One Earth, Volume *4*

Supplemental information

Emphasizing urgency of climate change is insufficient to increase policy support

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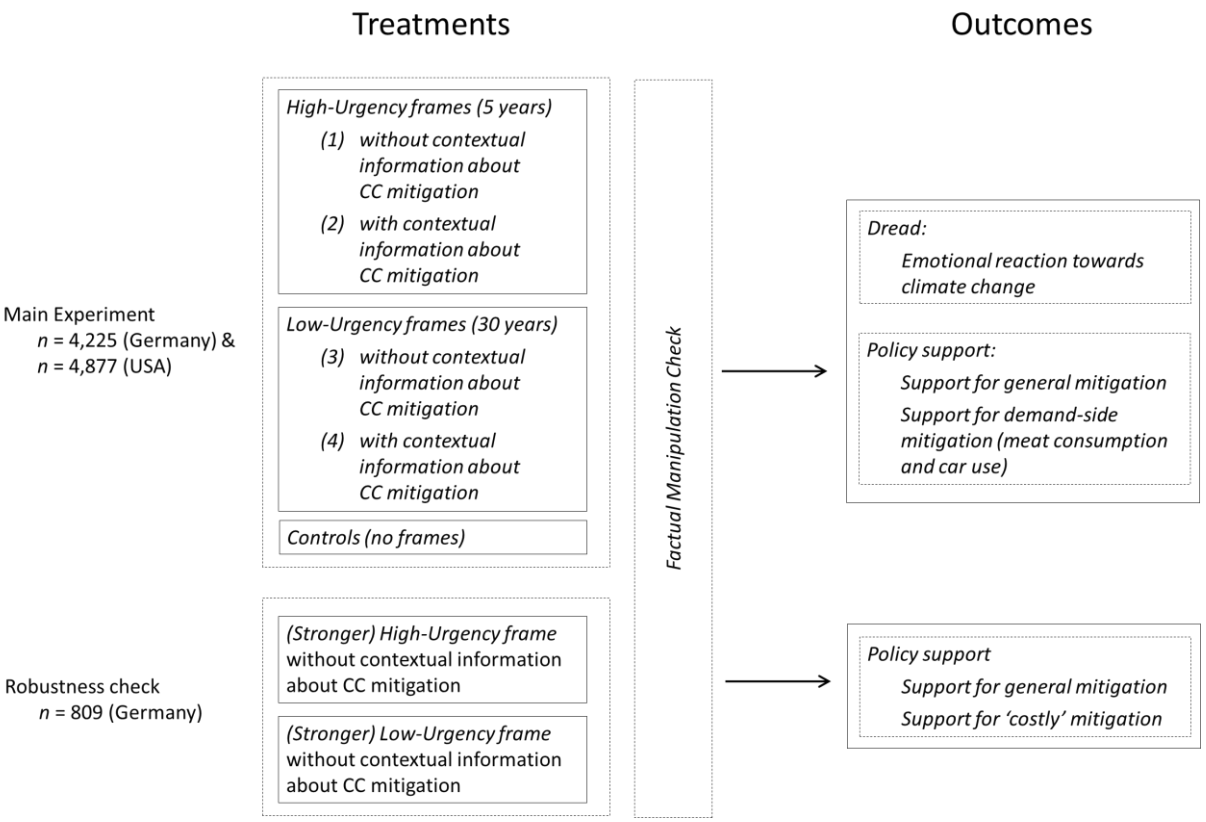
Supplemental Information (SI)

Table of Contents

I. Overview of Experimental Study Design 2
II. National/Sample statistics for Age, Gender, Rural Urban and Income 3
III. First Step (Observational) LASSOplus Sparse Regression Results 5
IV. Second Step (Experimental) OLS Regression Results 9
V. Balance Test to Check for Proper Treatment/Control Randomization 17
VI. Supplemental Note: Robustness-Check Survey-Experiment in Germany 19
VII. Supplemental Note: Survey Instrument (English version) 21

I. Overview of Experimental Study Design

SI-Figure 1: Overview of experimental study design



II. National/Sample statistics for Age, Gender, Rural Urban and Income Variables

SI-Table 1: German Sample Statistics

Germany	National Statistics[1]	Sample
Gender		
Male	51%	51%
Female	49%	49%
Age		
18-24	9.0%	13%
25-39	22.5%	23%
40-64	43.5%	43%
65+	25.0%	21%
Income (monthly)		
960 € or less	10%	10%
960 - 1290 €	10%	9%
1290 - 1640 €	10%	12%
1640 - 1975 €	10%	8%
1975 - 2365 €	10%	13%
2365 - 2860 €	10%	13%
2860 - 3440 €	10%	14%
3440 - 4215 €	10%	11%
4215 - 5515 €	10%	6%
More than 5515 €	10%	4%
Urban-Rural		
Urban	76%	77%
Rural	24%	23%

