Journal of European Public Policy

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rjpp20

Communitarians, cosmopolitans, and climate change: why identity matters for EU climate and energy policy

Silvia Weko

To cite this article: Silvia Weko (2022) Communitarians, cosmopolitans, and climate change: why identity matters for EU climate and energy policy, Journal of European Public Policy, 29:7, 1072-1091, DOI: 10.1080/13501763.2021.1918751

To link to this article: https://doi.org/10.1080/13501763.2021.1918751

JOURNAL OF EUROPEAN PUBLIC POLICY
2022, VOL. 29, NO. 7, 1072–1091
https://doi.org/10.1080/13501763.2021.1918751

Communitarians, cosmopolitans, and climate change: why identity matters for EU climate and energy policy

Silvia Weko[a,b]

[a]Institute for Advanced Sustainability Studies, Potsdam, Germany; [b]Willy Brandt School of Public Policy, University of Erfurt, Erfurt, Germany

ABSTRACT

Can ambitious climate policies in the European Green Deal succeed when faced with rising societal divisions between Europeans? This paper undertakes an empirical analysis using data from the European Social Survey to see whether the divisions between cosmopolitan and communitarian Europeans evident in other policy fields like migration are also found in relation to climate and energy. The results show that political ideology is most important determinant of individual attitudes, and that differences in attitudes between Eastern and Western Europe may be explained by energy security and economic development issues. The EU has maintained an ambitious policy since the mid-2010s, and with the Green Deal appears to be framing climate ambition in ways that the data suggests may reduce communitarian opposition, but not the differences between EU Member States resulting from security concerns.

KEYWORDS Attitudes; climate policy; energy policy; political cleavages; social cleavages

Introduction: societal cleavages and climate change

The proposed Green Deal aims to make Europe completely carbon-neutral by 2050. For this ambitious plan to be carried out, it needs sufficient public support across Member States. In the past, climate policies were seen as an opportunity for European institutions to enhance their legitimacy, as environmental protection measures were consistently popular with voters (Oberthür & Roche Kelly, 2008). However, in recent years, new right-wing parties have found

CONTACT Silvia Weko Silvia.weko@iass-potsdam.de

Supplemental data for this article can be accessed at https://doi.org/10.1080/13501763.2021.1918751

This article has been corrected with minor changes. These changes do not impact the academic content of the article.

political success in denying climate change both within the EU and national governments (Forchtner, 2019; Hess & Renner, 2019; Lockwood, 2018).

The rise of such parties has been traced back to a new political cleavage based on societal divisions between the 'winners' and 'losers' of globalization (von Homeyer & Oberthür, forthcoming). So far, much of the empirical research on the differences in attitudes between 'winners and losers' looks at the EU and immigration as 'flashpoints', finding that more cosmopolitan individuals show higher support for international redistribution (Bechtel et al., 2014; Kuhn et al., 2018) and welfare solidarity in the EU (Gerhards et al., 2019). Less is known about climate: so far, only one recent volume by De Wilde et al. (2019) empirically assesses whether climate change is similar other trans-boundary issues from the literature on new societal divisions. Its findings on five most-different countries suggest an attitudinal gap between elites and mass publics, calling for further analyses to examine the differences between cosmopolitan and communitarian positions on climate.

While the extensive body of literature on attitudes towards climate change provides initial explanations for why attitudes may differ within and between countries, it has not yet addressed the role of new societal divisions in the EU. Studies of the U.S., the U.K., and Australia have demonstrated a large left-right divide between individuals (see Brulle et al., 2012; Huber, 2020; Huber et al., 2020; McCright & Dunlap, 2011; Tranter, 2011; Whitmarsh, 2011). Yet, the political dynamics in the U.S. make generalizing these findings to other countries problematic (Capstick et al., 2015; Poortinga et al., 2019). Within Europe, similar divisions appear in Norway, where studies show polarization on climate change between individuals with different values and political affiliations (Aasen, 2017; Krange et al., 2019). Cross-national research by Tranter and Booth (2015) likewise identifies Norway and the U.K. as similar to the U.S. in terms of their relatively high rates of climate denial; however, the authors do not find a significant impact of political affiliation on attitudes in other European countries. This is consistent with country case studies that find little evidence of political polarization in Germany (Metag et al., 2017) or France (Douenne & Fabre, 2020). In contrast, recent work by Poortinga et al. (2019) finds that in some countries, far-right Europeans are more likely to deny climate change's existence, downplay its impact, and worry less overall about climate. The lower overall concern and absence of a clear left-right divide in Eastern Europe observed by the authors appears to confirm similar findings by McCright et al. (2016). As both studies aggregate attitudes to the regional level, the question of how national differences can be explained remains unanswered. This lack of empirical investigations that address both individual and cross-national variation is identified by Tranter and Booth (2015) as a key gap in the climate change literature; their work begins to address differences, but looks at a smaller collection of EU countries

with less recent data. Another gap in the literature on cross-national analyses, pointed out by Capstick et al. (2015), is that measures of opinion differ across studies and in many cases do not capture the full complexity of attitudes. Indeed, analyses of other topics such as environmental attitudes include multiple aspects such as emotional affect and willingness to act (see Franzen & Vogl, 2013).

This paper therefore draws from both streams of research to investigate how new societal divisions come to bear on individuals' attitudes towards climate change, and how differences between countries can be explained. The finding that attitudes are influenced by structural factors across European countries supports the argument that the conflict between winners and losers of globalization is a durable cleavage extending beyond Europeanization or immigration to the issue of climate change.

The remainder is structured as follows: the next section looks at the mechanics of values, ideologies, and attitudes, bringing together cleavages literature with social psychology approaches. It then explores why people on opposite sides of the new societal divide hold different attitudes towards climate change. The paper then outlines the individual and country characteristics that may be considered as additional objective and subjective dimensions of the new societal divide. The hypotheses are then operationalized using data from the 2016 European Social Survey; the paper finds that societal divisions are a strong predictor of attitudes, and explores possible explanations for the differences between Western and Eastern Member States. The conclusion gives implications for future research and policy.

