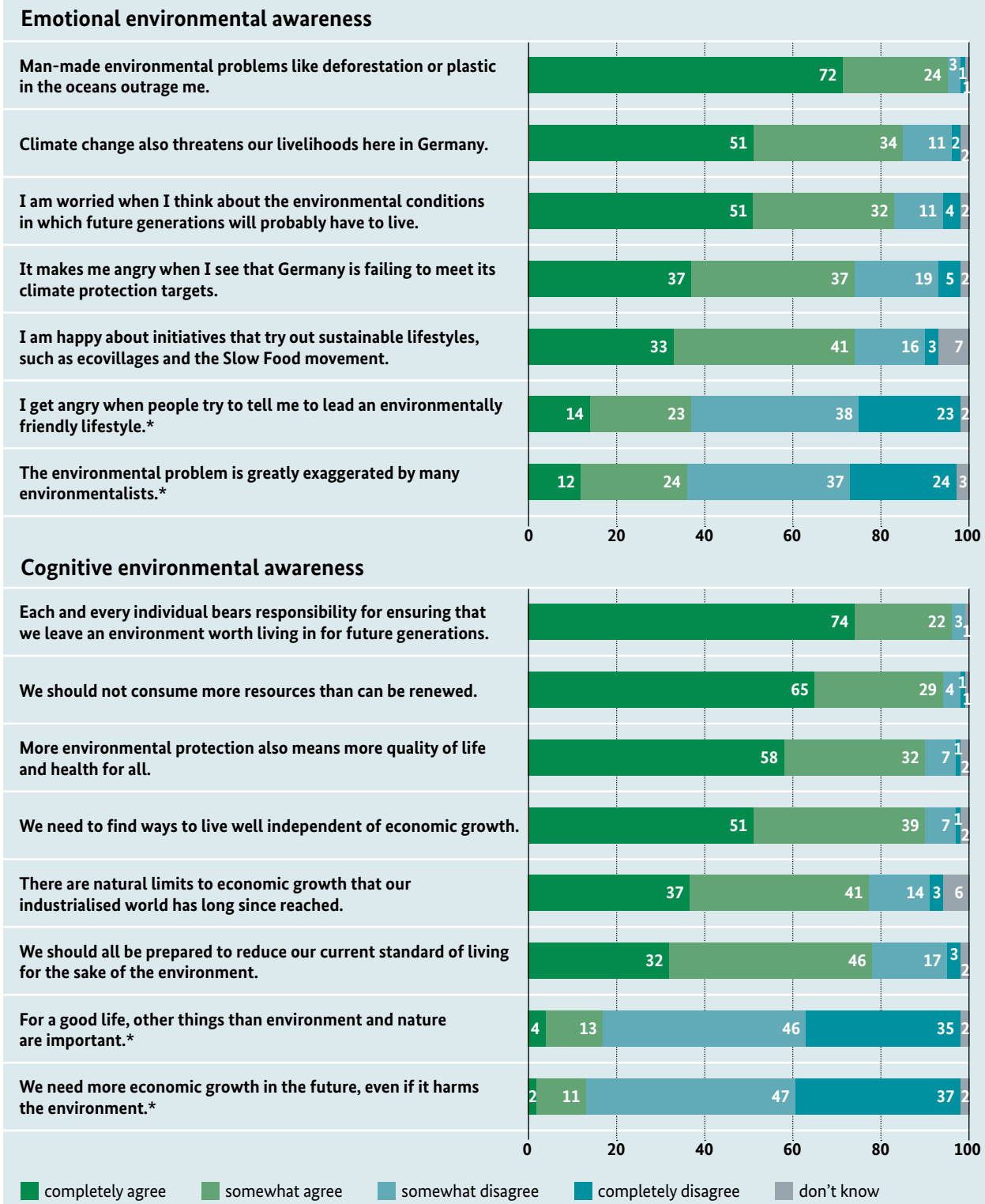
The summary shows that affective and cognitive attitudes receive high approval rates in the population. This is expressed in the mean values of 7.2 and 7.9 on a scale of zero to ten. Environmentally conscious behaviour is less common and reaches an average frequency of 4.6.[49]

Those who are environmentally conscious in one sub-area do so to a similar extent in the other sub-areas as well; the correlation between emotional environmental awareness and cognitive environmental awareness is $r = 0.73$. This means that affective environmental awareness and cognitive environmental awareness are very strongly related among respondents.[50]

The correlations of affective and cognitive environmental awareness with environmentally conscious behaviour are somewhat less strong, but still substantial: $r = 0.51$ and $r = 0.48$. This means that people who agree with the emotional and cognitive statements in general act with more respect for the environment. In the case of some individuals, however, the emotional environmental awareness and cognitive environmental awareness can deviate significantly downwards or upwards.

Figure 37: **Emotional and cognitive environmental awareness**

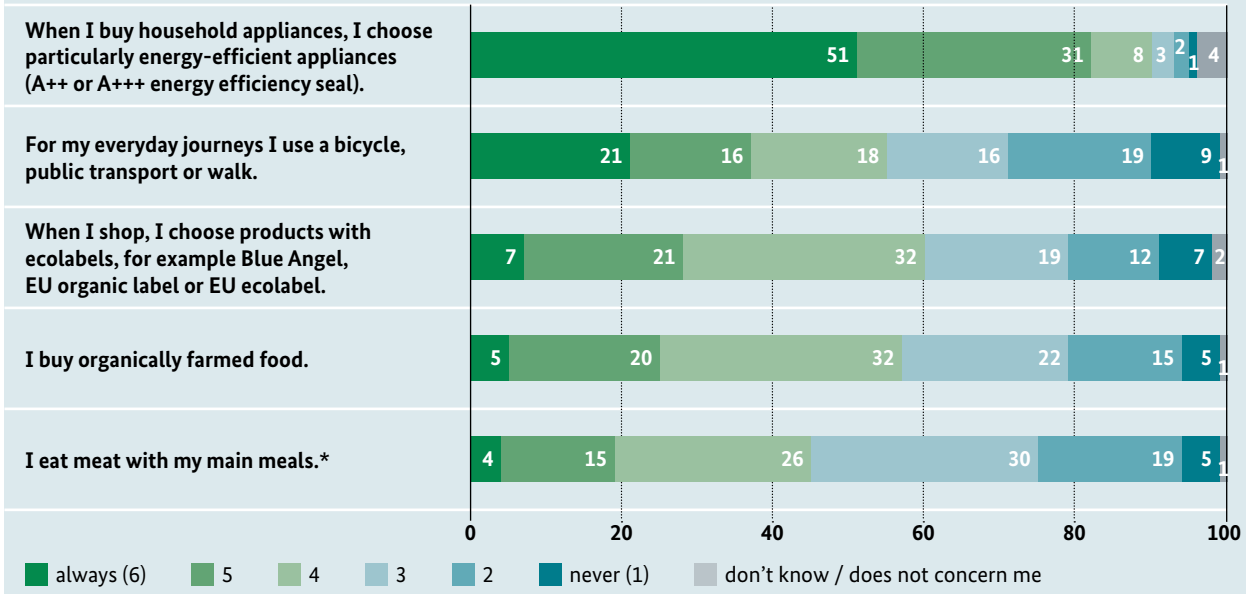
Question: **In the following you will see various statements. Please indicate to what extent you agree with each statement.**



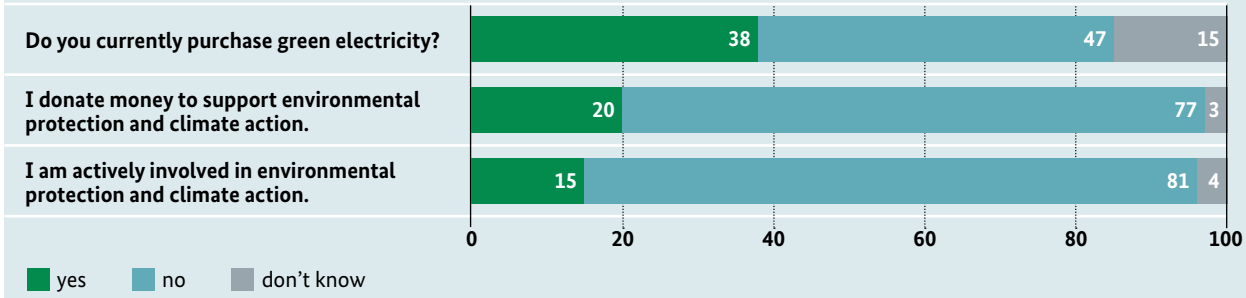
** The responses to these statements are reversed for the calculation of the key figures describing environmental awareness.*
Representative survey of 2,017 respondents, 2nd survey wave, sample from 14 years of age
(figures in per cent, deviations from 100 per cent due to rounding)