[1] Source: De-Statitis 2017

SI-Table 2: US Sample Statistics

USA	National Statistics[2]	Sample
Gender		
Male	48%	48%
Female	52%	52%
Age		
18-24	13%	19%
25-44	35%	28%
45-64	35%	32%
+65	17%	21%
Income (annual)		
$22,500 or less	20%	21%
$22,501 - $43,500	20%	24%
$43,501- $72,000	20%	24%
$72,001- $117,000	20%	20%
$117,001 - $214'500	15%	9%
More than $214'500	5%	2%
Urban-Rural		
Urban	82%	80%
Rural	18%	20%

[2] Source: U.S. Census Bureau 2015

III. First Step (Observational) LASSOplus Sparse Regression Results

Main Analysis (corresponding to main manuscript)

SI-Table 3: US Sample: LASSOplus results for selected predictors of policy support for general mitigation corresponding to Figure 2, main manuscript

```
----------------------------
Variable Selection:
   Original variables: 119
   Selected variables: 7
----------------------------
Coefficients:
                         Posterior Median      5%    95% Pr(b<0) Pr(b=0) Pr(b>0)
Other: Country: Concern            0.0699  0.0558  0.136       0       0       1
Dread                              0.1520  0.1370  0.202       0       0       1
Lifestyle: Change                  0.1280  0.1160  0.176       0       0       1
State: Intervention                0.1210  0.1100  0.167       0       0       1
Humans: Not: Cause                -0.2560 -0.3060 -0.241       1       0       0
Climate: Knowledge                 0.1170  0.1020  0.166       0       0       1
Perceived: Urgency                 0.0887  0.0796  0.140       0       0       1
----------------------------
 Posterior intervals using quantiles of the approximate confidence interval
```

SI-Table 4: German Sample: LASSOplus results for selected predictors of policy support for general mitigation corresponding to Figure 2, main manuscript

```
----------------------------
Variable Selection:
   Original variables: 134
   Selected variables: 8
----------------------------
Coefficients:
                         Posterior Median      5%    95% Pr(b<0) Pr(b=0) Pr(b>0)
Country: Concern                   0.1080  0.0930  0.158       0       0       1
Other: Country: Concern            0.1650  0.1510  0.210       0       0       1
Dread                              0.0830  0.0729  0.128       0       0       1
State: Intervention                0.1250  0.1160  0.167       0       0       1
Humans: Not: Cause                -0.2420 -0.2830 -0.230       1       0       0
CFC: Future                        0.0606  0.0588  0.108       0       0       1
Climate: Knowledge                 0.0975  0.0868  0.140       0       0       1
Perceived: Urgency                 0.0706  0.0635  0.114       0       0       1
----------------------------
 Posterior intervals using quantiles of the approximate confidence interval
```

SI-Table 5: US Sample: LASSOplus results for selected predictors of policy support for demand-side mitigation

```
----------------------------
Variable Selection:
   Original variables: 119
   Selected variables: 7
----------------------------
Coefficients:
                       Posterior Median     5%     95% Pr(b<0) Pr(b=0) Pr(b>0)
Personal: Concern             0.165  0.143  0.2300       0       0       1
Dread                         0.132  0.117  0.1940       0       0       1
Age                          -0.110 -0.178 -0.0976       1       0       0
State: Intervention           0.253  0.233  0.3100       0       0       1
Humans: Not: Cause           -0.107 -0.175 -0.0889       1       0       0
Climate: Knowledge            0.268  0.251  0.3270       0       0       1
Meat: Consumption            -0.181 -0.241 -0.1680       1       0       0
----------------------------
 Posterior intervals using quantiles of the approximate confidence interval
```

SI-Table 6: German Sample: LASSOplus results for selected predictors of policy support for demand-side mitigation

```
----------------------------
Variable Selection:
   Original variables: 134
   Selected variables: 11
----------------------------
Coefficients:
                        Posterior Median      5%     95% Pr(b<0) Pr(b=0) Pr(b>0)
Low Urgency + Context             0.1180  0.1610  0.3270       0       0       1
Personal: Concern                 0.0918  0.0692  0.1660       0       0       1
Country: Concern                  0.1180  0.0815  0.1940       0       0       1
Other: Country: Concern           0.1350  0.1170  0.1970       0       0       1
Dread                             0.1290  0.1140  0.1890       0       0       1
Greens                            0.0832  0.0794  0.1450       0       0       1
State: Intervention               0.2110  0.1980  0.2650       0       0       1
Humans: Not: Cause               -0.0944 -0.1540 -0.0865       1       0       0
Climate: Knowledge                0.3810  0.3660  0.4380       0       0       1
Car: Use                         -0.1320 -0.1870 -0.1220       1       0       0
Meat: Consumption                -0.1710 -0.2240 -0.1590       1       0       0
----------------------------
 Posterior intervals using quantiles of the approximate confidence interval
```

Supplemental Note: Mediation Analysis

In order to establish that the effect of perceived urgency on policy support for general and demand-side mitigation is mediated via increased feelings of dread (see main manuscript) there has to be a significant effect of perceived urgency on the assumed mediator. As the following sparse regression results indicate perceived urgency is not selected as a relevant predictor of feelings of dread in both country samples. This implies that we cannot confirm the expected mediation effect of perceived urgency on policy support via increased levels of dread.