Cosmopolitans, communitarians, climate and energy

New societal divisions and the role of values

The literature on political cleavages suggests that new societal divisions are emerging in Europe, as attributes such as social class and religion are less able to explain political preferences. From this rich literature, I take two key assumptions as a starting point: the EU is undergoing a fundamental change in the form of a 'distinct, rooted and durable conflict that will overlay and disrupt the existing structure of party competition' (see Hooghe & Marks, 2018, p. 116) and that this is a reaction to globalization or Europeanization, with the 'winners' of these processes seeing the opening of the nation to trade, immigration, and EU governance as an opportunity, and 'losers' seeing this as a threat. Issues that are both salient and polarized may appeal to the societal divisions between 'winners' and 'losers' and coalesce into cleavages through a process of political communication (see De Wilde et al., 2019). These arguments rest on the interactions of

citizens with parties, but much of this body of work looks at party positions; therefore, it is necessary to look at individuals as well (Teney et al., 2014).

In characterizing new societal divisions, I follow Teney et al. (2014) and distinguish between the 'winners' of globalization (cosmopolitans) and 'losers' of globalization (communitarians). Such gains or losses have an *objective dimension* (e.g., economic losses from globalization due to lower education levels) and *subjective dimension,* in that people perceive globalization as threatening or promising due to their underlying ideologies or value sets. The key subjective difference may be traced back to the boundary of the community: cosmopolitans see community as universal, conceiving of individuals as equal regardless of group membership, while communitarians see community as the constitutive in-group or the 'local' (Kuhn et al., 2018; Teney et al., 2014). Cosmopolitans may be less threatened by globalization because of their 'commitment to an institutionalized global order of rule of law and justice … and the respect of every human being's status as ultimate units of moral concern'; they are more supportive of tolerance towards immigrants and Europeanization (Teney et al., 2014, p. 580). Communitarians perceive EU integration as coming into conflict with 'the community's potential to realize, collectively, its particular understanding of justice' (2014, p. 580). It is important to note that communitarianism does not necessarily take the form of nationalism, nor of populism; such divisions can indeed cut across the left-right divide, with left-wing communitarians emphasizing 'the dangers of globalization for equality and solidarity within states' (De Wilde et al., 2019, p. 14).

This definition of ideological differences as based on an individual's value set relates directly to the way in which social psychologists conceptualize of the causal hierarchy between basic personal values, core political values, and behaviour. Schwartz et al. (2010) see these relationships as under-researched due to the different conceptualizations of values in political science and social psychology. Core political values refer to a person's beliefs about the way society should function; these are based on an individual's basic personal values, which are the guiding principles in one's life (Schwartz et al., 2014). Schwartz defines ten basic personal or human values; their relative importance to an individual is called their value constellation. Value constellations can be seen as a continuum with different poles of self-transcendence vs self-enhancement (accepting others as equal vs. pursuing success and dominance over others); and conservation vs. openness-to-change values (protecting stability vs. prioritizing independence). Of these, the self-transcendent and openness-to-change poles are driven by the need for growth, while the self-enhancement and conservation values are driven by a need 'to avoid or control anxiety and threat and to protect the self' (Schwartz et al., 2014, p. 904). Prioritizations are established during socialization by both individual requirements and exposure to dominant group values; they provide the

'unconscious motivational grounding that constrains and organizes core political values' and behaviour (Schwartz et al., 2010, p. 446).

The characterization in the literature of communitarians as reacting to the changes wrought by globalization by societal and economic closure (see Koopmans, Chapter 7 in De Wilde et al., 2019) seems to fit most accurately with the need to avoid threats through self-enhancement and conservation poles of Schwartz values. Self-transcendence dimensions of values (benevolence and universalism) are also motivated by growth priorities and have been shown to have a positive relationship with climate concern (Poortinga et al., 2019). Yet, the definitions of benevolence and universalism echo the key difference between communitarians and cosmopolitans: that is, where the boundary of the in-group is drawn. According to Schwartz et al. (2014), people who place an emphasis on 'Benevolence' prioritize helping those around them and caring for their well-being; and 'Universalism' measures wanting everyone to be treated justly, even strangers. To avoid the problematic assumption that cosmopolitans are more altruistic generally than communitarians (for further discussion see Kuhn et al., 2018), values are assessed as rather more communitarian or cosmopolitan expressions of similar motivations. Of the self-expression values, Universalism is more cosmopolitan than Benevolence. For the opposite end of this spectrum (self-enhancement), the paper characterizes the more individualistic Achievement values (personal success through demonstrating competence) as more cosmopolitan, and Power values as more communitarian (control or dominance over people and resources).

Consequently, this paper conceptualizes of communitarianism and cosmopolitanism as political ideologies, which are linked to a person's basic value constellation. This differs from the literature on attitudes towards climate change which looks at basic human values and self-assessed left-right position (e.g., Poortinga et al., 2019); and from De Wilde et al. (2019) who measure climate concern as a direct indicator for ideology. Differentiating between values and political ideologies enables this paper to compare their respective relationships with attitudes towards climate change; further details are available in the methods section and Appendix.

Climate as an attitudinal target

As the world enters a climate crisis, how communitarians and cosmopolitans react may depend on framings of climate change; nevertheless, climate and environmental issues may become contentious due to their cross-border nature (see in De Wilde et al., 2019). In this paper, I differ from De Wilde et al. (2019) in defining climate change and the environment as separate attitudinal targets, due to differences in time and geographical scale (see in Huber et al., 2020). Environmental issues may be distinctly local, motivating

right-wing populist movements to respond if they perceive impacts to local land seen as belonging to 'the people'; yet, these same groups will downplay or deny larger-scale issues like climate change (Forchtner, 2019). Political actors also frame climate change as a global or regional problem more often than comparable issues such as trade or human rights (see Koopmans, Chapter 7 in De Wilde et al., 2019). At the same time, climate mitigation is linked to energy in the media and government policy, so that people closely connect energy with climate (Kim & Wolinsky-Nahmias, 2014). This reflects the reality in that over half of the EU's emissions are from fuel combustion (Eurostat,2017) and around 18 percent of EU emissions are from coal-fired power plants (Climate Analytics, 2017). The connection between climate and energy may serve as the tangible link bringing the potential for mitigation back to a more local level, while impacts remain comparatively long-term and global.

