

# Summary

## Climate change mitigation: choices that will shape the future of our society

The energy transition from the perspective of the citizen

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## Summary and discussion

The coming decades will be dominated by the transition to a more sustainable and climate-neutral society. This transition will be accompanied by major changes in society which will ultimately affect every citizen in the Netherlands. To arrive at a situation where the risks of climate change are kept at an acceptable level, the Netherlands is seeking to move away from an energy supply based on burning fossil fuels to a zero-emissions energy system. The ability to achieve this within the envisaged timeframe will depend partly on the active involvement of citizens.

This study outlines how the theme of climate change and climate change mitigation is perceived in Dutch society, describes differences in the types of concerns, dissatisfaction and opinions on the associated financial costs and the cost distribution between different actors, and sheds light on the characteristics which underpin the differences between those groups. These insights deepen our understanding of perceived concern, (dis)satisfaction and perceived distributive (in)justice in Dutch society. In this chapter we reflect on our findings and discuss a number of insights gained that are relevant for policy. We also identify a number of points which are important for policy development and implementation.

### S.1 Aim, content and approach

The aim of this study is to shed more light on public attitudes to the broader theme of climate and climate measures in the Netherlands. We map the opinions of the Dutch public on the climate issue in a variety of ways. First, we look at opinions on climate change itself: views on human influence on the climate (anthropogenic climate change), concerns about the impact of climate change and the possibility of avoiding that impact. In addition, we explore the perceived importance of measures to combat climate change and the roles and responsibilities which Dutch citizens see here for the government, the business community and their own households. We also look at aspects of dissatisfaction in relation to this theme.

We then turn our attention to opinions on climate change mitigation measures. How much support is there for specific types of measures? To what extent are people concerned that these measures will not be sufficient to resolve the climate problem, and about the impact of climate measures on their cost of living and way of life? To what extent do people perceive distributive justice with respect to climate change mitigation cost, and what expectations do they have for the future impacts of the energy transition (what do citizens believe will change for the better and for the worse)?

We explore how strongly held the various opinions are and how broadly they are shared across Dutch society. This gives us an impression of where these opinions are widely distributed or concentrated in relatively small groups, and where opinions are more and less pronounced. This gives us a clearer picture of the key focus areas in relation to the broader

theme of climate and climate measures in Dutch society, seen from the perspective of the citizen.

Finally, we look at opinions about the climate in Dutch society through three specific lenses: 1) concerns about climate change and climate mitigation measures; 2) dissatisfaction; and 3) costs and cost distribution. We analyse a set of opinions that are characteristic for each of these three lenses, and identify groups which show correspondences in their views, using latent class analysis (LCA). We then examine how these groups differ from each other in terms of sociodemographic characteristics. These insights offer pointers and focus areas for the broader climate policy.

For this study we draw on data from the 2019 Energy Transition Survey (Verkenning Energie Transitie – VET'19). These data were collected using a questionnaire developed by the Netherlands Institute for Social Research (SCP) and administered online by CentERdata among a sample of 3,480 participants in the LISS panel<sup>1</sup> (aged 18 years and older, one person per household; 2,384 respondents). During the summer and autumn of 2020, a few questions were repeated.

## S.2 Climate change and climate measures from a citizen perspective

### S.2.1 Widespread concern about climate change and dissatisfaction with the approach to mitigation

#### The climate problem is clearly on people's radar

The percentage of people who believe that the climate is changing due to human action has grown strongly over the last decade, from just 43% endorsing the notion of anthropogenic climate change in 2010 (Den Ridder & Dekker 2010), to over three-quarters in mid-2019; a comparable percentage are concerned about this. People are less concerned about the impact on their own lives ('here and now') than about the impact on nature and the environment, the lives of future generations ('later') and the lives of people worldwide ('elsewhere'). This increasing climate awareness over the last decade may be due in part to the fact that the topic is increasingly penetrating into people's personal lives in various ways – not just because of the attention for climate policy which has acquired an ever more emphatic place on the political agenda in recent years, but possibly also because of the weather records seen in the last decade; more than half the respondents in our study feel that the weather has changed noticeably due to climate change. And although the share of people who are concerned about the consequences for 'elsewhere' and 'later' (more than three-quarters) is greater than the share who are concerned about the impact on their own lives (just under two-thirds), it is still the case that a majority are concerned about the latter impact. The fact that the theme also appears to be affecting people in the 'here and now' could be reducing its psychological distance and leading to an increase in concerns as a result.