SI-Table 7: US Sample: LASSOplus results for selected predictors of feelings of dread

```
Variable Selection:
   Original variables: 114
   Selected variables: 6
----------------------------
Coefficients:
                        Posterior Median      5%     95% Pr(b<0) Pr(b=0) Pr(b>0)
Personal: Concern                 0.1480  0.1340  0.1950       0       0       1
Other: Country: Concern           0.0426  0.0463  0.1150       0       0       1
Gender                           -0.0718 -0.1200 -0.0661       1       0       0
Lifestyle: Change                 0.1170  0.1050  0.1620       0       0       1
Humans: Not: Cause               -0.1730 -0.2190 -0.1560       1       0       0
CFC: Future                       0.1490  0.1420  0.1940       0       0       1
----------------------------
 Posterior intervals using quantiles of the approximate confidence interval
```

SI-Table 8: German Sample: LASSOplus results for selected predictors of feelings of dread

```
LASSOplus results:
----------------------------
Variable Selection:
   Original variables: 129
   Selected variables: 7
----------------------------
Coefficients:
                        Posterior Median      5%     95% Pr(b<0) Pr(b=0) Pr(b>0)
Personal: Concern                 0.2550  0.2330  0.3030       0       0       1
Other: Country: Concern           0.1010  0.0866  0.1450       0       0       1
Gender                            0.1080  0.1000  0.1460       0       0       1
Lifestyle: Change                 0.0699  0.0614  0.1120       0       0       1
State: Intervention               0.0629  0.0570  0.1050       0       0       1
Humans: Not: Cause               -0.0685 -0.1100 -0.0606       1       0       0
CFC: Future                       0.0588  0.0536  0.1010       0       0       1
----------------------------
 Posterior intervals using quantiles of the approximate confidence interval
```

Robustness Check Analysis (for sample including all respondents, also those that do not perceive climate change to be a problem today nor in future)

SI-Table 9: US Sample: LASSOplus results for selected predictors of policy support for general mitigation

LASSOplus results:

Variable Selection:
- Original variables: 124
- Selected variables: 8

Coefficients:

	Posterior Median	5%	95%	Pr(b<0)	Pr(b=0)	Pr(b>0)
Country: Concern	0.1410	0.1130	0.204	0	0	1
Other: Country: Concern	0.0947	0.0719	0.151	0	0	1
Dread	0.2740	0.2550	0.323	0	0	1
Lifestyle: Change	0.1570	0.1450	0.204	0	0	1
State: Intervention	0.2060	0.1920	0.251	0	0	1
Humans: Not: Cause	-0.4200	-0.4740	-0.395	1	0	0
Climate: Knowledge	0.1270	0.1110	0.175	0	0	1
Perceived: Urgency	0.2210	0.2030	0.270	0	0	1

Posterior intervals using quantiles of the approximate confidence interval

SI-Table 10: German Sample: LASSOplus results for selected predictors of policy support for general mitigation

LASSOplus results:

Variable Selection:
- Original variables: 139
- Selected variables: 8

Coefficients:

	Posterior Median	5%	95%	Pr(b<0)	Pr(b=0)	Pr(b>0)
Country: Concern	0.1460	0.1240	0.195	0	0	1
Other: Country: Concern	0.2200	0.2040	0.268	0	0	1
Dread	0.0902	0.0769	0.136	0	0	1
Lifestyle: Change	0.0780	0.0676	0.124	0	0	1
State: Intervention	0.1320	0.1230	0.175	0	0	1
Humans: Not: Cause	-0.3260	-0.3710	-0.309	1	0	0
Climate: Knowledge	0.1100	0.0966	0.152	0	0	1
Perceived: Urgency	0.1650	0.1510	0.207	0	0	1

Posterior intervals using quantiles of the approximate confidence interval

SI-Table 11: US Sample: LASSOplus results for selected predictors of policy support for demand-side mitigation

LASSOplus results:

Variable Selection:
- Original variables: 124
- Selected variables: 7

Coefficients:

	Posterior Median	5%	95%	Pr(b<0)	Pr(b=0)	Pr(b>0)
Personal: Concern	0.210	0.185	0.272	0	0	1
Dread	0.168	0.147	0.230	0	0	1
Age	-0.121	-0.172	-0.109	1	0	0
State: Intervention	0.313	0.295	0.369	0	0	1
Humans: Not: Cause	-0.179	-0.241	-0.152	1	0	0
Climate: Knowledge	0.283	0.262	0.336	0	0	1
Meat: Consumption	-0.156	-0.203	-0.146	1	0	0

Posterior intervals using quantiles of the approximate confidence interval

SI-Table 12: German Sample: LASSOplus results for selected predictors of policy support for demand-side mitigation

LASSOplus results:

Variable Selection:

Original variables: 139

Selected variables: 11

Coefficients:

	Posterior Median	5%	95%	Pr(b<0)	Pr(b=0)	Pr(b>0)
Personal: Concern	0.0781	0.0524	0.1540	0	0	1
Country: Concern	0.1430	0.1060	0.2160	0	0	1
Other: Country: Concern	0.1200	0.1010	0.1800	0	0	1
Dread	0.1610	0.1450	0.2180	0	0	1
Greens	0.0751	0.0717	0.1330	0	0	1
State: Intervention	0.2070	0.1950	0.2570	0	0	1
Humans: Not: Cause	-0.0946	-0.1510	-0.0804	1	0	0
CFC: Immediate	0.0671	0.0686	0.1310	0	0	1
Climate: Knowledge	0.3810	0.3660	0.4340	0	0	1
Car: Use	-0.1400	-0.1890	-0.1320	1	0	0
Meat: Consumption	-0.1830	-0.2300	-0.1720	1	0	0

Posterior intervals using quantiles of the approximate confidence interval

IV. Second Step (Experimental) OLS Regression Results

Main Analysis (corresponding to main manuscript)

Main Effects on Dread and Policy Support Outcomes

SI-Table 13: US Sample - Table includes OLS regression results with robust standard errors showing the main effects of framing treatments on dread and policy support outcomes corresponding to Figure 3 and 4, main manuscript

	Feelings of Dread	General Mitigation	Demand-Side Mitigation
Intercept	4.048 (0.039)***	5.803 (0.044)***	4.581 (0.056)***
High Urgency	0.262 (0.057)***	0.104 (0.065)	-0.023 (0.078)
Low Urgency	0.244 (0.056)***	0.217 (0.061)***	0.079 (0.079)
High Urgency+Context	0.198 (0.057)***	0.136 (0.062)*	0.211 (0.080)**
Low Urgency+Context	0.192 (0.055)***	0.000 (0.066)	0.163 (0.079)*
R^2	0.008	0.005	0.004
Adj. R^2	0.007	0.004	0.003
Num. obs.	3450	3450	3450
RMSE	1.055	1.198	1.464

***p < 0.001, **p < 0.01, *p < 0.05

SI-Table 14: German Sample - Table includes OLS regression results with robust standard errors showing the main effects of framing treatments on dread and policy support outcomes corresponding to Figure 3 and 4, main manuscript

	Feelings of Dread	General Mitigation	Demand-Side Mitigation
Intercept	3.746 (0.034)***	5.963 (0.041)***	4.509 (0.057)***
High Urgency	0.233 (0.049)***	0.163 (0.056)**	0.219 (0.077)**
Low Urgency	0.277 (0.050)***	0.200 (0.055)***	0.254 (0.078)**
High Urgency+Context	0.183 (0.050)***	0.032 (0.058)	0.364 (0.077)***
Low Urgency+Context	0.328 (0.049)***	0.106 (0.056)	0.483 (0.076)***
R^2	0.014	0.005	0.013
Adj. R^2	0.013	0.004	0.012
Num. obs.	3616	3616	3616
RMSE	0.951	1.055	1.424

***p < 0.001, **p < 0.01, *p < 0.05

SI-Table 13a: US Sample: Dread Outcome - Table includes Dunn Kruskal-Wallis multiple comparison tests with p-values adjusted with the Holm method

	Comparison	Z	P.adj
1	Control vs. Low Urgency	-4.680753683	2.5724E-05
2	Control vs. Low Urgency + Context	-3.78114311	0.001092769
3	Low Urgency vs. Low Urgency + Context	0.946145153	1
4	Control vs. High Urgency	-5.262172968	1.42363E-06
5	Low Urgency vs. High Urgency	-0.478405175	1
6	Low Urgency + Context vs. High Urgency	-1.450206633	0.882005436
7	Control vs. High Urgency + Context	-3.977109801	0.000558064
8	Low Urgency vs. High Urgency + Context	0.760985914	1
9	Low Urgency + Context vs. High Urgency + Context	-0.189157496	0.84996938
10	High Urgency vs. High Urgency + Context	1.262155975	1

SI-Table 14a: German Sample: Dread Outcome - Table includes Dunn Kruskal-Wallis multiple comparison tests with p-values adjusted with the Holm method

	Comparison	Z	P.adj
1	Control vs. Low Urgency	-5.783171611	6.59747E-08
2	Control vs. Low Urgency + Context	-6.682768478	2.3447E-10
3	Low Urgency vs. Low Urgency + Context	-0.870363724	0.76820333
4	Control vs. High Urgency	-4.816357844	1.16962E-05
5	Low Urgency vs. High Urgency	0.985126128	0.973686362
6	Low Urgency + Context vs. High Urgency	1.863353877	0.312062473
7	Control vs. High Urgency + Context	-4.075291612	0.000321697
8	Low Urgency vs. High Urgency + Context	1.7056536	0.352290374
9	Low Urgency + Context vs. High Urgency + Context	2.584346345	0.05853826
10	High Urgency vs. High Urgency + Context	0.726343657	0.467628122

SI-Table 13b: US Sample: General Mitigation - Table includes Dunn Kruskal-Wallis multiple comparison tests with p-values adjusted with the Holm method