The global impacts of climate change disproportionately and severely impact individuals in developing countries, even in a scenario in which global warming is limited to 1.5 °C. If one considers the 'out-group' (non-Europeans) as equally important, it is imperative to limit emissions as quickly as possible. While there are certainly many local co-benefits of mitigation and adaptation, the scale and speed at which structural change needs to occur will also create 'losers' (Markard, 2018). Truly ambitious climate action therefore puts the value of a person in a German coal region who will be negatively impacted by the coal phase-out and a person in Bangladesh who will be negatively impacted by climate-related flooding on an equal footing. For communitarians, this violates the emphasis on the primacy of the in-group.

In addition, climate action is a public goods problem requiring coordinated action beyond the national level. Over time, EU competences in the energy arena have broadened with policies meant to both prevent climate change and integrate energy such as the 2030 Climate and Energy Package (Eicke & Petri, 2020). The core national interest of energy security, which historically referred to access to fossil fuel reserves, is often framed as in opposition to decarbonization (although definitions of 'security' differ according to actors and their goals; see Sovacool & Saunders, 2014). Nevertheless, the transfer of some national competences to the supranational level may make climate action less appealing to communitarian Europeans.

Given these characteristics of climate change as an attitudinal target, the universalistic implications of ambitious climate action, and the importance of international coordination, H1 predicts that:

> H1: The more cosmopolitan a person's political ideology, the more positive their attitudes towards climate action.

Demographics and country dynamics

Attitudes and individual self-interest

This paper follows Teney et al. (2014), differentiating between subjective and objective dimensions of the cosmopolitan–communitarian divide. *Subjective dimensions* are addressed by the internal factors (e.g., political ideology and values) that impact whether a person perceives globalization as a threat. *Objective dimensions* are the socio-demographic characteristics associated with material gains or losses from globalization: education, income, and age. Here, at least some share of attitudes is determined by rational choices made around material interests. Rational, material self-interest is also an important mechanism identified in the climate change attitudes literature. This overlap means that the paper cannot to measure to what extent attitudes are influenced by pure material self-interest vs. self-interest due to winning or losing from globalization. However, it can theorize on the direction this self-interest takes, and to what extent objective factors matter compared to subjective factors. From Teney et al. (2014) as well as previous work demonstrating the importance of basic values for climate attitudes (Poortinga et al., 2019), H2 predicts that:

> H2: Subjective dimensions of the cosmopolitan vs. communitarian divide (i.e. political ideology and values) have a greater impact on attitudes than objective dimensions.

The objective demographic characteristics identified in both literatures as representing material self-interest are education, income, and age. Higher levels of **education** are associated with 'winners' of globalization, as it gives citizens the skills to benefit from open borders, and authors have shown a positive relationship between education levels and cosmopolitan positions on the EU and immigration (in Teney et al., 2014). More educated respondents are also expected to see climate action in a positive light, because they can better understand the complex issue of climate change and its impacts, motivating them to act. Empirical results here are mixed: Poortinga et al. (2019) find a positive association between level of education and concern about climate change among Europeans, but findings from the U.S. find a contradictory relationship between education and climate concern (McCright & Dunlap, 2011). De Wilde et al. (2019) find a mixed relationship depending on national globalization levels; but their measure of cosmopolitanism is whether or not a person judges climate to be a serious issue, and is highly impacted by the presence of the U.S. in the four countries surveyed. Within the EU, I expect that:

> H3: The higher a person's level of education attained, the more positive their attitudes towards climate action.

Higher income is associated with cosmopolitanism due to the competition from cheap labour from globalization (Marks, Attewell, Rovny, & Hooghe, 2017). Higher-income individuals are also expected to have positive attitudes towards climate action, as material security allows people to place more emphasis on higher-order needs such as environmental protection (as in Inglehart, 1990). **Younger age** is also positively associated with cosmopolitan ideologies as younger generations benefit more from Europeanization (Teney et al., 2014); and with attitudes towards climate change, as the young are more impacted by its negative effects (Poortinga et al., 2019).

H4: The higher a person's income, the more positive their attitudes towards climate action.

H5: The younger a person is, the more positive their attitudes towards climate action.

It is important to isolate the impacts of objective and subjective dimensions of cosmopolitan–communitarian divisions by controlling for other relevant factors impacting attitudes; for example, women tend to care more about climate change and hold more cosmopolitan views. In addition, urban places of residence and internet use are associated with cosmopolitanism (Teney et al., 2014) while increased religiosity is associated with anti-climate beliefs in the U.S. (McCright & Dunlap, 2011).

Country dynamics

Country-level studies of climate change attitudes propose different explanations, but do not often look at the individual and country levels simultaneously, coming to mixed results. Country differences may be based on the role of rational economic interests, as the country-level effects on individual attitudes can be interpreted as reflecting national instrumental rationality (see Gerhards et al., 2019). An alternative explanation is that individual attitudes are impacted by the national political discourse.

The paper explores three possible measures of national interests: economic development, climate risk, and energy issues. The relationship between environmental attitudes and economic interests has been the subject of an intense scholarly debate (see Knight, 2016). Generalizing post-materialist values theory to the national level, citizens in countries with higher levels of economic development are expected to care more about the environment, because they are no longer focused on survival and can worry about 'higher-order' needs such as environmental quality (Inglehart, 1990). Studies on climate attitudes using economic self-interest to explain country differences reveal different results: some show a negative relationship between development and concern (Kim & Wolinsky-Nahmias,

2014; Kvaløy et al., 2012; Tjernström & Tietenberg, 2008), others show the opposite effect (Knight, 2016; Lee et al., 2015). Within the EU, lower environmental concern in Eastern Europe has been connected its lower levels of economic development compared to the West (Shum, 2012). The paper predicts that:

H6: The higher a country's economic development, the more positive its residents' attitudes towards climate action.