There is a reasonably widely shared sense of urgency regarding the need for (global) action, with a majority (around two-thirds) expressing some agreement with the statement:

‘Humankind must take action as quickly as possible to combat climate change, otherwise it will be too late.’ There is thus no lack of public awareness of the problem.

### Confidence in avoidability relatively low; perceived importance of climate action relatively high

The group of people that believe that severe consequences of climate change can no longer be avoided (just over four out of ten) is slightly greater than the group of people that believe they can be avoided (roughly three out of ten). Just under half believe that science and technology will resolve the impact of climate change. Both optimism and pessimism about the ability to solve climate problems could potentially be a barrier to support for active intervention, for example because of the assumption that technological progress will ultimately offer solutions, or, conversely, based on the reasoning that there is ‘nothing more that can be done about it anyway’. We were not able to pursue this topic further in this survey, though we did find that people attach a relatively high level of importance to the climate issue. People also think about future generations: roughly half the respondents feel that today’s society is doing too little about climate change, and that problems are therefore being stored up for future generations. And as earlier research has shown (Scholte et al. 2020), there is broad endorsement of the importance of the energy transition, energy conservation (both more than three-quarters of respondents) and changing our lifestyles in order to combat climate change (around seven out of ten people). In short, the belief that climate change is happening, some degree of concern about this and the perceived importance and urgency of the issue at the heart of climate policy – the energy transition – are all broadly shared.

### Possible tension around roles and responsibilities

Yet there appears to be a tension between this broadly felt threat, the perceived urgency of the need for global action and the public support for general energy transition goals on the one hand, and the role that the Netherlands or Dutch citizens should play in tackling the climate problem. Given the perceived importance and urgency of climate action and the energy transition as highlighted above, it seems somewhat paradoxical that a proportion of Dutch citizens believe there is actually *too much* attention for combating climate change (more than four out of ten people feel this). That is a slightly higher proportion than those who feel that there is too little attention for this topic.<sup>2</sup> Although these two groups differ in terms of the perceived importance and urgency of the issue, this by no means implies that the first group believe that tackling climate change is unimportant. In fact, a large majority of this group, too, believe it is important to change our lifestyles, save energy and make the transition to green energy in order to combat climate change. The main difference between the two groups lies in the extent to which people feel that their own household has a responsibility to contribute to solving the problem (approximately four out of ten versus more than three-quarters). A large majority in both groups believe that major corporations need to shoulder their responsibility. In the population as a whole, we find a widespread feeling that large companies and the government ought to take responsibility

for combating climate change, and regard these institutions as the best placed to do this. A majority think that large companies, in particular, are still doing too little and also feel that they are relatively unwilling to take action. There is less consensus about people's own role and responsibility, although here too a small majority believe that their own household has a role to play and a responsibility to shoulder: more than half of respondents think this. This also appears to translate into behavioural intentions: more than half the respondents reflect on what they can do in their daily lives to combat climate change. The findings also suggest that some people see possibilities to do more: a third feel that their own household is already doing enough, but a similar proportion – just under a third – feel this is not yet the case. There does appear to be some consensus that it can be worthwhile people making their own contribution to combating climate change (two-thirds believe this can be meaningful).

### Climate opinions and the Covid crisis

The Covid crisis caused a shift in the public perception of societal problems. In the 'Citizens' Outlook Barometer' (Continu Onderzoek Burgerperspectieven – COB),<sup>3</sup> we see that in mid-2020 the themes of society, immigration and integration and environment and climate have all been pushed to the background somewhat, while the topic of health and care scores highly in the national problem awareness and is the most frequently cited example of the 'biggest problem facing the Netherlands at this time' (Dekker et al. 2020). The same survey also shows that when people are asked to share their thoughts about the future, the climate and environment are mentioned more often than when the question is focused on the present time.

Determining whether the coronavirus crisis has had a (temporary or permanent) influence on the perceived importance of climate action, and if so, how, is something that will require further research. But in this study, at least, we found no indications for a decrease in people's willingness to do something about climate change themselves: in two surveys carried out during the Covid crisis (July and October 2020), a number of questions were resubmitted to a group of respondents about how important they felt it was to change their lifestyles in order to combat climate change (in a general sense), and also about their own willingness to do this. The results showed no reduction during the Covid crisis in the high proportion of people who believe it is important to change our lifestyles in order to combat climate change: over three-quarters of respondents at all three survey moments endorsed the importance of this (in mid-2019 and in the two surveys in 2020). The share of people who are not opposed to the notion of adapting their own lifestyle to help the climate was also comparable during the Covid crisis (July 2020), at more than half.