	Comparison	Z	P.adj
1	Control vs. Low Urgency	-3.629310678	0.002841791
2	Control vs. Low Urgency + Context	-0.942770625	1
3	Low Urgency vs. Low Urgency + Context	2.698142744	0.055782028
4	Control vs. High Urgency	-2.849549185	0.039403112
5	Low Urgency vs. High Urgency	0.844247423	0.797062319
6	Low Urgency + Context vs. High Urgency	-1.899093257	0.345313293
7	Control vs. High Urgency + Context	-2.301632916	0.149491176
8	Low Urgency vs. High Urgency + Context	1.362479686	0.865232753
9	Low Urgency + Context vs. High Urgency + Context	-1.357164522	0.698915763
10	High Urgency vs. High Urgency + Context	0.534301073	0.59313325

SI-Table 14b: German Sample: General Mitigation - Table includes Dunn Kruskal-Wallis multiple comparison tests with p-values adjusted with the Holm method

	Comparison	Z	P.adj
1	Control vs. Low Urgency	-3.821863401	0.001324471
2	Control vs. Low Urgency + Context	-2.083570623	0.223195449
3	Low Urgency vs. Low Urgency + Context	1.768404606	0.384966436
4	Control vs. High Urgency	-3.325840907	0.007933701
5	Low Urgency vs. High Urgency	0.507467672	0.611826714
6	Low Urgency + Context vs. High Urgency	-1.262288978	0.827379285
7	Control vs. High Urgency + Context	-0.963264632	0.670829475
8	Low Urgency vs. High Urgency + Context	2.865011775	0.033359499
9	Low Urgency + Context vs. High Urgency + Context	1.116279796	0.792907162
10	High Urgency vs. High Urgency + Context	2.365309143	0.126105183

SI-Table 13c: US Sample: Demand-side Mitigation - Table includes Dunn Kruskal-Wallis multiple comparison tests with p-values adjusted with the Holm method

	Comparison	Z	P.adj
1	Control vs. Low Urgency	-0.78378	1
2	Control vs. Low Urgency + Context	-2.11376	0.241752
3	Low Urgency vs. Low Urgency + Context	-1.30396	0.961229
4	Control vs. High Urgency	0.384297	0.700758
5	Low Urgency vs. High Urgency	1.169502	0.968805
6	Low Urgency + Context vs. High Urgency	2.515286	0.095149
7	Control vs. High Urgency + Context	-2.87928	0.035872
8	Low Urgency vs. High Urgency + Context	-2.05857	0.237215
9	Low Urgency + Context vs. High Urgency + Context	-0.76172	0.892456
10	High Urgency vs. High Urgency + Context	-3.28784	0.010096

SI-Table 14c: German Sample: Demand-side Mitigation - Table includes Dunn Kruskal-Wallis multiple comparison tests with p-values adjusted with the Holm method

	Comparison	Z	P.adj
1	Control vs. Low Urgency	-3.183660826	0.008725518
2	Control vs. Low Urgency + Context	-6.464794622	1.01436E-09
3	Low Urgency vs. Low Urgency + Context	-3.277929958	0.007319994
4	Control vs. High Urgency	-2.767711343	0.028225715
5	Low Urgency vs. High Urgency	0.425496128	0.670475043
6	Low Urgency + Context vs. High Urgency	3.713895953	0.001632742
7	Control vs. High Urgency + Context	-4.762488552	1.72098E-05
8	Low Urgency vs. High Urgency + Context	-1.591534088	0.222978861
9	Low Urgency + Context vs. High Urgency + Context	1.671429662	0.283910523
10	High Urgency vs. High Urgency + Context	-2.020107787	0.173488833

Interaction Effects on Dread and Policy Support Outcomes by Prior Perceived Urgency

SI-Table 15: US Sample - Table includes OLS regression results with robust standard errors showing interaction effects of framing treatments on dread and policy support outcomes corresponding to Figure 5 and 6, main manuscript

	Feelings of Dread	General Mitigation	Demand-Side Mitigation
Intercept	3.260***	4.836***	3.575***
	(0.109)	(0.141)	(0.151)
Low Urgency	0.295	0.178	0.237
	(0.155)	(0.195)	(0.218)
Low Urgency+Context	0.240	-0.230	0.267
	(0.157)	(0.230)	(0.244)
High Urgency	0.259	0.050	-0.120
	(0.151)	(0.213)	(0.216)
High Urgency+Context	0.266	0.059	0.258
	(0.175)	(0.237)	(0.261)
Low Urgency by Problem today and in future	-0.054	0.048	-0.172
	(0.165)	(0.204)	(0.233)
Low Urgency+Context by Problem today and in future	-0.049	0.264	-0.111
	(0.167)	(0.239)	(0.257)
High Urgency by Problem today and in future	0.008	0.067	0.115
	(0.162)	(0.223)	(0.231)
High Urgency+Context by Problem today and in future	-0.097	0.056	-0.081
	(0.185)	(0.244)	(0.273)
R^2	0.067	0.094	0.054
Adj. R^2	0.065	0.091	0.052
Num. obs.	3450	3450	3450
RMSE	1.024	1.144	1.428

***p < 0.001, **p < 0.01, *p < 0.05

SI-Table 16: German Sample - Table includes OLS regression results with robust standard errors showing interaction effects of framing treatments on dread and policy support outcomes corresponding to Figure 5 and 6, main manuscript