Another mechanism for between-country differences may be that people in countries that are more impacted by climate change are also more motivated to act. The analysis from the cleavage literature (see Weßels and Strijbis in De Wilde et al., 2019) expects that countries with a higher 'environmental problem load' are more motivated to act; their measurement of 'problem load' as greenhouse gas emissions per capita is negatively associated with climate concern. The literature on attitudes sees impacts as climate risks,[1] which are connected to a rise in concern in the developing world (Capstick et al., 2015). This is empirically demonstrated by Knight (2016) for a sample of 111 countries, but may not hold true for all regions: Kvaløy et al. (2012) found lower climate concern in countries with more disasters, while Kim and Wolinsky-Nahmias (2014) found no significant relationship between vulnerability and concern. It remains to be seen whether EU citizens' attitudes are impacted by their country of residences' climate risk.

H7: The higher a country's climate risk, the more positive its residents' attitudes towards climate action.

The national interest of providing energy to citizens may also be seen as in opposition to decarbonization; if affordable and secure energy are not ensured, citizens may be less supportive of climate action. Energy poverty can refer to not being able to pay bills for adequate heating and cooling, and is more prevalent in places with poorer building stocks. People may feel that the government should address these problems before climate change, leading to the hypothesis that:

H8: The lower a country's energy poverty, the more positive its residents' attitudes towards climate action.

Security of energy supply may be seen as in opposition to decarbonization. Meanings of energy security are ideationally constructed by different actors and may be especially relevant in Member States if geopolitical tensions with Russia are high (see Kuzemko, 2014). Therefore if countries prioritize energy security issues over decarbonization, they will have lower rates of energy dependence and see climate as a lower priority.

H9: The lower a country's energy dependence, the more positive its residents' attitudes towards climate action.

Finally, differences between countries in attitudes towards climate change may be due to national political dynamics. The process by which cleavages emerge is described with more depth elsewhere (De Wilde et al., 2019); put simply, societal divisions may coalesce into political cleavages if the issue of climate is salient and politicized. This paper uses the presence of green/alternative/libertarian (GAL) vs. traditional/authoritarian/nationalist (TAN) parties to approximate the extent to which climate is discussed in the political sphere.[2] As Hooghe and Marks (2018) argue, TAN parties stake out more extreme positions and place more salience on issues such as European integration and immigration with GAL parties as their counter-pole, thereby mobilizing societal divisions and structuring party positions on these issues. The strong presence of 'GAL' parties could mean that pro-climate action views are represented in public discussion, leading to a more positive view of climate actions on average. In countries where 'TAN' parties are highly represented, discourse may be more focused on other issues.

H10: The higher the representation of GAL parties in government, the more positive its residents' attitudes towards climate action.

H11: The lower the representation of TAN parties in government, the more positive its residents' attitudes towards climate action.

Data and methods

The two-step regression analysis first shows the importance of societal divisions between individuals, and identifies the magnitude of country differences; it then explores how the magnitude of these differences can be explained. The advantage of this approach over multilevel modelling is twofold. First, it identifies the impact of membership of a particular country on individual attitudes, which is important as both climate attitudes and societal cleavages take different shapes in different countries. Second, isolating the impact of residing in a specific country on a person's attitudes allows for testing theories of country difference. The two-step approach also has empirical advantages over multilevel modelling in terms of its robustness and predictive power when clusters are below 20–25 units (Bryan & Jenkins, 2016).

Data on individual characteristics is taken from Round 8 of the European Social Survey (ESS), which is the only round to date to include climate change and was collected in 2016. The ESS is funded by the European Commission and is a reliable and representative data source, making it an appropriate tool to look at attitudes. The next steps empirically demonstrate that Europeans closely associate climate change with energy, and outline how the hypotheses are operationalized.

Dependent variable: attitudes towards climate and energy

Climate and energy are associated in policy and the public debate, and previous studies have identified that people directly associate energy use with climate change (Kim & Wolinsky-Nahmias, 2014). The ESS 2016 asks a number of questions about climate and energy; of these, questions that capture three key aspects of attitudes are selected: emotional affect, willingness to act, and attitudes towards collective action. These are the extent to which a person feels a personal responsibility to stop climate change (emotional affect); the likelihood that limiting their energy use would help reduce climate change (willingness to act); and the likelihood that large numbers of people will limit their energy use to try to reduce climate change (attitude towards collective action). Respondents choose answers between 0 (not at all) to 10 (a great deal). The empirical association between responses to these questions points to its expressing an underlying attitude.[3]

The paper therefore uses a respondent's mean score on the above items as the dependent variable 'attitudes towards climate change/climate action' for the individual-level model. Answers fall along a standard distribution with a maximum of 10 (most positive attitudes) and a minimum of zero (most negative attitudes). The variable is both continuous and evenly distributed, making an Ordinary Least Squares (OLS) method for linear regression possible.

Independent variables

The independent variables in the analysis include measurements of cosmopolitan/communitarian values and ideology, as well as the objective demographic factors which may influence a person's attitudes towards climate change.

