

Changing climate, changing party: Exploring demographic and environmental factors underlying voting for Green parties in European parliamentary election, 1994 to 2019

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Given the urgency of tackling climate change, public support for climate policies are fundamental to policy action. Previous studies have shown that personal experience of natural disasters and extreme weather events influence attitudes and concern about climate change and consequently support for climate policies and societal action. However, attitudes do not necessarily translate into action that can achieve social transformation. Voting behaviour, on the other hand, reflects voter demand for alternative political priorities. This study exploits a newly constructed municipal-level dataset of European Parliament election results in 11 western European countries from 1994 to 2019 to explain the dramatic surge in public support for Green parties, especially in the latest election. We combine demographic and socioeconomic data, mainly obtained from the Eurostat regional statistics, with floods and climate data obtained from the European Environmental Agency and the Climate Research Unit at the University of East Anglia (CRU-TS 3.25) at NUTS3 level (Nomenclature of territorial units for statistics). We estimate models for the percentage of the vote received by the Green parties in each European parliamentary election in NUTS 3 regions. Based on the demographic metabolism theory, we expect that changes in demographic composition whereby older and less educated generations are replaced by younger and more educated cohorts who are embedded in post-materialist value partially explain these changes. Meanwhile, we expect that experiences of natural disasters and extreme weather events trigger support for green parties. Extant evidence documents that local warming effect and natural disaster experience influence belief in global warming and concern about climate change. Given that the occurrence of an extreme natural event is plausibly exogenous with respect to voting behaviour, we can estimate reduced form (intention to treat) causal effects of climate-change related events on support for Green parties.