	Feelings of Dread	General Mitigation	Demand-Side Mitigation
Intercept	3.281***	5.031***	3.609***
	(0.163)	(0.264)	(0.280)
Low Urgency	0.204	-0.062	0.057
	(0.214)	(0.346)	(0.360)
Low Urgency+Context	-0.229	-0.031	0.404
	(0.216)	(0.369)	(0.384)
High Urgency	-0.303	-0.209	-0.176
	(0.213)	(0.321)	(0.340)
High Urgency+Context	-0.122	-0.213	0.141
	(0.248)	(0.347)	(0.369)
Low Urgency by Problem today and in future	0.078	0.275	0.207
	(0.220)	(0.350)	(0.368)
Low Urgency+Context by Problem today and in future	0.590**	0.151	0.090
	(0.221)	(0.373)	(0.391)
High Urgency by Problem today and in future	0.581**	0.414	0.437
	(0.219)	(0.326)	(0.348)
High Urgency+Context by Problem today and in future	0.333	0.278	0.254
	(0.253)	(0.352)	(0.378)
R^2	0.055	0.072	0.046
Adj. R^2	0.052	0.070	0.044
Num. obs.	3616	3616	3616
RMSE	0.931	1.019	1.401

***p < 0.001, **p < 0.01, *p < 0.05

Robustness Check Analysis (for sample including all respondents, also those that do not perceive climate change to be a problem today nor in future)

Main Effects on Dread and Policy Support Outcomes

SI-Table 17: US Sample (Robustness Check) - Table includes OLS regression results with robust standard errors showing the main effects of framing treatments on dread and policy support outcomes including all respondents, also those that do not perceive climate change to be a problem today nor in future

	Feelings of Dread	General Mitigation	Demand-Side Mitigation
Intercept	3.655 (0.039)***	5.197 (0.052)***	4.163 (0.053)***
High Urgency	0.216 (0.058)***	0.079 (0.076)	-0.047 (0.075)
Low Urgency	0.215 (0.057)***	0.097 (0.075)	-0.029 (0.076)
High Urgency+Context	0.165 (0.058)**	0.092 (0.074)	0.158 (0.076)*
Low Urgency+Context	0.142 (0.057)*	-0.068 (0.076)	0.113 (0.076)
R^2	0.004	0.001	0.002
Adj. R^2	0.003	0.001	0.002
Num. obs.	4877	4877	4877
RMSE	1.294	1.696	1.679

***p < 0.001, **p < 0.01, *p < 0.05

SI-Table 18: German Sample (Robustness Check) - Table includes OLS regression results with robust standard errors showing the main effects of framing treatments on dread and policy support outcomes including all respondents, also those that do not perceive climate change to be a problem today nor in future

	Feelings of Dread	General Mitigation	Demand-Side Mitigation
Intercept	3.639 (0.034)***	5.696 (0.046)***	4.381 (0.053)***
High Urgency	0.215 (0.048)***	0.133 (0.065)*	0.152 (0.074)*
Low Urgency	0.260 (0.050)***	0.222 (0.063)***	0.220 (0.075)**
High Urgency+Context	0.123 (0.050)*	-0.019 (0.066)	0.248 (0.075)***
Low Urgency+Context	0.304 (0.049)***	0.139 (0.063)*	0.436 (0.073)***
R^2	0.011	0.005	0.009
Adj. R^2	0.010	0.004	0.008
Num. obs.	4225	4225	4225
RMSE	1.031	1.306	1.506

***p < 0.001, **p < 0.01, *p < 0.05

Interaction Effects on Dread and Policy Support Outcomes by Prior Perceived Urgency

SI-Table 19: US Sample (Robustness Check) - Table includes OLS regression results with robust standard errors showing interaction effects of framing treatments on dread and policy support outcomes including all respondents, also those that do not perceive climate change to be a problem today nor in future

	Feelings of Dread	General Mitigation	Demand-Side Mitigation
Intercept	2.576***	3.527***	3.004***
	(0.072)	(0.101)	(0.100)
Low.Urgency	0.284**	0.001	-0.168
	(0.107)	(0.142)	(0.140)
Low.Urgency.Context	0.079	-0.106	0.061
	(0.102)	(0.143)	(0.143)
High.Urgency	0.030	-0.099	-0.165
	(0.108)	(0.151)	(0.142)
High.Urgency.Context	0.060	0.019	-0.010
	(0.106)	(0.145)	(0.144)
Low.Urgency.by. No.Problem.today.but.in.future	0.011	0.177	0.405
	(0.188)	(0.241)	(0.259)
Low.Urgency.Context.by. No.Problem.today.but.in.future	0.161	-0.124	0.206
	(0.187)	(0.271)	(0.283)
High.Urgency.by. No.Problem.today.but.in.future	0.228	0.149	0.045
	(0.185)	(0.261)	(0.259)
High.Urgency.Context.by. No.Problem.today.but.in.future	0.206	0.041	0.268
	(0.205)	(0.277)	(0.298)
Low.Urgency.by. Problem.today.and.in.future	-0.043	0.225	0.233
	(0.121)	(0.155)	(0.162)
Low.Urgency.Context.by. Problem.today.and.in.future	0.112	0.140	0.094
	(0.116)	(0.157)	(0.164)
High.Urgency.by. Problem.today.and.in.future	0.237	0.216	0.161
	(0.122)	(0.164)	(0.164)
High.Urgency.Context.by. Problem.today.and.in.future	0.109	0.097	0.188
	(0.121)	(0.157)	(0.166)
R^2	0.309	0.417	0.230
Adj. R^2	0.306	0.415	0.227
Num. obs.	4877	4877	4877
RMSE	1.080	1.297	1.477