Figure 38: **Environmentally conscious behaviour**

Question: **The following is about your personal behaviour when buying and using products and services. Please enter "1" if you never do this, or "6" if you always do this – or a number in-between proportionate to your actual behaviour.**



Question: **The following section deals with other types of behaviour. Please indicate whether the following applies to you personally.**



** The responses to these statements are reversed for the calculation of the key figures describing environmental awareness.*
Representative survey of 2,017 respondents, 2nd survey wave, sample from 14 years of age
(figures in per cent, deviations from 100 per cent due to rounding)

Table 5: **Specific statistical values for the affective, cognitive and conative components**

Range	Number of questions	Mean value	Standard deviation	Minimum	Maximum	Alpha
Affective component	**7**	**7.2**	**1.92**	**0.0**	**10.0**	**0.80**
Cognitive component	**8**	**7.9**	**1.44**	**1.3**	**10.0**	**0.77**
Conative component	**8**	**4.6**	**1.74**	**0.0**	**10.0**	**0.62**

Number = number of statements belonging to the scale
Standard deviation = measure of how widely a characteristic scatters in the population, i.e. how heterogeneous it is
Alpha = Cronbach's Alpha (quality criterion for the internal consistency of a questionnaire. From 0.6 it is regarded as acceptable, from 0.7 as satisfactory, between 0.8 and 0.9 as good)
Representative survey of 2,017 respondents, 2nd survey wave, sample 14 years and older

6.3 Differences in environmental awareness by gender and Social Milieu

Average values for environmental awareness higher among female respondents

The sexes differ in all three sub-areas of environmental awareness (Figure 39). Female respondents tend to show higher mean values for emotional environmental awareness and agree more with cognitive statements than male respondents. On average, they also tend to have higher values for self-reported environmentally conscious behaviour.

Environmental awareness differs among Social Milieus

The survey also shows that the three key figures describing environmental awareness are very differently pronounced in the Social Milieus (see Table 6).

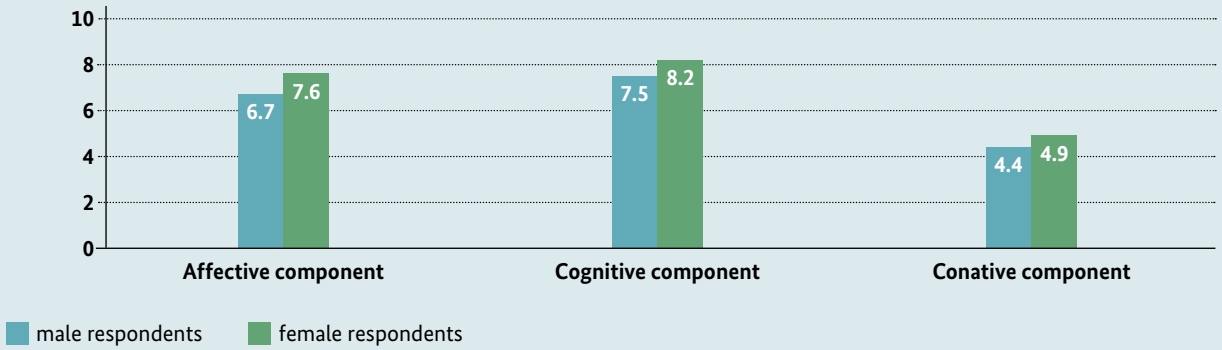
Particularly the members of the Critical and Creatives and the Young Idealists show clearly above-average values in all three sub-areas (affective, cognitive and conative components). The Critical and Creatives and the Young Idealists are especially ahead when it comes to commitment to environmental protection and climate action. The Traditionals often indicate above-average environmentally conscious behaviour, for example with regard to their donation activities, although their emotional environmental awareness is more in the intermediate range.

The comparatively lowest values for emotional and cognitive environmental awareness are found in members of the Well-established and the Young Pragmatists. Particularly the emotional concern in the face of environmental problems is much less pronounced in these Social Milieus than in others. Members of these groups also have few intentions to behave in an environmentally conscious manner. Additionally, the self-reported environmentally conscious behaviour is below average in the Modern Mainstream and among the Precarious and the Young Distanced. In the case of the latter, it is also noticeable that the values for the affective and cognitive components are approximately average, but below average for the conative component.

Environmental awareness, environmental knowledge and environmental footprint are only weakly interrelated

The study also asked knowledge questions regarding various environmental issues. There were ten questions, each with four possible responses, only one of which was correct. On average, respondents answered 5.4 of the ten questions correctly. The result: Environmental knowledge only weakly correlates to the individual sub-areas of environmental awareness; the correlation with the affective component amounts to r = 0.08, with the cognitive component r = 0.10 and the conative component r = 0.16. This is not as surprising as it might seem at first. One explanation is that the corresponding general knowledge does not necessarily lead to certain attitudes or behaviours. The existing infrastructure, effort, social norms or habits in the household or in the surrounding area can also affect attitudes and behaviour. This is another reason

Figure 39: Differences between the sexes in the key figures describing environmental awareness



Representative survey of 2,017 respondents, 2nd survey wave, sample 14 years and older (mean values of the standardised scales with minimum value = 0 and maximum value = 10; all three mean value differences are significant)[51]

Table 6: **Key figures describing Environmental awareness in Social Milieus**

	Affective component	Cognitive component	Conative component
Total sample	**7.2**	**7.9**	**4.6**
The Traditionals	**7.2**	**8.1***	**5.0****
The Well-establisheds	**6.2****	**7.1****	**4.3****
The Modern Mainstream	**6.7****	**7.7***	**4.3****
The Precarious	**7.0**	**7.8**	**4.0****
The Critical and Creatives	**8.7****	**9.0****	**6.1****
The Young Idealists	**8.8****	**8.8****	**5.8****
The Young Pragmatists	**6.5****	**6.8****	**3.8****
The Young Distanced	**7.3**	**7.8**	**4.0****

Significant deviations from the average of the respondents

significantly overrepresented | about average/differences not significant | significantly underrepresented

* significant in 95 per cent confidence interval ($p < .05$)

** significant in 99 per cent confidence interval ($p < .01$)

Representative survey of 2,017 respondents, 2nd survey wave, sample 14 years and older
(mean values of the standardised scales with the theoretical minimum value = 0 and maximum value = 10)

why environmental knowledge is not treated as part of the key figures describing environmental awareness here.

The personal environmental footprint was estimated in the Environmental Awareness Study for five particularly environmentally friendly behaviours: food, car journeys, air travel, heating energy and electricity consumption in the household. This value was estimated in CO_2 emissions and is higher the greater the negative impact on the environment. The part of the environmental footprint surveyed here is generally slightly negatively related to the key figures describing environmental awareness of the respondents. The correlation with the affective component is $r = -0.17$, with the cognitive component $r = -0.22$ and with the conative component $r = -0.25$. That means that the more environmentally conscious someone is, the lower their CO_2 emissions usually are, albeit with a very weak tendency. It can also happen that more environmentally conscious people have higher CO_2 emissions.[52]

7. Social Milieus

Social Milieus group together people with similar values, mentalities and lifestyles.[53] In doing so, they describe different everyday cultures and lifestyles in society. The identification and description of Social Milieus takes into account basic orientations in everyday life, social status and the generational imprint of the various age groups.