### Dissatisfaction with level of involvement: a sense that climate measures are being imposed on the public

The climate is an issue which has increasingly figured in the public debate in recent years. Den Ridder et al. (2019) concluded on the basis of the COB that the climate debate is in full swing. We have for some time been seeing a growing number of people adopting a stand-

point towards climate and climate policy. In this study we shed light on several indicators of experienced dissatisfaction. A substantial proportion of people (four out of ten) report a feeling that ‘a small group of Dutch people are forcing climate measures on the rest’. A contributory factor here could be that many citizens feel they have had little involvement in the formulation of the Dutch strategy for tackling climate change. Earlier findings call for a reflection on the (active) involvement of citizens in climate policy. The Climate Agreement states that widespread active involvement of citizens is essential if the policy is to succeed. In preparation for the Climate Agreement, a number of meetings were held in which members of the public were able to share their views; citizens were asked via a website to put forward plans, ideas, suggestions and questions, and a number of organisations also represented the interests of citizens (including trade unions, the Woonbond tenants’ rights association, the Dutch homeowners’ association (Vereniging Eigen Huis), and the Youth Climate Movement (Jonge Klimaatbeweging)). Despite this, it has been observed that public interests were generally less well represented (Adviescommissie Burgerbetrokkenheid bij klimaatbeleid 2021). The calls for greater involvement of citizens in these deliberation processes have been growing for a number of years. The Advisory Committee on citizen involvement in climate policy, chaired by Alex Brenninkmeijer, recently published a report on the use of civic forums as a means of involving citizens in the design and implementation of climate and energy policy, following a motion in parliament tabled by the MP Anne Mulder (TK 2020/2021). To what extent such an approach will help give citizens a voice and lead to better policy, and ultimately to greater acceptance of policy, remains to be seen. It will depend in part on how the scheme is rolled out in practice and the degree to which a number of necessary conditions are met (see also Adviescommissie Burgerbetrokkenheid bij klimaatbeleid 2021). Those conditions broadly relate to *who* is able to participate, *when*, *about what* and *in what way*, *what* is subsequently done with the input of citizens, and *how* the link to the wider public is subsequently made.

The dissatisfaction among some Dutch citizens regarding the limited involvement (or at least the sense of having climate measures forced upon them) does not automatically mean that people are also willing or able to play an active part in the decision-making process. That will depend among other things on what form citizen involvement takes, their personal interest in and engagement with this topic, the time they have available alongside other commitments (e.g. work and care tasks), and the extent to which other problems in the lives of individual citizens demand their attention (e.g. their own physical or mental health or that of loved ones, financial worries and/or concerns in the relational sphere). People are expected to provide input in numerous policy domains, whether it be sport, culture, education, the neighbourhood, vulnerable groups, the configuration of the public space or the energy transition. In short, there is more going on in people’s lives than just climate policy, and what is demanded of citizens must be realistic and achievable.

## Dissatisfaction regarding the perceived 'restrictive nature' of environmental and climate measures

A substantial share of people (around four in ten) also appear to feel their freedoms are being curbed to some extent by the debates about the environment and climate. They sometimes have the feeling that 'they aren't allowed to enjoy anything anymore because of all the debates about the environment and climate'. This might be explained in part by the fact that the emphasis in the last decade has frequently been placed on (behavioural) restrictions (driving *less*, flying *less*, eating *less* meat, having *fewer* hot showers, using *less* energy), rather than on *more*, *different* or *better*. This has also become something that can no longer be seen entirely separately from the restrictions that have been imposed in a bid to contain the spread of the coronavirus, raising the question of whether people might perhaps be feeling (even) more resistant to restrictions to help the environment and climate. Offering a more positive, appealing perspective, with attention for the impact of measures on the quality of life of different groups of citizens, might perhaps help here. It may also be that valuable lessons can be drawn from initiatives emanating from society itself. What are successful examples from practice? What can incentivise others to do the same? What are the barriers for different groups? How can obstacles to desired behaviour/initiative be removed? What is needed to achieve this? In short, how can serious efforts be made to facilitate and scale up promising initiatives? Embracing initiatives from society more enthusiastically might also create scope for different groups to contribute in a way that is appropriate for them.