***p < 0.001, **p < 0.01, *p < 0.05

Interaction Effects on Dread and Policy Support Outcomes by Prior Perceived Urgency

SI-Table 20: German Sample (Robustness Check) - Table includes OLS regression results with robust standard errors showing interaction effects of framing treatments on dread and policy support outcomes including all respondents, also those that do not perceive climate change to be a problem today nor in future

	Feelings of Dread	General Mitigation	Demand-Side Mitigation
Intercept	2.938***	3.979***	3.568***
	(0.108)	(0.153)	(0.158)
Low.Urgency	0.041	0.162	-0.269
	(0.161)	(0.209)	(0.219)
Low.Urgency.Context	0.110	0.307	0.085
	(0.159)	(0.207)	(0.211)
High.Urgency	0.023	-0.089	-0.383*
	(0.153)	(0.211)	(0.223)
High.Urgency.Context	-0.223	-0.227	-0.387*
	(0.154)	(0.212)	(0.209)
Low.Urgency.by. No.Problem.today.but.in.future	0.163	-0.224	0.326
	(0.268)	(0.404)	(0.421)
Low.Urgency.Context.by. No.Problem.today.but.in.future	-0.339	-0.338	0.319
	(0.268)	(0.423)	(0.438)
High.Urgency.by. No.Problem.today.but.in.future	-0.326	-0.120	0.207
	(0.262)	(0.384)	(0.406)
High.Urgency.Context.by. No.Problem.today.but.in.future	0.101	0.014	0.527
	(0.292)	(0.407)	(0.424)
Low.Urgency.by. Problem.today.and.in.future	0.240	0.051	0.533**
	(0.169)	(0.216)	(0.232)
Low.Urgency.Context.by. Problem.today.and.in.future	0.252	-0.187	0.409*
	(0.167)	(0.214)	(0.224)
High.Urgency.by. Problem.today.and.in.future	0.255	0.294	0.644***
	(0.160)	(0.218)	(0.237)
High.Urgency.Context.by. Problem.today.and.in.future	0.434***	0.292	0.782***
	(0.162)	(0.220)	(0.223)
R2	0.146	0.312	0.130
Adj. R2	0.142	0.308	0.126
Num. obs.	4,225	4,225	4,225
RMSE	0.960	1.088	1.414

***p < 0.001, **p < 0.01, *p < 0.05

V. Balance Test to Check for Proper Treatment/Control Group Randomization

SI-Table 21: Germany - Balance Test: Age, Gender, Income (Quota Variables)

	Age	Gender	Income
(Intercept)	47.98 (0.58)**	0.00 (0.07)	5.10 (0.09)**
Low-Urgency	0.06 (0.82)	0.11 (0.10)	0.07 (0.13)
Low-Urgency Context	-0.18 (0.82)	0.03 (0.10)	-0.10 (0.13)
High-Urgency	-0.59 (0.82)	0.04 (0.10)	0.06 (0.13)
High-Urgency Context	-0.79 (0.82)	-0.03 (0.10)	0.09 (0.13)
R^2	0.00		0.00
Adj. R^2	-0.00		-0.00
Num. obs.	4225	4225	4225
RMSE	16.79		2.57
AIC		5867.74	
BIC		5899.49	
Log Likelihood		-2928.87	
Deviance		5857.74	

**p < 0.01, *p < 0.05

SI-Table 22: Germany - Balance Test: Education

	Low Education	Medium Education	High Education
(Intercept)	-1.04 (0.08)**	-0.17 (0.07)*	-0.95 (0.08)**
Low-Urgency	0.01 (0.11)	-0.03 (0.10)	0.03 (0.11)
Low-Urgency Context	0.20 (0.11)	-0.11 (0.10)	-0.06 (0.11)
High-Urgency	0.18 (0.11)	-0.06 (0.10)	-0.11 (0.11)
High-Urgency Context	0.13 (0.11)	0.03 (0.10)	-0.18 (0.11)
AIC	5040.84	5826.00	4914.46
BIC	5072.59	5857.75	4946.21
Log Likelihood	-2515.42	-2908.00	-2452.23
Deviance	5030.84	5816.00	4904.46
Num. obs.	4225	4225	4225