Social Milieus as a context for interpretation of Environmental Awareness Studies

Value orientations and lifestyles, as well as socio-economic conditions and generation-specific experiences, are crucial factors for the way in which people perceive everyday life and act. Thus, individual environmental awareness and environmentally conscious behaviour are also determined by everyday life. In order to conceive environmental policy and respective communication in a way that is appropriate for different target groups, it is important to take the attitudes, requirements and expectations of the different Social Milieus into account. In this respect, the benefit of the Social Milieu approach consists above all in condensing and vividly depicting complex correlations and making them understandable in the context of every-day life scenarios, i.e. in the "totality of subjective reality".[54]

As in the preceding 2014 and 2016 studies, the 2018 Environmental Awareness Study also used the Social Milieu model of Sociodimensions as a background for interpretation.[55] In the present study, the model has been extended to include additional Social Milieus of the youth in order to reflect new developments in the younger generation.[56]

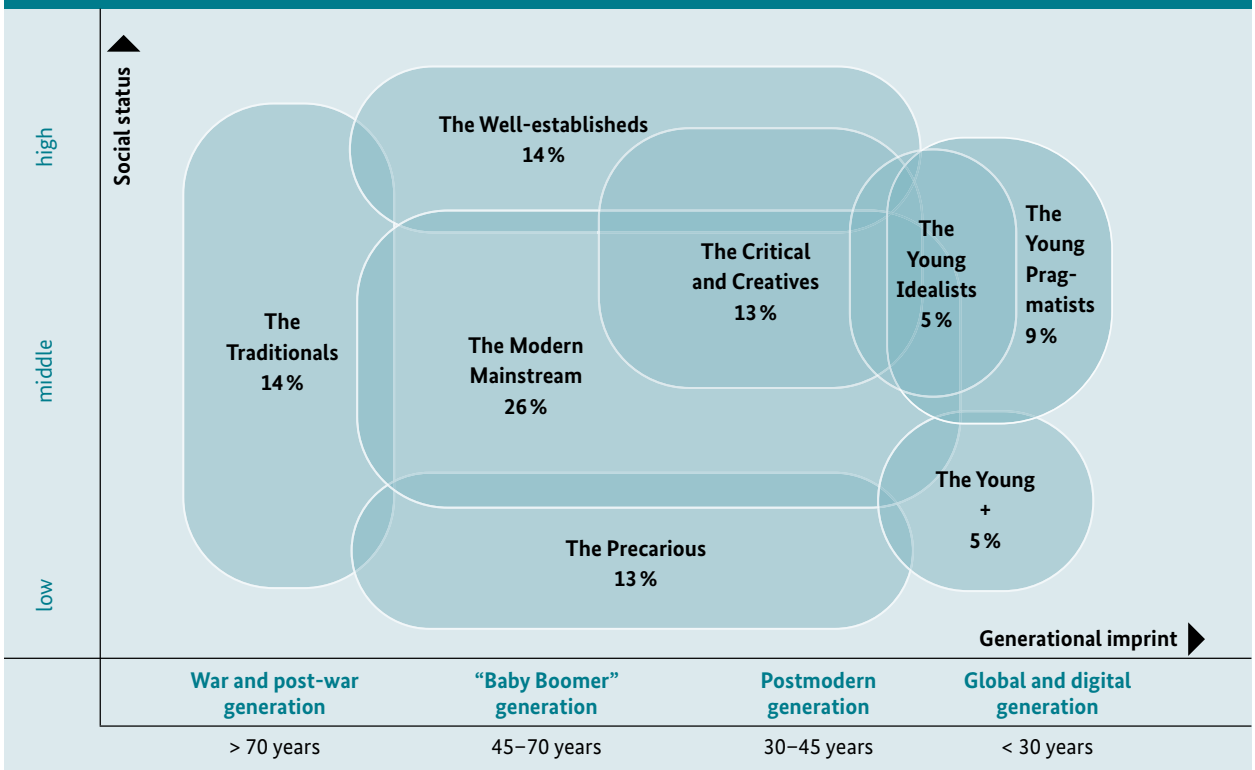
Figure 40 shows the Social Milieus in Germany according to the Sociodimensions model (for a brief description, see Chapter 1, box on page 14). The graphic representation refers to two basic dimensions that determine values and lifestyles. The vertical axis delineates the social status in which education, income and occupational status are combined. On this dimension, society can be structured into high, middle and low social strata. The horizontal axis, on the other hand, demarcates various biographical influences that result from the socialisation of certain generations and influence basic orientations. Not everyone can always be unambiguously assigned to a specific group in social reality. The diagram shows overlapping areas, which indicate that there are also transitional and mixed forms among the different Social Milieus.

In the following, the Social Milieus are presented with regard to the following four aspects:

- their socio-demographic emphases according to the distribution in the two survey waves of the Environmental Awareness Study 2018,
- their basic orientation in everyday life according to the results of the long-standing milieu research by Sociodimensions,
- their attitudes towards environmental protection and climate action according to the results of this and previous cycles of the Environmental Awareness Study,
- their attitudes to central questions of the main topics of this Environmental Awareness Study.

The characteristics of a Social Milieu are derived from an analysis of the responses of the respective milieu compared to the average of all respondents.

Figure 40: **Social Milieus in Germany 2018**



Representative survey of 4,038 respondents, 1st and 2nd survey wave aggregated, sample from 14 years of age (shares of Social Milieus in the model of Sociodimensions in per cent of the sample, deviations from 100 per cent due to rounding)

7.1 The Traditionals: Hold on to what you know

Life motto:
"I hope everything stays as it is"

The members of the Traditionals are mostly older people over 70 years of age. As this milieu has such a strong focus on individuals of an advanced age, women are demographically overrepresented. The group includes people of varying social status. What they have in common is a basic attitude based on traditional values.

Security and stability are important to the Traditionals. Thriftiness and the willingness to do without characterise their basic orientation. They generally have the desire to preserve what is familiar and proven, such as social order and nature, the latter of which they often understand as "creation". Many of the current developments are of great concern to them.

Climate and the environment: an important problem – among others

Environmental issues or climate change are at present not the top priority for the Traditionals. They currently see the greatest problems in ensuring a functioning system of government and maintaining social cohesion. In addition, migration to Germany makes them uncomfortable. But the members of this group are also concerned about the environmental conditions under which future generations, including their own children and grandchildren, may have to live. They believe that there is an urgent need to find ways to make a good life possible regardless of further economic growth.

One's own car is essential for mobility, but e-bikes are on the rise

Many people belonging to the Traditionals live alone, both in big cities and in smaller communities. They do not go out as much as people from other backgrounds. At least one car is available in 87 per cent of households; the annual mileage covered is usually quite modest (up to 10,000 kilometres per year). It is an important means for them to remain individually mobile. They use electrically powered bicycles much more frequently than members of other milieus, ten per cent daily or several times a week. The advent of e-bikes has evidently opened up a new form of mobility for the older members of the Traditionals, one which they use increasingly.

Concerns about excessive commercialisation of agriculture

The present conditions in agriculture are viewed critically by the Traditionals. Their ideal is a smallholder agriculture, in which nature conservation, animal welfare and the production of healthy food are the main tasks of agriculture. It probably plays a role here that they remember times in which agriculture was still predominantly small-structured and rustic.

Support the energy transition, but see few opportunities to contribute themselves

Due to deeply rooted principles of thriftiness, the members of the Traditionals have always been careful not to waste electricity and heat. Their awareness of their electricity consumption is above-average. They are well aware of the energy-saving renovation options for residential buildings, but they are less likely to consider them personally – mostly for reasons of age. Overall, the vast majority of the members of the Traditionals are clearly in favour of the energy transition. However, it is important to them that an affordable energy supply remains guaranteed for all.

7.2 The Well-establisheds: Performance- and success-oriented

Life motto:
"Be proud of what you've achieved and enjoy it"

Intermediate and higher age groups between 40 and 70 years of age are the most common among the Well-establisheds. Men are slightly more represented than women. They have an intermediate to high level of education – intermediate school-leaving certificate, higher school-leaving certificate or university degree – and usually have high to very high incomes.

The members of this milieu are extremely performance- and success-oriented. They attach importance to a high standard of living, which they believe they have earned due to their own professional commitment. They are optimistic about their personal and social future. They are in favour of economic globalisation and are convinced that free markets, as unregulated as possible, are the best means of promoting development.

Economic growth and competitiveness have priority

Economic growth, efficiency and competitiveness are important goals for members of the Well-establisheds. They also think about the challenges of digitisation and the current shortage of skilled workers. They take ecological problems seriously, but consider them to be secondary to economic goals. The environmental situation in Germany and the world is assessed more positively by the Well-establisheds than by other Social Milieus. The federal government's policy, but also industry's commitment to environmental protection and climate action, are rated above average.