Subjective dimensions: political ideology and human values

Whether a person's political ideology is more cosmopolitan or communitarian is measured by their mean score on the pertinent issues of immigration and EU integration. The questions on integration include how much a person identifies with Europe, trusts the EU parliament, and whether European integration has gone too far or could go further. The questions on immigration ask whether immigration is bad or good for the country's economy, if the country's cultural life is undermined or enriched by immigrants, and if their country is made worse or better by immigration. The way in which people answer these questions is highly related, with a Cronbach's alpha of 0.78. The resulting measurement variable for cosmopolitan vs. communitarian political ideology ranges from 0 (least cosmopolitan) to 10 (most cosmopolitan).[4]

The model also includes relevant Schwartz values which may influence a person's perceptions of climate change as well as their political ideology. For purposes of comparison with Poortinga et al. (2019), who find a strong positive relationship between self-transcendent values and climate concern, the same value measures are used for self-transcendent values (Benevolence and Universalism) and self-direction (Power and Achievement). Schwartz values are conceptualized as more or less cosmopolitan expressions of self-transcendence and self-direction: to avoid the problematic assumption that cosmopolitans are more altruistic (see Kuhn et al., 2018), the paper characterizes Universalism as a more cosmopolitan expression of altruism and Benevolence as more communitarian. Of the self-direction values, Power is theorized to be more communitarian than Achievement. An assessment of inter-variable correlations shows that of the self-transcendence values Universalism has a stronger relationship positive association with cosmopolitan ideologies, while Power has the strongest negative relationship with cosmopolitanism (see Appendix). In theory, the values-ideology-behavior hierarchy means that this including political ideology will lessen the overall impact of human values in the model, but that they will still impact attitudes.

Objective: demographic self-interest variables

Demographic characteristics representing objective self-interest include income, education, and age. Income is measured by the household total net income variable, ranging from 1 to 10 (lowest to highest deciles). Education is measured by the simplified International Standard Classification of Education scale from 0 to 7, where 7 is tertiary education. Because generational change is more relevant than age in years for the emergence of societal divisions, age is operationalized as in a series of factors representing generations (e.g., Millennials vs. Baby Boomers).

The model also includes pertinent control variables. Gender is measured using a dummy variable with female as the reference category. Place of residence is measured by a series of dummy variables, where level 1 represents living in a city, 2 is the outskirts of a large city, 3 is a town or small city, 4 is a village and 5 is a farm or home in the countryside. Immigration background is measured as whether the respondent was born in their country of residence, and internet use is measured as whether the respondent has posted about politics online in the last year. Religiosity is measured by self-assessment on a 0–10 scale from not at all to very religious. The model also includes a variable for self-assessed position on the left-right spectrum from 0 to 10 to assess its relative importance vis-a-vis cosmopolitan political ideology.

The impact of country of residence on individual attitudes is measured using a series of 18 dummy variables, for which Hungary is the reference category for the ease of comparing Eastern and Western Europe. Identifying the

magnitude of country enables the exploration of reasons for these differences in a subsequent set of OLS models using country-level data (for summary statistics and coding see Appendix). Economic development is measured by the UN Human Development Index (HDI) and by real GDP per capita in 2015 (Eurostat). Climate risk is measured by the Climate Risk Index, which includes both the economic losses and fatalities from extreme weather (Kreft et al., 2014). Energy poverty is measured with the 2015 EPOV indicator 'share of the population having arrears on energy bills.' Country prioritization of energy security is measured by energy dependence levels in 2015, which are compiled from Eurostat and based on energy imports divided by the gross available energy. Finally, national political communication is measured by the percentages of GAL-TAN parties in parliaments based on Hooghe and Marks (2018).

Regressions and robustness checks

Model 1 assesses the importance of individual-level variables on attitudes towards climate change using an OLS regression. No multicollinearity was detected using the Variance Inflation Factor (VIF), and the error term for the regression is independent and identically distributed, making predictions accurate. Model validity is also assessed with R's bootstep. AIC procedure to determine the most parsimonious model; all variables are consistently selected, excepting migration status and internet use. In the second step, a series of linear regressions explores the relationship of country average attitudes (unstandardized regression coefficients for the country dummy variable) and macro-level variables.

Empirical exploration of individual and country attitudes

The individual-level model shows that cosmopolitan political ideology correlates with more positive views on climate action; and that objective self-interest accounts for a relatively small share of attitudinal variation across all 18 countries surveyed. The OLS regression has an adjusted R-square of 0.1614 (significant at the $p < .001$ level), meaning that this model can explain over 16 per cent of variation.

Hypothesis 1 is supported: people with more cosmopolitan political ideologies see climate action more positively than communitarians. More cosmopolitan political ideology has a strong association with positive attitudes, and an even greater predictive power than human values measurements. Schwartz values are also significant predictors of attitudes; theseresults differ from Poortinga et al. (2019) in that the self-transcendent and self-enhancement values reveal an oppositional relationship along the expected cosmopolitan vs. communitarian dimensions. The self-

enhancement value of power (the control or dominance over people and resources) has a negative association with attitudes, but achievement has a slight positive association with attitudes. Universalism is consistently related with positive attitudes towards climate action, but Benevolence shows the opposite, suggesting that individuals whose altruism focuses on their immediate community view climate action less favourably. When compared to objective socio-demographic characteristics, cosmopolitan vs. communitarian ideology and human values are most important factors in determining attitudes towards climate change, supporting Hypothesis 2.

Hypothesis 3 is supported: the higher a respondent's income, the more supportive they are of climate action, although the effect is comparatively small. Contrary to Hypothesis 4, people with higher education levels view climate action less positively. Given that multiple authors point towards a mixed and sometimes oppositional relationship between education and attitudes depending on country context (De Wilde et al., 2019; McCright & Dunlap, 2011; Poortinga et al., 2019), these findings point towards a potential polarization which requires further exploration.[5]

Hypothesis 4, that younger generations have more positive attitudes towards climate action, is partially supported. Millennials view climate action more positively than the Greatest and Silent Generations; but Millennials are less positive than GenX and Baby Boomers. The relationship between place of residence and attitudes is less clear; the only significant difference is that people living in large cities rate lower on the index than those living in towns and small cities. Internet use and migration background are not significant.

Although the direction is as predicted, the model shows no statistically significant relationship between political position on the left-right spectrum and attitudes. As in previous studies, women express more positive attitudes towards the climate on average. In opposition to previous findings on the U.S., more religious respondents have more positive views on climate action, and this association is highly significant and accounts for a greater share of variation than the income or education variables.