## Dissatisfaction regarding prioritisation

All in all, the picture that emerges is that a combination of factors play a role in determining dissatisfaction about the attention for climate change and its mitigation. It is plausible that the groups who feel dissatisfied about the attention given to climate change mitigation also face other problems which are more pertinent for them. This suggestion is underlined by the finding that more than a quarter of respondents report feeling some 'anger about all the attention given to the climate, whereas there are more important problems' which demand attention. This could be a reference to concerns about other problems in the Netherlands which citizens regard as important: themes such as society, health & care, income & economy and immigration & integration all score highly in the national problem awareness rankings, for example (Dekker et al. 2020).<sup>4</sup> If no attention is given to these (other) problems, this could lead to dissatisfaction, especially if measures affect citizens. The findings also suggest that there is (or could be) friction when it comes to perceived roles and responsibilities. There is a general sense that large corporations and the government are best placed to do something about the problem, whereas in the eyes of citizens, large companies, in particular, are currently doing (too) little. This also impinges on people's perceived sense of (un)fairness. We will explore this in more detail later in this discussion.

### Dissatisfaction regarding attitudes or behaviour of others

While a substantial proportion of respondents (roughly two-thirds) occasionally feel annoyed about people who take no account at all of the environment, climate and sustainability, there is also a large share (around four out of ten) who occasionally feel annoyed by people who devote a great deal of attention to those topics. This may suggest that there is yet no clear common social norm regarding roles and responsibilities in relation to climate-friendly behaviour. The current campaign ‘Everyone does their bit’ (‘Iedereen doet wat’) touches upon the establishment of the social norm that everyone makes a contribution, in whatever form. It will take some time before the long-term effect becomes apparent and whether more direction may be given.

### 5.2.2 Support for specific climate measures and concerns about their impact

#### Difference in support for ‘stick’ or ‘carrot’; strong support for taxing companies.

As regards the different climate measures we submitted to respondents – (subsidies for) gas-free housing, subsidies for electric vehicles, subsidies/taxes for companies (to reduce the use of fossil energy), taxes on flying and on meat, reducing the maximum speed limit on the roads – most support was found for subsidies to help citizens make their homes more sustainable (around eight out of ten), closely followed by raising the taxes on companies which use lots of fossil fuels (almost three-quarters). We also found more support for measures which reward certain behaviours (‘pull measures’) than for measures which penalise certain behaviour (‘push measures’). However, in some cases the differences are not large. For example, subsidies to help with the purchase of an electric vehicle receive virtually no more support (almost six out of ten respondents) than a tax on flying (roughly half support this to some degree). The support for taxing companies which use lots of fossil energy (push measure) is greater than the support for subsidies (pull measure) for companies to reduce their use of fossil fuels. The support for taxing companies is also substantially higher than the support for taxing citizens (for example by raising the price of flight tickets). We can only speculate about possible explanations. It may be that people adopt more negative attitudes to measures which affect themselves, but the relatively high degree of support for taxing companies may also be partly explained by a perceived imbalance in the roles and responsibilities (large companies assume too little responsibility in the eyes of citizens). To what extent such mechanisms play a role is a question for future research. Perceived fairness may also be a factor; we will explore this later in this discussion.

#### Concerns about impact of measures on cost of living

Concerns about the impact of climate measures are broadly shared. Those concerns relate both to the effectiveness of measures (‘Are these measures enough to solve the climate problem?’) and to their impact on cost of living (‘Will these measures make my life more expensive?’). Around three-quarters of respondents are (at least slightly) concerned that the climate measures will be insufficient to solve the climate problem. Roughly the same



proportion are (at least slightly) concerned that climate measures will make their lives more expensive or make it (more) difficult for them to pay their energy bills. The share of people who have concerns about the impact of climate measures on their way of life is rather smaller, but still accounts for roughly half of respondents.

The widely shared concerns about both the impact on cost of living and the adequacy of climate measures to solve the climate problem suggest that we are looking not so much at a broadly shared desire to reduce the efforts to mitigate climate change, but rather at concerns about the consequences of the form those efforts currently take (and fears that the costs will increase if more stringent policy becomes necessary, which could become problematic for an even bigger share of the population). The finding that the concerns about the impact of climate measures on cost of living are so broadly shared among Dutch citizens, and that a substantial proportion of them (over a third) are very or extremely concerned that the measures will make their lives more expensive, is an important signal in this context. The (actual and perceived) impact of climate measures on the affordability of citizens' living costs are a key focus area for policy. Kate Raworth, the British economist and author of the book *Doughnut Economics* (2017), describes two rings of that 'doughnut': an upper boundary, which she refers to as the 'ecological ceiling' (what is the most that can be achieved within the limits of the ecosystem, bearing in mind the needs of future generations?) and a lower limit, or 'social foundation' (what is needed to meet the basic needs of people on earth?). She calls for an approach to tackling the environmental and climate challenges which takes account of basic needs, for both environmental and social quality. The challenge of sustainability impinges on the elements of quality of life 'beyond gdp' ('brede welvaart')(income and job security, access to housing, energy, food and health/care). People who have more difficulty making ends meet financially are extra vulnerable to further deterioration. We will discuss this in more detail later.