The car: A symbol of progress and economic performance

In comparison with all other Social Milieus, the members of the Well-establisheds use the car in everyday life the most. This milieu has the highest rate of car ownership: 47 per cent have two cars, twelve per cent three or more cars in the household. These cars are usually used to cover high mileages – 20,000 to 40,000 kilometres per year and vehicle are normal. The milieu members often live in "the countryside", in smaller communities on the outskirts, and have longer distances to work, shops and other facilities. But also in terms of their attitudes, they clearly prefer motorised individual transport. They rarely travel by public transport and use bicycles as sports equipment, especially on weekends.

The Well-establisheds approve of modern agriculture

Among the Well-establisheds, agriculture is viewed primarily from the point of view of economic efficiency. Ecological problems such as the death of species, environmental pollution caused by plant protection products, pesticides or excessive fertilisation are considered less serious by members of the Well-establisheds than by other milieus.

They demonstrate modernity through energetically optimised living

Although the Well-establisheds have a generally positive attitude towards the energy transition, they are more sceptical than other milieus. They are very open-minded about energy-saving measures in the residential sector. Their – mostly large – flats or houses have often undergone energy-saving renovations or have been built or bought to low-energy standards. Being up-to-date with the latest technology is a natural part of modern living for them.

7.3 The Modern Mainstream: Security and harmony in private life

Life motto:
"Belonging and being integrated"

The members of the Modern Mainstream are mostly found in middle social classes, intermediate educational groups and intermediate income groups. The ages 40 to 70 are most strongly represented.

Private and family life is at the top of everyday priorities. There is a strong desire in the Modern Mainstream to feel protected in private life and well cared for in a functioning community – amongst their circle of friends and acquaintances, neighbourhood, but also in society as a whole. In terms of consumption, members of this milieu are guided by comfort, convenience and value for money. It is important for them to maintain their accustomed standard of living and social status in the centre of society. They are willing to work hard in return. However, fears of a possible social decline are increasing.

Pensions and old-age provision are of great concern

The members of the Modern Mainstream are currently very concerned about the security of pensions and the increasing poverty among the elderly, which may also be a threat to themselves. Additionally, they attach great importance to migration policy. But they also see environmental protection and climate action as important societal tasks.

Ecologically sound consumption, if it has no price disadvantages

When it comes to consumption, the Modern Mainstream is open to environmentally friendly offers, especially if these are linked to cost savings, such as energy-saving technologies. In these milieus, the goal of shopping cheaply for everyday necessities often conflicts with the goal of behaving in an ecologically sound manner.

Having one's own car is considered indispensable

The members of the Modern Mainstream use the car more intensively than others. In 52 per cent of households there is one car, in a further 35 per cent there are two, and these are used to cover a medium to high mileage – usually 20,000 to 30,000 kilometres per year and car. Public transport, cycling and walking are the least important means of transport for them compared to the other milieus. However, they are not opposed to greater support for public transport and cycling.

Problems in agriculture are seen, but not as urgent

The Modern Mainstream certainly sees ecological problems in agriculture and food production, but does not consider them to be urgent. The supply of inexpensive food is of above-average importance. But animal protection and animal welfare are also big concerns for them.

Open to energy-saving renovation in order to save costs

The Modern Mainstream assesses the energy transition positively, much like the average population at large. However, the members of this milieu place particular importance on energy remaining affordable and on a fair distribution of the costs of the energy transition, areas where they currently see deficits. Keeping their own energy costs low is important to them. Energy-saving renovation measures in residential buildings are therefore attractive, while state subsidies are a helpful instrument.

7.4 The Precarious: Coping with everyday life as a central challenge

Life motto:
"Make ends meet and don't attract negative attention"

The Precarious consist mainly of age groups from 40 years upwards. They predominantly have low formal educational qualifications and very low to low incomes. These are mostly people with basic and low-paid jobs, for example in the low-wage sector, as well as recipients of state transfer payments. Single mothers are also overrepresented.

Everyday life among the Precarious is characterised by a strong orientation towards the present: People want (and need) to get things done, keep their job (if there is one), take care of themselves and their family and cope with the daily routines. Overall, they see themselves as losers in the current social developments and tend to look pessimistically into the future.

Work and pensions currently important issues, but also migration

In this milieu, labour market issues and pension protection as well as combating crime are particularly important. The problem of migration is also currently of overriding significance for them. They generally recognise the importance of environmental protection and nature conservation, but are less aware of the problem of climate change. The commitment of the government and other actors to environmental protection and climate action is also viewed critically in this milieu. With regard to the contribution of citizens for the environment, however, they tend to think that they are already doing enough.

Orientation towards environmental protection as a social norm, but at the same time exposed to above-average environmental impacts

The Precarious acknowledge (as do other milieus) the social norms of environmentally sound behaviour and try, for example, to separate waste and save energy. At the same time, they are particularly exposed to everyday environmental pollution such as noise or air pollutants and also feel disadvantaged in this respect.

Public transport is considered too expensive

The Precarious are generally less mobile than others. 85 per cent of households in this milieu have (at least) one car. The mileages covered are rather low – usually no more than 10,000 kilometres per year. The personal motor vehicle is also the most frequently used means of transport in everyday life. Public transport use, on the other hand, is below average among the Precarious, with cost reasons often cited as a barrier. Accordingly, they more often than not state that public transport must become cheaper in order to be an attractive alternative to the car. They also ride a bicycle somewhat rarely.

Ecological problems of agriculture less present

The Precarious mention the production of inexpensive food as a task of agriculture at an above-average frequency. However, they are less aware of the associated ecological problems. Animal welfare is particularly close to their hearts.

Energy must not become more expensive

The Precarious support the energy transition, but feel that its costs are distributed too unequally in Germany. They consider an affordable energy supply for everyone to be extremely important. Wherever they can save energy in their own household, they naturally make an effort to do so.

7.5 The Critical and Creatives: Enlightened, cosmopolitan and tolerant

Life motto:
„Question things critically; live responsibly and meaningfully“

The Critical and Creatives cover a broad age spectrum from 30 to 70 years. Typical are intermediate or higher formal education and intermediate or upper income groups. Women are clearly more strongly represented than men in this milieu, with a share of 60 per cent.

The milieu members are enlightened, cosmopolitan and tolerant. They strive for self-realisation and independence from norms and conventions. They are very interested in social and cultural topics.

Environmental protection and climate action are important problems that are currently not being addressed sufficiently

Ecology plays a prominent role for the Critical and Creatives. They feel that the current commitment of government and industry, but also of citizens, to environmental protection and climate action is inadequate. Social justice is also important to them. At present they broach problems with the actions of the government and in the political climate more often than average; they are particularly worried about a rise of right-wing populism.

In their behaviour, the Critical and Creatives show a high social and ecological willingness to take responsibility. They prefer to buy ecologically produced and fair-trade products. They are also open to social innovations such as shared housing, shared product use or borrowing and exchange schemes.

Open for environmentally friendly means of transport, but no fundamental willingness to do without a car

Households with two or three cars tend to be more frequent than average among the Critical and Creatives. But at 14 per cent, even households without a car are represented slightly more frequently than the average (eleven per cent). The mileage covered is somewhat below average – up to 10,000 kilometres per year and car. The frequency of car use in the everyday life of the Critical and Creatives corresponds approximately to that of the population average. They tend to cycle more than others, which they consider enjoyable as well as being beneficial for fitness and environmental protection and climate action. This is also a central reason for the use of public transport; they also mention the possibility of doing other things whilst travelling as a reason. The Critical and Creatives advocate greater promotion of public transport and cycling, because they believe that more attractive conditions than at present are needed for (even) more intensive use of these means of transport

Agriculture responsible for environmental protection and nature conservation

Environmental protection and nature conservation are important responsibilities of the agricultural sector for the Critical and Creatives, which they consider to be inadequately fulfilled so far. They are highly aware of the environmental and climatic burdens associated with modern agriculture. They are also sensitised to animal welfare. They demand political measures that improve all these issues. However, they see as a barrier the fact that agricultural policy is currently too strongly geared towards the interests of industry. The production of high-quality and healthy foods has priority for them over the price of the products.