Significant variation is already apparent among the country dummy variables included in the analysis. Using Hungary as a reference category, the data show that people in most Eastern European countries view climate change less positively on average; for example, people in France score 0.8 points higher on the climate attitudes scale than those in Hungary. Yet post-socialist countries are not homogenous, and Lithuania scores higher than several Western countries. The series of bivariate OLS regressions therefore looks at how differences between countries relate to national-level rational interests and political communication.

The explanation with the most explanatory power and significance is that people in countries with higher levels of economic development express more positive views of climate action. This is true for development measured by HDI and real GDP per capita (which can significantly explain approximately 11 or 37 per cent of variation respectively). There is no correlation between climate risk and attitudes; however, this is not unexpected given that risk has only been shown to be significant in cross-national studies with a wider range of countries. H9 is also rejected; there is no correlation between energy poverty and attitudes. However, low energy dependence levels correlate with negative attitudes towards climate change, significantly explaining 21 per cent of variation between countries. Post-socialist countries tend to have lower dependence rates, especially Poland, Slovenia, and Hungary; Estonia and the Czech Republic also rely heavily on electricity generation from indigenous fossil fuel resources of oil and coal. Lithuania, which does not possess its own fossil fuel resources, imports much of its electricity from Sweden and Norway and may be less concerned with its geopolitical dependence on Russia. Given these findings, I also ran a regression to check correlations of fossil fuel intensity of energy production with attitudes; while results were significant, they explained relatively little variation (around 7 per cent).

Evidence for a relationship between national-level political discussion and individual attitudes is mixed. There is no association between share of government held by TAN parties and attitudes, suggesting that at least in 2015–16 such parties did not mobilize against climate change to the extent that attitudes were negatively affected. Nevertheless, people in countries with a relatively high presence of GAL parties show more positive attitudes towards climate action, explaining 22 per cent of between-country variation.[6] It therefore is plausible that the presence of a GAL pole increases political discussions around climate change and influences attitudes; the absence of GAL parties in the U.K. and Eastern Europe (Hooghe & Marks, 2018) may mean less discussion and relatively less positive attitudes.

Discussion and policy implications

The analysis suggests that societal divisions between communitarians and cosmopolitans extend to the issue of climate change, lending support to De Wilde et al.'s findings (2019). The index representing cosmopolitan vs. communitarian political ideology is the strongest and most significant predictor of attitudes within, between, and across countries. The human value of Universalism is associated with positive attitudes, while Benevolence is associated with a more negative view, contrasting with Poortinga et al.'s findings that self-transcendent values are consistently associated with

climate concern. This echoes findings by Kuhn et al. (2018) that cosmopolitans and communitarians have different attitudes towards redistribution due to their conceptions of the in-group, but would require further research in the vein of Schwartz et al. (2014) to clarify the relationship. The impact of subjective factors such as political ideology and values appears to be larger for the issue of climate than for other relevant issues such as territorial and fiscal solidarity in the EU (see Gerhards et al., 2019). The findings confirm results from other authors that Eastern European countries have lower levels of climate concern (Poortinga et al., 2019), expanding on the extent of and reasons for between-country differences. Between-country differences may be due to differences in levels of economic development; but energy dependence and the role of political party representation in national discussions also merit further investigation.

This paper has some limitations. As in previous analyses, between-country differences are significant, making generalizing these findings to the entire EU problematic. In addition, the individual-level model only explains 16 per cent of total variation, and is unable to address relevant variables such as the role of the media, which has been shown to be influential (Barkemeyer et al., 2017). How people receive information on climate change is doubly relevant as false information is increasingly being spread on social media; further research is needed on new modes of communication. The analysis only speaks to one point in time due to data limitations, although work from Brulle et al. (2012) shows that attitudes indeed changed over time in the U.S. Nevertheless, the model offers a snapshot of a tumultuous year after the Euro crisis and during the migration crisis, where the cosmopolitan–communitarian divide plays a key role.

The EU is presented with a balancing act of managing the pressing need for decarbonization without exacerbating societal divisions within and between countries. Many factors are out of the EU's control, including national political dynamics. However, attention to framing may help keep EU climate and energy policy from becoming as divisive as immigration. Policymakers would be well-advised to frame EU climate policy in a way that appeals to communitarian priorities such as in-group benefits. So far, it appears that the Commission is considering the importance of framings, stating in their communication on the Green Deal that no one will be 'left behind' (2019, p. 4); and emphasizing fighting energy poverty by renovating social housing, schools, and hospitals. Considering that the lower average support in Eastern Europe relates to economic development, mechanisms like the Just Transitions Fund could make inroads in levelling out between-country differences. However, given the findings that energy security may also drive country differences, the EU should not neglect these issues going forward. Here, too, framings matter: energy security can be redefined as based on connections with Europe instead of fossil fuels.

A more concrete recommendation to the Commission is to make data available for researchers to explore attitudes towards climate and energy policy. Further research on these trends and their combination with post-factual communication can help inform policymakers. Because data are scarce, the Commission could consider asking the ESS to include yearly questions on media and climate change, just as there are now questions on the thorny issues of integration and migration. Climate and energy are likely to become more pressing going forward – laying the groundwork for research would be an important step in understanding how to address these issues in the future.

Notes

1. While the relationship between actual risk and perceptions of risk can be mediated by several factors, including political cues and media consumption, media attention to climate change has been demonstrated to be impacted by climate risk (Barkemeyer et al., 2017).
2. No political party perfectly represents communitarian or cosmopolitan positions, but far-right parties are the most consistently 'communitarian'; green and liberal parties are at least culturally, if not economically, cosmopolitan (see Koopmans in De Wilde et al., 2019).
3. The Cronbach's alpha of 0.63, and inter-item correlations of 0.25, 0.42 and 0.42 are considered acceptable; see Appendix for further information on questions and robustness checks.
4. The index shows a correlation (0.11) with self-assessed left-right position, with more cosmopolitan respondents rating themselves as further left; see Appendix for further details.
5. Further explanation of between-country differences on education can be seen in the Appendix.
6. It is difficult to rule out endogeneity; however, the data on GAL-TAN representation represent points in time before the ESS data were gathered, so it is possible to assume an effect based on timing (see Appendix).