### Citizens expect the energy transition to lead to a deterioration in their financial position and to an increase in inequality

It is interesting in this context to look at people's expectations for the future as regards the energy transition. Where do citizens expect to see improvements? Where do they expect to see a deterioration? Our study shows that expectations regarding the impact on the quality of the residential and broader living environment are the most positive, relatively speaking (more than half of respondents expect to see improvements for nature and the environment and in the quality of the Dutch housing stock). The share of people expecting an improvement in the quality of their own home, living environment and the landscape (more than four out of ten), and in the Dutch economy (three out of ten) is smaller, but still larger than the share of people who expect to see a deterioration in these areas. The picture is quite different when it comes to Dutch citizens' expectations regarding the change in their own and others' financial situation, with substantially more people expecting a deterioration than an improvement. Just under half expect an increase in poverty in the Netherlands, while only a very small group (fewer than one in ten) think there will be a

reduction in poverty. A majority (almost two-thirds) also expect the gap between rich and poor in the Netherlands to widen as a result of the energy transition.

While the economic importance of and opportunities presented by the energy transition are emphasised in several circles, among Dutch citizens there is no broadly shared sense that they will share in the benefits, at least not financially. There are calls for action on climate to go hand in hand with improvements in other areas of quality of life by establishing links between societal missions, for example in the areas of housing, employment and economic renewal (Alkemade et al. 2018; Jennings et al. 2020; Raspe et al. 2019; Visser & Uytterlinde 2019). The Covid crisis has reinforced this desire to an integrated approach to addressing societal needs in a coherent way: building a 'green' recovery from the crisis is an important motto, both nationally (RLi 2020; SCP et al. 2020; SER 2020; Verwest et al. 2020) and internationally (European Commission 2020; OECD 2020). However, our study shows that the appealing prospect of a win-win situation in relation to tackling climate change is not yet broadly shared within society. In short, while the energy transition has been identified as an opportunity for the economy and employment, we do not find that this is yet clearly reflected in the perception of citizens: in general, they do not expect to derive any financial benefit, and in fact, more than half of citizens expect to see their own financial situation deteriorate, while only a small minority (roughly one in ten) expect an improvement. Finding ways to turn these expectations more positive and enabling citizens to share more in the financial benefits of the transition is perhaps one of the most important policy challenges.

The group who expect the energy transition to lead to an increase in inequality do not by definition regard this transition or the urgency of the need to tackle climate change as unimportant. In fact, this group differs only marginally on this point from those who expect a reduction in inequality. The former group do however feel (even) more strongly that large corporations must take responsibility – though this does not automatically mean that they believe their own household should take *less* responsibility than those who expect a decrease in inequality (there is little difference between the two groups on that point).

### Perceived injustice in distribution of costs of climate change abatement

Many people feel that the costs of climate measures are not fairly distributed between citizens and businesses and between rich and poor. The former appears to be a particular bone of contention: almost two-thirds of respondents feel that the costs of tackling climate change are unfairly distributed between citizens and companies, with only a small proportion (fewer than one in five) feeling that these costs are distributed fairly. This could be problematic in securing public support for specific measures in which the government expects a substantial involvement of citizens. Perceived injustice and a perception by citizens that large corporations are the best-placed to do something about climate change (but currently do too little) may help explain partly why there is more support for taxing companies which use a lot of fossil energy than for subsidising businesses to reduce their consumption of energy derived from fossil fuels.

Although the share of people who feel that the costs of tackling climate change are unfairly distributed between rich and poor people in the Netherlands is smaller (less than half) than we found regarding the distribution between citizens and businesses, it is still substantially larger than the share of people who believe that these costs are distributed fairly (less than a quarter). It might be that this perceived unfairness in the distribution of costs between rich and poor is concentrated mainly among the less affluent members of the population. Steenbekkers et al. (2021) observed that certain policy instruments resonate better in practice with more affluent than less affluent citizens. For example, less affluent citizens are often not eligible for grants or loans to make their homes more sustainable, because they do not possess the necessary funds of their own to invest in these improvements. This can have the unintended consequence that rising energy costs fall particularly hard on precisely this group, for example if their homes are less well insulated and they are unable to make the necessary investments in energy-saving measures, or if they lack the resources to invest in solar panels and are therefore unable to reap the benefits of self-generated energy and lower energy bills.