Purchasing green electricity and saving energy as a matter of course

The Critical and Creatives clearly support the energy transition. They also try to contribute with their own actions. They often purchase green electricity, make sure to purchase energy-saving appliances and try to avoid energy guzzlers in the home. They are open to energy-saving renovations of residential buildings.

7.6 The Young Idealists: Want to contribute to the social-ecological transition

Life motto:
"Lead a sustainable life and make the world a better place"

The Young Idealists – like the other young milieus – can be found in the age group from 14 to 30 years. There are significantly more young women among them than men. They have a high level of formal education – higher school-leaving certificate or university studies or school careers aimed at these. One third still lives with their parents, the others alone, in a two-person household or in a flat-share. Most of them come from parental homes with above-average incomes, but the majority of them (still) have low incomes of their own.

For the Young Idealists, values such as tolerance, respect and diversity are of great importance, as are sustainability and environmental protection. Like other young people, family, good friends and a partner as well as a solid education are also important to them. They are prepared to work hard in their profession. At the same time they think that our current way of life is irresponsible in the long run. They are therefore highly willing to commit themselves to social and environmental goals and support appropriate organisations, actions and campaigns. They buy environmentally friendly and fair trade products where possible. They use modern technology as a matter of course, but, just like fashionable clothing or their own car, this is less important to them than to others in their age group. They find it important to travel, to get to know the world and to have new experiences.

High degree of sensitivity to ecological problems, in particular climate change

The majority of the Young Idealists cite environmental protection and climate action as one of the most important challenges in Germany. They mention climate change particularly frequently, but also social issues. In this milieu there is a clear plea that environmental protection and climate action should be given priority in all political fields of action.

Majority uses environmentally friendly means of transport in everyday life – but also flies a lot

The Young Idealists most frequently use public transport and bicycles. More than half of them cycle several times a week. Car ownership in this milieu is below average: 29 per cent of households have no car, 40 per cent have one car and 31 per cent have two or more cars. (It should be borne in mind here that for milieu members, these are mostly likely to be the parents' cars – the responses to the question of mileage per car and year are mostly "do not know")

Because it is very important to them to travel and get to know the world, they tend to fly quite a lot. They are aware of the effects this has on climate change and tend to make offset payments more frequently than other milieus. They urge for more effort to be made to promote public transport and cycling.

Ecological problems of agriculture: More organic products, less meat

The Young Idealists are of the opinion that agriculture is currently responsible for many ecological problems and that an "agricultural transition" is inevitable. Environmental protection and nature conservation, animal welfare and the supply of high-quality and healthy foods are of great importance to them. Their own contribution, whenever possible, is to buy organic, regional and seasonal food and eat little or no meat. One in three Young Idealists has a vegetarian or vegan diet.

Energy transition strongly advocated, but few possibilities for action in everyday life

The Young Idealists are strongly committed to the energy transition in Germany. However, measures to save electricity and heating energy are not relevant for many of them, as they live in their parents' homes and do not decide on the purchase of household appliances and heating systems or on energy-saving renovations and the like. They can imagine that such measures will be increasingly implemented in the future.

7.7 The Young Pragmatists: Oriented towards professional success and a good standard of living

Life motto:
"Be flexible and seize opportunities"

Young men are overrepresented in this group. The Young Pragmatists are younger than the other two young milieus on average, almost half of them under 20 years of age. The formal educational profile corresponds to what is typical for this age group: Many still go to school, others have an intermediate or higher school-leaving certificate, some have also a completed vocational or university education. About a third are already working. More than half of them live with their parents, with high and very high household incomes represented at an above-average rate.

The Young Pragmatists think above all of their personal way of life. Much more important than to others in this age group is their ability to succeed in their chosen career and achieve a high standard of living. The lifestyle of the Well-establisheds is an aspiration for them (and is often also their environment of origin). They are convinced that high economic growth will continue to be needed to maintain social prosperity. Owning the latest technology, having a car, wearing the latest fashionable clothes and going on many (long-distance) holidays are important requirements for them. They worry comparatively little about the state of the environment.

Solving environmental problems through technology, research and government measures

The economic situation and the state of the education system are currently of particular importance to the Young Pragmatists. They are aware of the problems of climate change, but they trust that new inventions, technical advances and government measures will find solutions. The Young Pragmatists have little sympathy for demands to reduce living standards or change consumer behaviour.

Own car important, many flights

Most Young Pragmatists above 17 years of age have a driving licence. In almost two thirds of the households where milieu members live, there are two or more cars. More than half of the Young Pragmatists also regularly use a car themselves for everyday journeys. However, public transport and bicycles are also used to an above-average extent. Owning their own car means a lot to them. It stands for quality of life and independence. They enjoy driving a car more than others in their age group. They also go on many flights, making compensation payments more frequently than the average of all respondents, but less often than others in their age group.

Agriculture not an issue

For the Young Pragmatists, agriculture is not an issue to which they give much thought. They consider the environmental impact of agriculture to be less relevant than others. They mention the production of low-cost food as an important task of agriculture at an above-average rate, as well as the cultivation of plants as industrial raw materials and for energy generation. Overall, they are of the opinion that agriculture in Germany fulfils its tasks well.

Energy issues (still) of little relevance

The Young Pragmatists are not particularly interested in energy issues. They give little thought to the consumption of electricity and heat in the household. They are generally positive about the energy transition. The fossil fuel phase-out and the expansion of renewable energies is clearly supported. However, they are rather sceptical about other objectives related to energy use, such as reducing energy consumption in transport, the economy and private households.

7.8 Young Distanced: Great distance to political and social issues.

Life motto:
"Do my own thing as best I can"

The gender ratio in this milieu is balanced. Persons with a lower secondary school-leaving certificate or intermediate school-leaving certificate or corresponding school careers are overrepresented. Nearly half are gainfully employed, with a focus on less-demanding activities. The unemployment rate is above average. Incomes are rather low, both with regard to own income, if there is one, and those of the parents, if the Young Distanced still live at home.

Similar to the other young people, a stable relationship, good family life as well as respect and acceptance from friends are of central importance to the Young Distanced. However, they have significantly lower expectations of their future life than others in their age group. A well-paid job and a high standard of living hardly seem attainable to them. In private consumption, they are particularly guided by the price of products. They have little interest in political and social developments, because not only do they experience the accomplishment of everyday tasks as challenging enough, but they also assume that for them personally not much will change anyway.

Climate and the environment: Important, but abstract – in case of doubt priority for social justice

Questions of social justice and opportunities for participation are often cited by Young Distanced as important current problems. In addition, environmental problems and in particular climate change are of above-average relevance to them. However, they do not deal much with concrete challenges in this respect and hardly see any possibilities for action of their own. They furthermore assume that the political field also contributes little to solving such problems. Young Distanced argue more strongly than others that environmental protection and climate action must sometimes take a back seat, especially when it comes to social justice and jobs.