Data availability statement

Data are derived from the following sources in the public domain: European Social Survey Round 8, Eurostat, United Nations, the Energy Poverty Observatory (EPOV), and Germanwatch's Climate Risk Index. Further data were compiled on party positions from Hooghe and Marks (2018), supplemented with data from the Chapel Hill Expert Study (2014) and National Political yearbook. All coding was performed in R and is available on request.

Acknowledgements

Sincere thanks to the anonymous reviewers for their valuable comments, and to Zsófia Ignácz for her support. The paper also greatly benefitted from the feedback of the organizers and participants in the 2019 GOVTRAN workshop; and from Laima Eicke and Maria Apergi.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Notes on contributor

Silvia Weko works as a research associate for the IASS on the project Investigating the Systemic Impacts of the Global Energy Transition, and is a PhD student at the WBS School of Public Policy at the University of Erfurt.

References

Aasen, M. (2017). The polarization of public concern about climate change in Norway. *Climate Policy*, *17*(2), 213–230. https://doi.org/10.1080/14693062.2015.1094727

Barkemeyer, R., Figge, F., Hoepner, A., Holt, D., Kraak, J. M., & Yu, P. S. (2017). Media coverage of climate change: An international comparison. *Environment and Planning C: Politics and Space*, *35*(6), 1029–1054. https://doi.org/10.1177/0263774X16680818

Bechtel, M. M., Hainmueller, J., & Margalit, Y. (2014). Preferences for international redistribution: The divide over the Eurozone bailouts. *American Journal of Political Science*, *58*(4), 835–856. https://doi.org/10.1111/ajps.12079

Brulle, R. J., Carmichael, J., & Jenkins, J. C. (2012). Shifting public opinion on climate change: An empirical assessment of factors influencing concern over climate change in the U.S., 2002–2010. *Climatic Change*, *114*(2), 169–188. https://doi.org/10.1007/s10584-012-0403-y

Bryan, M. L., & Jenkins, S. P. (2016). Multilevel modelling of country effects: A cautionary tale. *European Sociological Review*, *32*(1), 3–22. https://doi.org/10.1093/esr/jcv059

Capstick, S., Whitmarsh, L., Poortinga, W., Pidgeon, N., & Upham, P. (2015). International trends in public perceptions of climate change over the past quarter century. *Wiley Interdisciplinary Reviews: Climate Change*, *6*(1), 35–61. https://doi.org/10.1002/wcc.321

Climate Analytics, 2017. "About 80% of EU and German, virtually all Polish coal plants non-compliant with new EU 2021 air pollution regulations". https://climateanalytics.org/briefings/about-80-of-eu-and-german-virtually-all-polish-coal-plants-non-compliant-with-new-eu-2021-air-pollution-regulations/

De Wilde, P., Koopmans, R., Merkel, W., & Zürn, M. (Eds.). (2019). *The Struggle Over Borders: Cosmopolitanism and Communitarianism*. Cambridge University Press.

Douenne, T., & Fabre, A. (2020). French attitudes on climate change, carbon taxation and other climate policies. *Ecological Economics*, *169*, 106496. https://doi.org/10.1016/j.ecolecon.2019.106496

Eicke, L., & Petri, F. (2020). The EU in global energy governance. In M. Knodt & J. Kemmerzell (Eds.), *Handbook of energy governance in Europe* (pp. 1–26). Springer.

European Commission. (2019). Communication on The European Green Deal.

Eurostat, 2017. "How are emissions of greenhouse gases by the EU evolving?" https://ec.europa.eu/eurostat/cache/infographs/energy/bloc-4a.html

Forchtner, B. (2019). Climate change and the far right. *Wiley Interdisciplinary Reviews: Climate Change*, *10*(5). https://doi.org/10.1002/wcc.604

Franzen, A., & Vogl, D. (2013). Two decades of measuring environmental attitudes: A comparative analysis of 33 countries. *Global Environmental Change*, *23*(5), 1001–1008. https://doi.org/10.1016/j.gloenvcha.2013.03.009

Gerhards, J., Lengfeld, H., Ignácz, Z. S., Kley, F. K., & Priem, M. (2019). *European Solidarity in Times of Crisis*.

Hess, D. J., & Renner, M. (2019). Conservative political parties and energy transitions in Europe: Opposition to climate mitigation policies. *Renewable and Sustainable Energy Reviews*, *104*, 419–428. https://doi.org/10.1016/j.rser.2019.01.019

Hooghe, L., & Marks, G. (2018). Cleavage theory meets Europe's crises: Lipset, Rokkan, and the transnational cleavage. *Journal of European Public Policy*, *25*(1), 109–135. https://doi.org/10.1080/13501763.2017.1310279

Huber, R. A. (2020). The role of populist attitudes in explaining climate change skepticism and support for environmental protection. *Environmental Politics*, 29(6), 1–24. https://doi.org/10.1080/09644016.2019.1708186

Huber, R. A., Fesenfeld, L., & Bernauer, T. (2020). Political populism, responsiveness, and public support for climate mitigation. *Climate Policy*, *20*(3), 373–386. https://doi.org/10.1080/14693062.2020.1736490

Inglehart, R. (1990). *Culture shift in advanced industrial society*. Princeton University Press.