### 5.3 Findings differ between groups

#### Differences in concerns felt by different groups – climate change and climate policy

If we combine the *type* and *degree* of people's concerns, we are able to identify five distinct groups (latent classes): 1) concerned about costs; 2) unconcerned; 3) middle group; 4) concerned about both climate and climate measures; and 5) concerned about the climate.

The moderate middle group is the largest (comprising around four out of ten respondents), followed by those concerned about the climate (just over two out of ten). The group who are only concerned about the consequences (mainly the costs) of measures is the smallest (less than one in ten).

While the first group tend to be concerned about the consequences of climate measures, and in particular the impact on their cost of living, the fifth group tend to worry about the impact of climate change and the efficacy of the measures being taken to solve the problem. The second group are relatively unconcerned in general (both about the climate and the impact of climate measures), while the fourth group are concerned about both. The middle group are neither particularly concerned nor particularly unconcerned about either climate change or abatement measures. This finding again illustrates that the group who are not concerned about climate change but who are mainly worried about the costs of climate policy is very small. This does not however imply that paying attention to the concerns and needs of this group is any less relevant. It is reasonable to assume that there are real concerns in this group which warrant attention, as our analyses also appear to suggest. People's financial situation, in particular, is a key predictor. People who have (great) difficulty making ends meet relatively often occur in the group who are concerned about the costs.<sup>5</sup> However, they also appear relatively frequently in the group who are concerned about both the impact of climate change and mitigation measures. This supports the idea that people's financial position is related to concerns about the impact of climate policy on

cost of living, but also frequently goes hand in hand with concerns about the impact of climate change. The degree to which people feel they are able to keep pace with the changes may also play a role.

### Differences between groups in feelings of satisfaction – climate change and climate policy

If we look at public attitudes to climate through the lens of dissatisfaction, three groups emerge which differ in the type of dissatisfaction they feel and the extent to which they feel it. We find one group who are relatively strongly focused on climate change (roughly a third of respondents), a broad middle group who experience little dissatisfaction and appear to take a relatively positive stance towards climate policy (between four and five out of ten respondents), and a group who experience relatively high levels of dissatisfaction around the topic of climate action (around a fifth).

The middle group record a fairly neutral average score on the indicators for dissatisfaction. There is thus relatively little dissatisfaction in this large middle group, and people do not appear averse to changing their own lifestyle in order to combat climate change. Yet this group, too, tend (on average) slightly towards the feeling that climate measures are being forced upon them. We can only speculate about the reason for these feelings. They may be related to a sense of being largely left out of the process of making policy choices; or it may be that people feel critical about the choices being made, as we have also seen in our focus group study on the transition towards natural gas-free housing. The feeling that climate change abatement measures are being forced on citizens may be problematic for a theme where the government will be asking for active participation by citizens over the coming decades and will need their commitment in order to achieve the envisaged policy goals. The group who are dissatisfied relatively often agree with the statement: ‘I have the feeling that a small group of people are forcing climate measures on the rest’, and this group also score highly on virtually all other indicators of dissatisfaction. The self-reported anger about the perceived excessive attention given to the climate compared with other problems may indicate an underlying need to address other issues that are important for this group.

Once again we find a strong correlation between these feelings and people’s own financial situation, alongside education level, gender and age. People who have (great) difficulty making ends meet occur in the group where dissatisfaction is high substantially more often than people who find it (very) easy to make ends meet. By contrast, people who find it (very) easy to make ends meet are relatively often found in the more ‘environment and climate-focused’ group, where dissatisfaction is low. Attention for groups who are financially vulnerable is important. One challenge here is to ensure that climate measures do not appeal only to the most affluent citizens, whilst imposing (extra) worries on the less affluent, on top of their existing financial and other concerns. Seeking ways of removing barriers to participation by groups who have fewer resources is one of the key policy challenges in this regard.

### Differences between groups in views to costs and distribution of costs

If we look at citizens' views to combating climate change through the lens of costs and cost distribution, four more or less distinct groups emerge. The main differences between these groups are whether they regard the financial consequences as negative or positive (concerns about costs, perceived injustice in the distribution of costs, negative expectations for their own and others' financial situation, and the difference between rich and poor). Only a very small group (5% of respondents) believe that the energy transition will have a positive impact on the future financial situation. It is striking that all groups score low to very low on average for perceived fairness, especially as regards the distribution of the costs of combating climate change between citizens and companies. All groups also expect, to a greater or lesser extent, that poverty and the gap between rich and poor in the Netherlands will widen due to the energy transition. In short, this analysis reveals citizens' predominantly negative expectations about the impact on cost of living, their future financial situation and growing inequality as a result of the energy transition and the perceived (distributive) injustice in combating climate change.