Car, if possible – public transport, if there's no other option

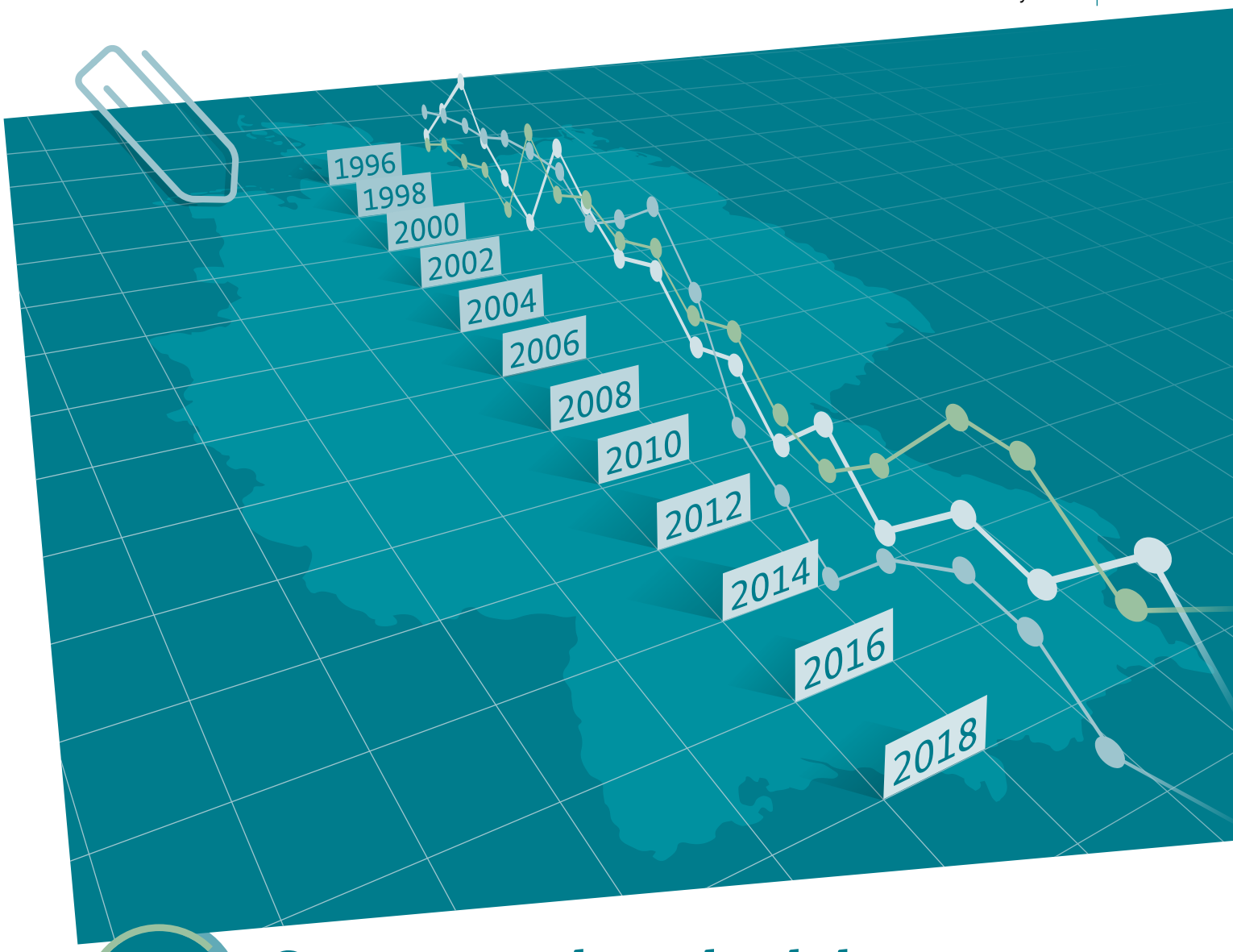
In households where Young Distanced live, there is an above-average absence of cars (24 per cent compared to an average of eleven per cent of all respondents). However, the car(s) available in the household are little used by the members of the milieu – as shown by the fact that they are usually unable to provide any information on the mileage they cover each year. Many, even if they are old enough, do not (yet) have their own driver's license. Instead of the car, Young Distanced therefore use public transport and bicycles more frequently than average for their everyday journeys. But they are particularly dissatisfied with public transport. In contrast, from their point of view there are various reasons for owning a car, even if one cannot afford it (yet), such as comfort, fun, but also cost reasons (compared to public transport). Like all other young milieus, Young Distanced also travel by plane at an above-average frequency.

Barely any personal reference to agriculture

Young Distanced have hardly any reference to agriculture. However, it is much more important to them than other milieus that food is inexpensive. Due to low financial resources for consumption in general, price criteria are particularly important for this group when purchasing food. They consider environmental protection and nature conservation in agriculture to be less relevant, but the welfare of animals is close to their hearts.

Fair distribution of the costs of the energy transition in society

Young Distanced are in favour of the energy transition in principle. However, they know little about the concrete objectives and measures associated with them. At most, it is important to them that the costs associated with the energy transition are distributed fairly. They hardly ever consider ways of saving energy in their personal behaviour.



8. Concept and methodology of the study

Continuous research of environmental awareness and environmentally conscious behaviour in Germany

This Environmental Awareness Study is the twelfth survey since 1996 that investigates the development of environmental awareness and environmentally conscious behaviour in Germany at two-year intervals. The studies are carried out on behalf of the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and the Federal Environment Agency (UBA). They contribute to providing a socially and scientifically sound basis for environmental policy and communication.

The Environmental Awareness Study has several objectives. In order for it to be used as a monitoring instrument, part of the survey consists of questions already raised in previous studies. Time series over many years are available for some of these questions. Beyond that, the Environmental Awareness Study serves as a "seismograph", in order to capture current environmental policy issues and new social developments. Qualitative studies are therefore an essential part of the research. In addition, a part of the survey consists of changing focal topics, which are investigated in greater depth. For the 2018 survey, these are mobility, agriculture and energy transition. Last but not least, the Environmental Awareness Study also fulfils the task of providing social-scientific findings on a wide range of sustainability topics. In the current survey, the first-time measurement of the key figures describing environmental awareness also contributes to this.

Main study: Representative survey in two waves with 2,000 respondents each

As with the Environmental Awareness Studies of 2014 and 2016, the representative survey in 2018 was also carried out as an online survey within the Forsa Institute's Forsa-Omninet panel. This means that there are now three measurement times with this survey method and sample.[57] Forsa-Omninet is a representative panel for the German-speaking population aged 14 and over with currently around 75,000 participants.

In order to do justice to the extensive range of questions, the 2018 survey was divided and carried out in two survey waves. A sample of around 2,000 persons was surveyed for each. The samples are identical in structure, but they are not the same persons. They are comparable in terms of sampling method and composition by gender and other socio-demographic characteristics. Two additional questions were asked in December 2018: An open question and a statement battery on the most important problems in Germany were included in a multi-topic survey conducted by Forsa-Omninet. A sample of 2,004 persons was interviewed, which is also representative of the German-speaking population aged 14 and over.

When recording socio-demographic characteristics, a third category "inter*/trans*" was included for the first time for gender in addition to the response options male and female. The linguistic wordings, on the other hand, continue to refer only to women and men, since the designations of other gender identities has not yet been finalised.

This brochure presents the central findings from both survey waves and the follow-up survey. The given answers were evaluated according to socio-demographic characteristics, including gender, age, education, size of place of residence, and Social Milieu. The evaluations mainly point out significant and notable deviations from the average.

Methodological profile of the representative surveys

- **Implementation:** Forsa-Omninet in two survey waves and a short follow-up survey with structurally identical (but not person-identical) samples
- **Population:** German-speaking persons aged 14 and over living in private households in Germany
- **Online survey:** for persons without internet access via tablet or set-top box
- **1st survey wave:** Sample size 2,021 respondents, survey period from 23 August to 5 September 2018, survey duration approx. 30 minutes
- **2nd survey wave:** Sample size 2,017 respondents, survey period from 5 to 20 September 2018, survey duration approx. 30 minutes
- **Follow-up survey:** Sample size 2,004 respondents, survey period from 14 to 21 December 2018, survey duration approx. 5 minutes

Representativeness of the samples methodically ensured

The drawing of representative samples within the framework of online surveys is often critically questioned. In view of the representativeness problems with online access panels that have not yet been conclusively resolved, Forsa-Omninet takes a special path. Forsa-Omninet panel members are recruited using a multi-stage random process based on the Telephone Master Sample of the Arbeitskreis Deutscher Marktforschungsinstitute (Working Group of German Market Research Institutes).[58] Panel members are recruited exclusively offline, i.e. by telephone. Recruitment is done within the framework of Forsa-Omnitel, Forsa's telephone multi-topic survey, which daily surveys at least 500 people aged 14 and over who have been selected as representative of the German-speaking population. Since would-be participants cannot directly apply or register on a website, participant self-selection is not possible. Forsa-Omninet includes both internet users and persons without internet access. Persons who do not otherwise use the internet are interviewed using tablets provided to the household or, during a transition period, with a set-top box for the television set.

Participants for a particular survey are randomly selected from the panel's entire pool. The random recruitment of panel participants and the inclusion of people without internet access ensures that the samples meet the requirements of representativeness. The results of the sample can thus be generalised for the population as a whole, the German-speaking residential population in private households in the Federal Republic of Germany aged 14 and over.

Application of established test methods for the analysis of specific milieus

Differences between Social Milieus are investigated in detail in the individual chapters. In order to test the results for statistical significance, the chi-squared test or the *t*-test is used.[59] A confidence interval of 95 per cent, which is usual for social-science purposes, was used as the basis. Accordingly, characteristics are interpreted as overrepresented or above average, or underrepresented or below average, if the probability for this is at least 95 per cent. In the figures and tables, over- and under-representations are marked in colour and explained in the legend.

