## Perception of Climate Change and the Energy Transition



Results from a European Survey

To achieve national and European climate targets, political leaders will need to feel confident that their citizens generally<br/>support efforts to drastically reduce CO2 emissions. An in-depth research project,<br/>called European Perceptions of Climate Change (funded within the Social-Ecological<br/>Research program), provides insights into public support for climate change related<br/>policies across four European countries. The project team identified a widespread support<br/>for the Paris climate agreement and for renewable energy solutions, which suggests<br/>that there might be an opportunity for climate movements to gain momentum.

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he announcement of the US-President Donald Trump to withdraw from the *Paris Agreement* has recently brought climate change and its possible consequences back to the forefront of political discussions and media coverage. While the European Union and national leaders confirm their support for the climate accord, the details of how European countries will meet the agreed targets remain scattered and unclear.

#### **Project Design**

Over the last years, a number of national surveys assessed public perceptions of climate change and support for political strat-

**Contact authors:** *Dr. Annika Arnold* | University of Stuttgart | ZIRIUS | Stuttgart | Germany | E-Mail: annika.arnold@zirius.uni-stuttgart.de

Dr. Katharine Steentjes | Cardiff University | School of Psychology | Cardiff | United Kingdom | E-Mail: steentjesk@cardiff.ac.uk

Contact SÖF: Dr. Frank Betker | German Aerospace Center (DLR) | DLR Project Management Agency | Environment and Sustainability | Heinrich-Konen-Str. 1 | 53227 Bonn | Germany | Tel.: +49 228 38211975 | E-Mail: frank.betker@dlr.de | www.fona.de/de/9883

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egies to tackle climate change. But what was missing was a cross-national analysis of public perceptions and an in-depth assessment of underlying drivers of these public opinions and beliefs. The project European Perceptions of Climate Change (EPCC) seeks to fill this gap by focusing on four Northern European countries and asking questions such as: Which climate policies receive strong support and where do people disagree with proposed measures? What impacts do people expect climate change will have on their own and others' life? Do many people perceive renewable energies as a solution to climate change? Which other political strategies to reduce CO2 emissions would receive broad support?

An international research team, with members from Cardiff University, United Kingdom, University of Stuttgart, Germany, University of Bergen, Norway, and Symlog Institute, France, developed and conducted a cross-national survey in those four countries. The project was funded under the joint programming initiative *Connecting Climate Knowledge for Europe (JPI Climate)*, with funding contributions from national funding bodies.<sup>1</sup> In each country, 1,000 respondents aged 14 years or over were interviewed face-to-face (United Kingdom, Germany, France) or by telephone interviews (Norway, due to the dispersed population). A rigorous translation process produced a comparable four-language survey instrument that reaches beyond simple polling efforts, as it is based on theoretical insights and previous research findings. While a more in-depth analysis of the data is still under way, the following presents a concise overview of some descriptive key findings (see Steentjes et al. 2017).

### **Misperception of Scientific Consensus**

The survey measured various aspects of climate change beliefs and included various questions about energy production and other climate change related policies. While an overwhelming majority of respondents believe that climate change is happening (93 percent France, highest; 83 percent Germany, lowest), the survey revealed some misunderstanding in relation to the scientific certainty of human-made climate change: only between 24 percent (Germany) and 35 percent (Norway) knew that the vast majority of scientists agree that humans are the

<sup>1</sup> The Federal Ministry of Education and Research, Germany; Cardiff University Sustainable Places Research Institute, School of Psychology and the Economic & Social Research Council, UK; Agence Nationale de la Recherche, France; *KLIMAFORSK* Programme of the Norwegian Research Council, Norway, co-funded under the cooperation agreement between Statoil and the University of Bergen.

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main cause of the global temperature increase. Studies show that the consensus amongst scientist on this question might be as high as 97 percent (Cook et al. 2016). Belief in scientific consensus on humanmade climate change has been found to affect whether people believe in climate change and whether they are worried about it (Van der Linden et al. 2015). Despite this underestimation of scientific consensus, respondents of the *EPCC* survey indicated that they have started to feel the consequences of climate change.

## Climate Change Is Hitting Closer to Home for Many People

Climate change has often been described as a phenomenon that is perceived as a psychologically distant threat for people in Western countries. When a threat is perceived as temporally distant (consequences occur in the future), geographically distant (impacts mainly distant countries) and socially distant (people who are suffering are unlike me), it is often perceived as less severe than other threats (Liberman and Trope 1998). However, the EPCC data show that people start to see climate change as close threat, with 60 percent across all countries stating, "we are already feeling the effects of climate change" and 56 percent (average across countries) strongly or tentatively agreeing with the statement that "climate change is likely to have a big impact on people like me".

With regards to the expected effect of climate change for their own country, a majority of respondents across all four countries mentioned changes in weather patterns such as more severe storms, wetter weather and a more frequent occurrence of heat waves or droughts (see figure 1).

# Support for National and International Policy Measures

Concerning possible policy responses to climate change, *EPCC* survey results show strong support for renewable energy sources as well as support for investment in strategies to adapt to climate change at home and in developing countries. International collaboration and mutual support is also seen positive among respondents, as the majority of the participants across all four countries support the *Paris Agreement*, with highest scores among Norwegians (83 percent). Opposition to the agreement was very low (six percent UK, eight percent France, Germany and Norway).

In light of the recent withdrawal from the *Paris Agreement* by the USA, the question of how to deal with countries that refuse to commit to international efforts to limit the temperature increase to (below) 2°C became very relevant. Our survey found that, consistent with the strong support for the *Paris Agreement*, respondents in all four countries were equally in favor of the introduction of high economic penalties for refusing nations (52 to 69 percent).

When it comes to tangible measures using public money to advance climate mitigation, support for subsidizing renewable energies remains high (69 to 88 percent) as



FIGURE 1: Respondents in Germany associate climate change impacts with wetter weather and floods. The photo shows a flooded street in a German housing area. does support for using public money to advance the insulation of homes (60 to 74 percent). Less support was identified for measures directly affecting the living costs. Increasing taxes on the use of fossil fuels met some opposition (35 to 54 percent), and increasing energy prices in general to reduce people's energy use was even less popular (13 to 32 percent opposed). In the cross-national comparisons Norway stood out as consistently being the country with the highest support for policy measures that aim to reduce energy consumption.

## Window of Opportunity for Civic Engagement

A number of recommendations for public engagement can be taken from the EPCC results. The broad public support for adaptation policies could encourage policy makers to pursue those suggestions. The fact that climate change is getting closer to people's lives offers a chance to connect climate change communication to personal experiences such as changing weather patterns. Furthermore, the data suggest that climate change is increasingly perceived as a serious threat in need of internationally and locally coordinated efforts. Stakeholders should be encouraged by these findings and build on existing support to strengthen local environmental activities (see Corner et al. 2017 for recommendations).

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