Once again we find a strong relationship between these feelings and people's own financial situation (ability to manage financially and household income), alongside age, education level and degree of urbanisation. People who have (great) difficulty making ends meet are relatively often found in the two groups in which negative expectations about the financial impact of the energy transition and climate measures are strongest. The perceived distributive injustice is highest on average in these two groups, as is the expectation that poverty and the gap between rich and poor in the Netherlands will increase. These two groups also have the biggest concerns about the impact of climate measures on their own financial situation (and that of others) and on their cost of living and the affordability of their energy bills. It is also striking that people who find it neither difficult nor easy to make ends meet are also relatively often found in these groups. This suggests that there are also concerns in the groups who are currently able to manage reasonably well financially. This not only poses a risk for the support for climate measures which place demands on citizens' financial capacity, but also highlights the need for attention for the distribution of the costs and benefits.

It is perhaps not surprising in itself that the type of concerns people have in relation to the costs and cost distribution of climate policy are related to their financial situation. It is clear that attention is needed for the position of people who have more difficulty making ends meet, though it is important to guard against the focus of the discussion becoming narrowed to the financial differences alone. Earlier scp research has for example shown that there is a relationship between the degree to which different groups in society have access to economic capital and other forms of capital (social, cultural and person capital) (Vrooman et al. 2014). This could give rise to an accumulation of problems in certain groups in society. The 'Social State of the Netherlands 2019' report (*De sociale staat van Nederland 2019*) shows that – although the subjective satisfaction of the Dutch with their own lives is relatively high on average – there are wide (and fairly stubborn) differences in quality of life between different groups in the population. Groups who have access to

fewer resources are more pessimistic about their life chances and opportunities in a broader sense (Wennekers et al. 2019). Focusing on the importance of a particular climate measure without taking into account other, often more pressing problems for citizens personally, and without taking into account people's concerns about costs and the distribution of costs (distributive fairness and the potential impact on inequality), could therefore be experienced as a denial of those problems.

## S.4 Conclusion

The Member States of the European Union recently reached an agreement on raising the climate targets for the near term to a 55% reduction in greenhouse gas emissions by 2030. This means that every effort will need to be made to accelerate the transition which has already begun even further. Precisely what form this acceleration should take will be an important topic for the pending new government in formation. The Netherlands Environmental Assessment Agency (PBL) recently calculated the impact of the climate plans published by various Dutch political parties (CDA (Christian Democrats), D66 (Democrats), GroenLinks (Green Left), SP (Socialist Party), PvdA (Labour Party), ChristenUnie (Christian Union)). The VVD (People's Party for Freedom and Democracy) – currently the largest party – did not commission an extrapolation of the impact of its climate plans. The proposed package of measures appears to bring the climate goals within reach for only some of the parties (Folkert et al. 2021). The course that the new government will follow is still unknown, and will depend partly on the outcomes of the government formation process and the details of the Coalition Agreement.

This study makes clear that combating climate change through the energy transition is not just a technical or economic challenge, but also a social and societal challenge. While the Dutch public appear to be generally supportive of the climate goals, they do have questions and concerns about the way in which climate change action is currently taking shape. Many citizens have concerns about the impact on their cost of living, expect a deterioration in their own and others' financial situation, foresee an increase in inequality and perceive distributive injustice (especially between citizens and companies, but also between rich and poor). These concerns and expectations, combined with a tension in views on roles and responsibilities, could be make or break for the success of the climate policy. Promoting the involvement of citizens in climate change abatement is an important first step, but it is clear that more is needed to resolve these questions around legitimacy – not only due to the risk of loss of support for the policy, but also in the light of the potential socio-economic consequences, with an impact on inequality potentially carrying risks of exacerbating divisions in areas such as housing, employment, income, energy, mobility, consumption and health.

The findings of our analyses of people's views on climate viewed through the lenses of concern, dissatisfaction and opinions on costs and cost distribution also show that several distinct groups can be identified. People with access to more socioeconomic resources (those who find it easier to manage financially, highly educated people) are more likely to

be found in the more 'climate-oriented' groups who have fewer concerns about the impact of measures. By contrast, people with fewer resources (those who find it more difficult to manage financially, lower-educated people) are more likely to be found in the groups with more concerns (especially financial) and more dissatisfaction (e.g. a stronger sense that measures are being imposed on them) about climate change mitigation measures.