In addition, percentage values, including in tables, are marked with an "*" if the significance level $p < .05$ and thus the probability that it is not a random difference is greater than 95 per cent. The "**" marking means that the significance level is $p < .01$ – the probability that this is not a random difference is therefore greater than 99 per cent. It should be borne in mind that the results of significance tests also depend on the size of the subgroups examined and on the distribution of the characteristic surveyed.[60] For this reason, identical percentages are interpreted differently in individual cases. Interesting, conspicuous and plausible deviations of subgroups from the average of the respondents are sometimes pointed out, even if no significance tests were calculated. In these cases, such deviations are described as "tending" or "somewhat" above or below average.

Qualitative insights in advance through intensive work in group discussions

Prior to the representative surveys, a qualitative preliminary study was carried out in the format of extensive group discussions. In the course of this qualitative study, fundamental perceptions and patterns of interpretation on the topics of the representative study were to be explored openly and exploratively in advance.

In addition to qualitative insights, the preliminary study also served to create a knowledge base in order to develop suitable question modules and wordings for the representative survey. The study was carried out with participants of both sexes, from all Social Milieus and from different age groups in order to reflect the entire spectrum of attitudes represented in the population in the qualitative study. The Institut Seickel Marktforschung (Frankfurt/Main) recruited quota-compliant participants by means of preliminary telephone interviews using a screening questionnaire.

A combination of different methods was used in the group discussions. Role playing and actor constellations were carried out in addition to open discussion rounds, written individual works and the creation of collages, and there were moderated dialogues with participants from the Federal Environment Agency and the Federal Ministry for the Environment. In terms of content, one of the aims was to find out to which different actors the participants ascribe which options for action and which responsibilities in the fields of transport, agriculture and energy.

The research team primarily used the qualitative insights to substantiate and prepare the content of the representative survey. They also played an important role in supplementing and interpreting the quantitative data. The verbatim quotes in this brochure come from the group discussions.[61]

Quantitative pre-tests for methodical preparation and validation

Two pre-tests were carried out prior to the representative surveys. The first pre-test was used to test the refined instrument on the key figures describing environmental awareness.[62] The pre-test data were subjected to an extensive test-theoretical analysis to ensure that the relevant statistical quality criteria were met. The second pre-test examined newly developed questions and statement batteries on environmental policy issues and on the priority areas of transport, agriculture and energy with regard to their practicability in the survey and their specific statistical values.

Methodological profile of the qualitative preliminary study

- Six group discussions with a duration of 3.5 to 4 hours each
- A total of 54 participants:
  26 men and 28 women,
  eight to ten persons per group,
  the six groups were divided according to Social Milieu and age:
  - **1st group:** The Traditionals, 65 years and older
  - **2nd group:** The Well-establisheds and the Critical and Creatives, 25 to 44 years old
  - **3rd group:** The Well-establisheds and the Critical and Creatives, 45 to 64 years old
  - **4th group:** The Modern Mainstream and the Precarious, 25 to 44 years old
  - **5th group:** The Modern Mainstream and the Precarious, 45 to 64 years old
  - **6th group:** Young Milieus, 16 to 25 years old
- Time and place: 16 to 23 April 2018 in Berlin

Method profile of the pre-tests

- Two online surveys carried out by Respondi, Cologne
- Quota sample: Quota according to gender, age and education
- Sample sizes: first pre-test 483 respondents, second pre-test 504 respondents
- Survey period: first pre-test: 17 to 23 May 2018, second pre-test: 6 to 13 June 2018
- Duration of the survey: about 15 minutes each

Preparation of the study in a research co-operation

The study was conceived and carried out as a joint research effort by the Institute for Ecological Economy Research (IÖW), Sociodimensions and Holzhauerei with the support of the Federal Environment Agency and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety. The Technische Universität Berlin developed the instrument for recording the key figures describing environmental awareness.

The work on this Environmental Awareness Study was accompanied by a scientific advisory board consisting of scientists from various fields of environmental and social research. The advisory board was involved in particular in the methodological preparatory work and in commenting on the questionnaires and interpreting the survey results of the Environmental Awareness Study 2018.

Study and data available online for download

The study is available, also for download, at www.umweltbundesamt.de. The website also offers all brochures with the general data published since the year 2000 as well as all in-depth scientific reports published since 2006.

The data of the two survey waves of the Environmental Awareness Study 2018 will be archived in full in the Data Archive for the Social Sciences (DAS) at the GESIS Leibniz Institute for the Social Sciences. They are available to interested researchers for secondary analyses at www.gesis.org/institut/abteilungen/datenarchiv-fuer- sozialwissenschaften.

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Annotations

1 BMUB (2016b)

2 Sociodimensions (2010)

3 Basis of these representations is the long-standing milieu research of Sociodimensions (www.sociodimensions.com [22/01/2019]) and, with regard to younger milieus, the study "Zukunft? Jugend fragen!" ["Future? Ask youth!"] (BMU 2018).

4 This question was asked in a follow-up survey in December 2018, as it could not be asked in the main survey, mainly because it would exceed the length of the survey. It was included in one of Forsa-Omninet's multi-topic surveys, which are conducted weekly by Forsa. A sample of 2,004 persons was interviewed, which was representative of the German-speaking population aged 14 and over. The sample was structurally identical, but not person-identical, to those of the main survey.

5 The list specifications were selected on the basis of experience from previous studies, a qualitative preliminary study and current priority topics. Since only fields of action that are of general importance or that are associated with central social values were recorded, the overall assessment of the relevance of all problems is naturally high. For the interpretation of the results, only the responses "very important" are used; the less meaningful scale points (somewhat important, somewhat not important, not important at all) are not taken into account.

6 In 2014, the survey was changed from personal interviews to an online survey on Forsa-Omninet and the samples of persons aged 18 and over were changed to persons aged 14 and over. This change may be partly responsible for changes in the values between 2012 and 2014 (see also Chapter 8).

7 This sum of eight per cent results from the 1.4 per cent approval of "enough" and 6.4 per cent of "somewhat enough". Deviations from the figures of Figure 8 are due to rounding.

8 In 2014, the survey was changed from personal interviews to an online survey on Forsa-Omninet and the samples of persons aged 18 and over were changed to persons aged 14 and over. This change may be partly responsible for changes in the values between 2012 and 2014. However, clear leaps can only be seen in the responses to the federal government and the citizens, which suggests that the influence of methods and random samples can be regarded as small.

9 Representative of this is Greta Thunberg's statement "I want you to panic", which the 16-year-old Swedish environmental activist said to (mostly older) top managers in Davos in January 2019. https://meta.tagesschau.de/id/140669/klima-appell-in-davos-ich-will- dass-ihr-in-panik-geratet (29/01/2019).

10 UBA (2018c: 7)

11 BMWi (2019: 64ff)

12 BMWi (2016: 163)

13 A large part of this reduction is due to the collapse of the East German industry. Energy-related greenhouse gas emissions from transport rose slightly by about 2.2 per cent between 1990 and 2016 (UBA 2019: 21 ff).

14 In 2017, industrial processes, agriculture and waste management accounted for 15.5 per cent of total economic greenhouse gas emissions in Germany (UBA 2019: 56).

15 Social Sustainability Barometer for the energy transition (IASS 2019: 8). According to the survey, 90 per cent of those questioned are in favour of the energy transition, across all education, income and age groups, as well as in rural and urban areas.

16 Ethik-Kommission Sichere Energieversorgung [Ethics Committee on Secure Energy Supply] (2011: 20)

17 A total of 1,080 respondents stated that their main residence is an owner-occupied flat or house; 888 respondents stated that their main residence is a rented flat or house; 49 respondents did not provide any information on their housing situation.