Kim, S. Y., & Wolinsky-Nahmias, Y. (2014). Cross-national public opinion on climate change: The effects of affluence and vulnerability. *Global Environmental Politics*, *14*(1), 79–106. https://doi.org/10.1162/GLEP_a_00215

Knight, K. W. (2016). Public awareness and perception of climate change: A quantitative cross-national study. *Environmental Sociology*, *2*(1), 101–113. https://doi.org/10.1080/23251042.2015.1128055

Krange, O., Kaltenborn, B. P., & Hultman, M. (2019). Cool dudes in Norway: Climate change denial among conservative Norwegian men. *Environmental Sociology*, *5*(1), 1–11. https://doi.org/10.1080/23251042.2018.1488516

Kreft, S., Eckstein, D., Junghans, L., Kerestan, C., & Hagen, U. (2014). Global climate risk index 2015. Working paper, Germanwatch e.V.

Kuhn, T., Solaz, H., & van Elsas, E. J. (2018). Practising what you preach: How cosmopolitanism promotes willingness to redistribute across the European Union. *Journal of European Public Policy*, *25*(12), 1759–1778. https://doi.org/10.1080/13501763.2017.1370005

Kuzemko, C. (2014). Ideas, power and change: Explaining EU–Russia energy relations. *Journal of European Public Policy*, *21*(1), 58–75. https://doi.org/10.1080/13501763.2013.835062

Kvaløy, B., Finseraas, H., & Listhaug, O. (2012). The publics' concern for global warming: A cross-national study of 47 countries. *Journal of Peace Research*, *49*(1), 11–22. https://doi.org/10.1177/0022343311425841

Lee, T. M., Markowitz, E. M., Howe, P. D., Ko, C.-Y., & Leiserowitz, A. A. (2015). Predictors of public climate change awareness and risk perception around the world. *Nature Climate Change*, *5*(11), 1014–1020. https://doi.org/10.1038/nclimate2728

Lockwood, M. (2018). Right-wing populism and the climate change agenda: Exploring the linkages. *Environmental Politics*, *27*(4), 712–732. https://doi.org/10.1080/09644016.2018.1458411

Markard, J. (2018). The next phase of the energy transition and its implications for research and policy. *Nature Energy*, *3*(8), 628–633. https://doi.org/10.1038/s41560-018-0171-7

Marks, G., Attewell, D., Rovny, J., & Hooghe, L. (2017-08). Dealignment meets cleavage theory. *American Political Science Association Meeting*, *30*.

McCright, A. M., & Dunlap, R. E. (2011). Cool dudes: The denial of climate change among conservative white males in the United States. *Global Environmental Change*, *21*(4), 1163–1172. https://doi.org/10.1016/j.gloenvcha.2011.06.003

McCright, A. M., Dunlap, R. E., & Marquart-Pyatt, S. T. (2016). Political ideology and views about climate change in the European Union. *Environmental Politics*, *25*(2), 338–358. https://doi.org/10.1080/09644016.2015.1090371

Metag, J., Fuchslin, T., & Schafer, M. S. (2017). Global warming's five Germanys: A typology of Germans' views on climate change and patterns of media use and information. *Public Understanding of Science*, *26*(4), 434–451. https://doi.org/10.1177/0963662515592558

Oberthür, S., & Roche Kelly, C. (2008). EU leadership in international climate policy: Achievements and challenges. *The International Spectator*, *43*(3), 35–50. https://doi.org/10.1080/03932720802280594

Poortinga, W., Whitmarsh, L., Steg, L., Böhm, G., & Fisher, S. (2019). Climate change perceptions and their individual-level determinants: A cross-European analysis. *Global Environmental Change*, *55*, 25–35. https://doi.org/10.1016/j.gloenvcha.2019.01.007

Schwartz, S. H., Caprara, G. V., & Vecchione, M. (2010). Basic personal values, core political values, and voting: A longitudinal analysis. *Political Psychology*, *31*(3), 421–452. https://doi.org/10.1111/j.1467-9221.2010.00764.x

Schwartz, S. H., Caprara, G. V., Vecchione, M., Bain, P., Bianchi, G., Caprara, M. G., Cieciuch, J., Kirmanoglu, H., Baslevent, C., Lönnqvist, J.-E., Mamali, C., Manzi, J., Pavlopoulos, V., Posnova, T., Schoen, H., Silvester, J., Tabernero, C., Torres, C., Verkasalo, M., … Zaleski, Z. (2014). Basic personal values underlie and give coherence to political values: A cross national study in 15 countries. *Political Behavior*, *36*(4), 899–930. https://doi.org/10.1007/s11109-013-9255-z

Shum, R. Y. (2012). Effects of economic recession and local weather on climate change attitudes. *Climate Policy*, *12*(1), 38–49. https://doi.org/10.1080/14693062.2011.579316

Sovacool, B. K., & Saunders, H. (2014). Competing policy packages and the complexity of energy security. *Energy*, *67*, 641–651. https://doi.org/10.1016/j.energy.2014.01.039

Teney, C., Lacewell, O. P., & De Wilde, P. (2014). Winners and losers of globalization in Europe: Attitudes and ideologies. *European Political Science Review*, *6*(4), 575–595. https://doi.org/10.1017/S1755773913000246

Tjernström, E., & Tietenberg, T. (2008). Do differences in attitudes explain differences in national climate change policies? *Ecological Economics*, *65*(2), 315–324. https://doi.org/10.1016/j.ecolecon.2007.06.019

Tranter, B. (2011). Political divisions over climate change and environmental issues in Australia. *Environmental Politics*, *20*(1), 78–96. https://doi.org/10.1080/09644016.2011.538167

Tranter, B., & Booth, K. (2015). Scepticism in a changing climate: A cross-national study. *Global Environmental Change*, *33*, 154–164. https://doi.org/10.1016/j.gloenvcha.2015.05.003

von Homeyer, I., & Oberthür, S. (forthcoming). *Journal of European Public Policy*.

Whitmarsh, L. (2011). Scepticism and uncertainty about climate change: Dimensions, determinants and change over time. *Global Environmental Change*, *21*(2), 690–700. https://doi.org/10.1016/j.gloenvcha.2011.01.016