This may say something about society and how groups relate to each other.

Differences in the type of concerns, dissatisfaction and opinions about (distribution of) costs based on financial situation and education also suggest that failure to carry the public along fully should not too readily be interpreted as unwillingness. It is important to remain alert to situations in which too much is asked of citizens. Attention for the position of vulnerable groups in society and ensuring a just distribution of benefits and costs is essential for a successful transition and can make it more achievable. This may require a different approach, seeking ways to ensure that the public in a broad sense, and perhaps particularly the groups which now already find it more difficult to manage financially, can share in the benefits of the energy transition.

These findings suggest an interaction between several societal missions. The drive to achieve a climate-neutral society impinges on missions related to people's incomes and livelihoods, inclusion and social cohesion, fair distribution and the avoidance of growing inequality. Whether these different concerns and (negative) expectations will ultimately lead to growing resistance and opposition will depend in part on the choices made and what consequences they have for citizens, especially those who are already in a more vulnerable position. Perhaps illustrative of this is the finding that over a quarter of Dutch citizens say they feel angry about the attention devoted to climate change, whereas in their eyes there are more important pressing problems to be solved.

### Pointers for policy summarised

Briefly summarised, a number of points emerge from this study which can improve the chances of successful policy:

- Pay attention to the cohesion of policy instruments and take account of the impact of climate policy on other policy domains (such as income, purchasing power and poverty, housing, employment, residential quality, health and well-being). Adopt an integrated approach: climate policy cannot be seen in isolation from the broader quality of life.
- Take account of the impact on the quality of life of different groups of citizens in society. For example, groups who are already in a more difficult position are extra vulnerable to further deterioration (and a small change can mean a big improvement).
- When developing policy, try to offer an attractive and appealing prospect: devote attention to identifying and utilising opportunities to improve people's quality of life. How can citizens share more in the potential benefits (for example from renewable energy, increased housing comfort and better quality of the residential environment due to measures to increase sustainability)? This also means placing less emphasis on

the ‘less, less’ approach and showing that there are also opportunities for *different, better and more*.

- Pay attention to lowering thresholds, removing barriers and strengthening the scope for participation for different groups in society.
- Embrace and facilitate initiatives from society itself and create scope for different groups to contribute in a way that is appropriate for them.
- Involve citizens at an early stage so that their input can be taken into account.

The way in which this transition is shaped over the coming decades will influence the quality of life of present and future generations. It is therefore important to form a vision about the kind of society we wish to see in the long term. An essential part of this is thinking through the impact of measures during the planning, development and implementation phases of climate and energy transition policy: not just their impact on emission reductions, but also on the quality of life of different groups in society. A key focus here will need to be on preventing measures unintentionally leading to distributive injustice as regards the costs (and benefits) or contributing to an increase in inequality. Avoiding unintended negative effects and exploiting opportunities to improve people’s quality of life can contribute to the achievement of two related goals: sustainability and welfare in a broad sense.

## Notes

- 1 An additional survey was carried out in the LISS panel in July 2020 to study the social impact of coronavirus. The survey questionnaire contained two previously posed questions on sustainability, enabling us to present an update for those indicators. The questions were: ‘How important or unimportant do you think it is to change the way we live in order to combat climate change?’ (measured on a scale from 1 to 10) and, ‘I don’t think it’s necessary to adapt my lifestyle to combat climate change’ (measured on a scale from 1 to 7). A further survey was carried out in the LISS panel in October 2020 (De Klerk et al. 2021), in which one of the sustainability questions was repeated: ‘How important or unimportant do you think it is to change the way we live in order to combat climate change?’ (measured on a scale from 1 to 10). The outcomes of these two surveys, in July and October 2020, are described in the text. We make it clear that these findings relate to the more recent surveys, not the main survey carried out in 2019. The data from the three surveys are not directly comparable due to differences in research methodology (including differences in the questionnaire and the response scales and differences in the composition of the respondent group (panel)).
- 2 It should be noted that precisely what was meant by ‘attention’ was not specified in the questionnaire. It can therefore relate both to the public and political debate and to the media.
- 3 The Citizens’ Outlook Barometer (COB) is a long-standing SCP survey which has tracked trends in a wide spectrum of personal, political and societal views of Dutch citizens on a quarterly basis since 2008.
- 4 These findings relate to the pre-Covid context (mid-2019).
- 5 The statistical relationships discussed in this report are based on a mathematical (regression) model, in which the probability of being placed in a given latent group is compared with the probability of being placed in the middle group for different demographic groups.