18 See also the time series of the Nature Awareness Study since 2011 (BMU/BfN 2018: 30).

19 On the Climate Protection Plan 2050: BMUB (2016a: 62)

20 BMEL (2018a: in particular 7, 12, 15), BMEL (2018b) and BMEL (2018d: in particular 9)

21 UBA (2018a) as well as UBA (2017b) and Heißenhuber et al. (2015), BMEL (2018a: in particular 7, 12, 15), BMEL (2018b) and BMEL (2018d: in particular 9)

22 UBA (2018a: 16 to 18)

23 Current data www.bmel.de/DE/Landwirtschaft/Nachhaltige-Landnutzung/Oekolandbau/_Texts/OekologischerLandbauDeutschland.html?nn=309814 (19/03/2019)

24 Other representative surveys also indicate that the population is very concerned about the effects of agriculture, see for example the Nature Awareness Study (BMUB/BfN 2016: 32 to 33).

25 This questionnaire is based on the Eurobarometer 440 survey on the Common Agricultural Policy (CAP), with slight modifications (European Commission 2016: 13). There, too, the most important tasks were considered to be: first, provide the population with a variety of high-quality products; second, ensure the welfare of farm animals; third, protect the environment.

26 Nevertheless, many people are keen to ensure that food remains affordable. The relevance of low-cost foods may be somewhat underestimated in this survey for methodological reasons, as only the three most important ones are be selected from the numerous tasks of agriculture. In the nutrition report (BMEL 2019: 6ff.), respondents were asked to indicate how important various aspects of food (in general) are to them, without direct reference to agriculture. The fact that food is inexpensive was (very) important to 32 per cent of participants.

27 How the commitment of farmers or state governments to environmental protection and climate action in general is assessed was not surveyed.

28 UBA (2017a: 22ff.)

29 For data on the frequency of purchases of organic food and consumption of meat, see Figure 38. However, the changed wordings of questions and different response categories limit comparability with earlier Environmental Awareness Studies.

30 As in vitro meat is not generally known, the following information text was provided before the questions: "'In vitro meat' means muscle meat grown in the laboratory for human consumption. Animal cells are removed from an animal painlessly and without killing it. These cells then grow into larger pieces of meat in a nutrient solution in the laboratory. This makes it possible to obtain meat suitable for human consumption without having to rear and then kill entire animals. This product is not yet available from food retailers, but it could be ready for the market in two to three years."

31 Only seven per cent of the population buy directly from the farmer/farm shop, only nine per cent from a market (BMEL 2018c: 21).

32 According to information from the BMEL (2018a: 8), the average amount of agricultural subsidies paid out to German agricultural enterprises under the Common Agricultural Policy in the 2016/2017 financial year amounts to EUR 289 of direct payments per hectare and EUR 119 of other payments per hectare (including for agri-environmental and agri-climate programmes). This amounts to an average of 33,817 euros per farm in total. UBA (2018b) provides an overview of the debates on the forthcoming reform of the Common Agricultural Policy.

33 UBA (2017b: 22)

34 Ibid: 98

35 BMVI (2018: 6)

36 Data on commuting www.bbsr.bund.de/BBSR/DE/Home/Topthemen/2017-pendeln.html (24/01/2019)

37 BMUB (2016a: 51)

38 The study "Mobility in Germany" (MiD) covers the "normal use of means of transport" with somewhat different frequency categories. Despite the methodological differences, the results concluded are approximately the same: motor vehicle 76 per cent, walking 68 per cent, bicycle 35 per cent and public transport 23 per cent – each "daily" or "almost daily" use and "on 1–3 days per week" aggregated (BMVI 2018: 15). In addition, the possession of means of transport in the household, the use of public transport passes and the so-called modal split in percentages of routes and percentages of kilometres travelled are surveyed there (ibid.: 11 to 13).

39 Walking can be accompanied by the use of other means of transport, such as walking to a car or to a public transport stop.

40 These trends are also confirmed by the study "Mobility in Germany". This study also found: "The bicycle is not only increasing in its percentage, but above all in the transport performance it provides. It is not only used more frequently, but also for further distances" (BMVI 2018: 6). Compared to 2008, the study found an increase of 20 per cent in the number of kilometres travelled. For local public transport, it states: "Public transport is growing, especially in volume. There, it has increased by a quarter compared to 2008" (ibid: 15).

41 A study by the pro-rail group "Allianz pro Schiene" (2018) based on evaluations by the Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) comes to the conclusion that there are significant differences between the individual federal states.

42 Enjoyment as a reason for using public transport was not surveyed as this was not considered to be a relevant motive in this context. Instead, the reason for use was asked here as an equivalent to enjoyment, in the sense of "personally satisfying": "I can do other things during the journey, such as reading or working."

43 SRU (1978)

44 The feasibility study by Scholl et al. (2016: 38 to 42) presents the relevant definitions, including SRU (1978: 445).

45 Alternatively, one could also draw conclusions about people's environmental awareness by observing them or by measuring, for example, their electricity consumption using their electricity meter. The measurement of environmental awareness in this survey is based on survey data.

46 Geiger (in press) describes the further development of the measurement of environmental awareness sketched by Scholl et al. (2016) according to content and methodological principles using key figures. This was based on a classic three-part model of attitude (for example, Ealy and Chaiken 2011, Spada 1990).

47 The response options had several grades: For statements on the affective and cognitive components there were four grades (Degree of agreement) (see Figure 37), on the conative component six (frequency data) or two (yes/no) (see Figure 38).

48 The mean scale value for each subsection was calculated as the arithmetic mean of the individual questions surveyed (equal weighting of all questions). The values were then standardised so that a maximum value of 10 could be reached.

49 The affective and cognitive sub-areas can only be compared indirectly with the conative component, since the query was made on different scales (agreement vs. frequency).

50 The measure of a correlation between two variables can vary from zero to one. Zero means that there is no correlation, one indicates a perfect correlation. In social science research, a value of 0.5 or more is referred to as a strong correlation.

51 t [affective component] = 11.5, p <.001; t [cognitive component] = 10.8, p < .001, t [conative component] = 6.5, p < .001

52 See also the study by Kleinhückelkotten et al. (2016).

53 As defined in the journal "Aus Politik und Zeitgeschichte" (Belwe 2006), see also Hradil (2006).

54 Schipperges (2001)

55 For the model see Sociodimensions (2010). In order to determine the respondents' affiliation to a Social Milieu, certain questions were asked in both survey waves of the representative study; based on the response patterns, the respondents were then assigned to a milieu.

56 The basis was the study "Zukunft? Jugend fragen!" (BMU 2018), which was carried out by the Institute for Ecological Economy Research, Holzhauerei and Sociodimensions on behalf of the Federal Ministry for the Environment and has provided new insights into young people's living environments.

57 In the earlier Environmental Awareness Studies up to and including 2012, data collection was carried out with personal interviews in the presence of an interviewer at the interviewee's home; only persons aged 18 and over were interviewed. The following surveys from 2014 onwards were carried out through online questionnaires of samples aged 14 and over. With regard to the comparability of the values with the previous studies, this method change must be taken into account from 2014.

58 The master samples of the Arbeitskreis Deutscher Marktforschungsinstitute are standardised systems for drawing representative samples in Germany. The procedures were developed for oral interviews and telephone interviews, see www.adm-ev.de/leistungen/arbeitsgemeinschaft-adm-stichproben (26/04/2019). A detailed description can be found in ADM (2014).

59 Sedlmeier (2013)

60 Janssen and Laatz (2010: 276)

61 The literal quotations were slightly adapted to the written language in order to increase readability.

62 See Chapter 6 as well as Geiger (in press).

List of abbreviations

ADAC	Allgemeiner Deutscher Automobil-Club e.V. (German Automotive Club)
ADM	Working Group of German Market and Social Research Institutes
BBSR	Federal Institute for Research on Building, Urban Affairs and Spatial Development
BMEL	Federal Ministry of Food and Agriculture
BMU	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
BMUB	Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety
BMVI	Federal Ministry of Transport and Digital Infrastructure
BMWi	Federal Ministry for Economic Affairs and Energy
CO_2	Carbon dioxide
EU	European Union
CAP	Common Agricultural Policy of the European Union
IÖW	Institute for Ecological Economy Research
MiD	Mobility in Germany (study)
p	For significance tests, the probability of obtaining a corresponding sample result (or a more extreme one) if the null hypothesis is true and a difference observed in the sample between two groups might have arisen randomly
r	Correlation coefficient
SRU	German Advisory Council on the Environment
t	Test value for *t*-tests (= significance tests)
UBA	Federal Environment Agency

www.bmu.de/english