**p < 0.01, *p < 0.05

SI-Table 23: Germany - Balance Test: Individual Attitudes

	Ideology	Climate Skepticism	Problem Today	Problem in Future
(Intercept)	5.86 (0.07)**	-0.03 (0.03)	2.31 (0.05)**	2.31 (0.05)**
Low-Urgency	0.04 (0.09)	0.06 (0.04)	-0.06 (0.07)	-0.06 (0.07)
Low-Urgency Context	0.01 (0.09)	-0.01 (0.04)	-0.05 (0.07)	-0.05 (0.07)
High-Urgency	0.02 (0.09)	0.08 (0.04)	0.02 (0.07)	0.02 (0.07)
High-Urgency Context	0.14 (0.09)	0.02 (0.04)	0.07 (0.07)	0.07 (0.07)
R^2	0.00	0.00	0.00	0.00
Adj. R^2	-0.00	0.00	0.00	0.00
Num. obs.	4225	4225	4225	4225
RMSE	1.88	0.88	1.34	1.34

**p < 0.01, *p < 0.05

SI-Table 24: USA - Balance Test: Age, Gender, Income (Quota Variables)			
	Age	Gender	Income
(Intercept)	47.82 (0.60)**	0.07 (0.06)	2.68 (0.04)**
Low-Urgency	-1.26 (0.85)	0.10 (0.09)	0.10 (0.06)
Low-Urgency Context	-0.35 (0.85)	0.10 (0.09)	0.06 (0.06)
High-Urgency	-0.84 (0.85)	-0.05 (0.09)	0.11 (0.06)
High-Urgency Context	-0.68 (0.85)	0.03 (0.09)	-0.01 (0.06)
R^2	0.00		0.00
Adj. R^2	-0.00		0.00
Num. obs.	4877	4877	4877
RMSE	18.75		1.28
AIC		6753.70	
BIC		6786.16	
Log Likelihood		-3371.85	
Deviance		6743.70	

**p < 0.01, *p < 0.05

SI-Table 25: USA - Balance Test: Education			
	Low Education	Medium Education	High Education
(Intercept)	-0.24 (0.06)**	-1.47 (0.08)**	-0.52 (0.07)**
Low-Urgency	-0.09 (0.09)	-0.03 (0.12)	0.11 (0.09)
Low-Urgency Context	0.02 (0.09)	-0.09 (0.12)	0.04 (0.09)
High-Urgency	-0.04 (0.09)	-0.11 (0.12)	0.11 (0.09)
High-Urgency Context	-0.04 (0.09)	0.09 (0.12)	-0.02 (0.09)
AIC	6680.50	4637.90	6507.74
BIC	6712.96	4670.36	6540.20
Log Likelihood	-3335.25	-2313.95	-3248.87
Deviance	6670.50	4627.90	6497.74
Num. obs.	4877	4877	4877

**p < 0.01, *p < 0.05

SI-Table 26: USA - Balance Test: Individual Attitudes				
	Ideology	Climate Skepticism	Problem Today	Problem in Future
(Intercept)	5.95 (0.08)**	-0.01 (0.03)	2.95 (0.06)**	2.67 (0.06)**
Low-Urgency	-0.04 (0.11)	0.03 (0.04)	0.05 (0.08)	0.10 (0.08)
Low-Urgency Context	-0.05 (0.11)	-0.01 (0.04)	0.02 (0.08)	0.04 (0.08)
High-Urgency	-0.03 (0.11)	0.01 (0.04)	-0.03 (0.08)	-0.05 (0.08)
High-Urgency Context	-0.19 (0.11)	0.02 (0.04)	-0.10 (0.08)	-0.01 (0.08)
R^2	0.00	0.00	0.00	0.00
Adj. R^2	-0.00	-0.00	0.00	0.00
Num. obs.	4877	4877	4877	4877
RMSE	2.47	0.93	1.77	1.72

**p < 0.01, *p < 0.05

VI. Supplemental Note: Robustness-Check Survey-Experiment in Germany

Robustness-Check Treatment Wording

Bitte lesen Sie aufmerksam den folgenden Schluss eines kürzlich in einer Tageszeitung erschienenen Artikels durch. Sie werden später zu den Inhalten des Artikels gefragt

High-Urgency Frame (Germany, robustness check)

«Die unmittelbaren Auswirkungen des Klimawandels in Deutschland werden innerhalb der nächsten 5 Jahre deutlich schlimmer»

Die meisten Wissenschaftler sind sich darüber einig, dass die vom Menschen produzierten Treibhausgase die Erderwärmung verursachen. Zu diesen Treibhausgasen zählen z.B. das Kohlenstoffdioxid (CO2) und Methan (CH4). In den letzten Jahren haben wir in Deutschland schwere Stürme erlebt, wie z.B. Xavier, Kyrill und Herwart. Solche Extremwettereignisse werden bereits in den nächsten Jahren durch den Klimawandel verstärkt. Neben schweren Stürmen gehören dazu auch gefährliche Dürren, Brände und Überflutungen. Auch ein Anstieg des Meeresspiegels ist bereits jetzt nachweisbar. **Einige Wissenschaftler warnen, dass die Auswirkungen des Klimawandels innerhalb der nächsten 5 Jahre deutlich schlimmer werden. Falls es nicht gelingt, in den nächsten 5 Jahren den Ausstoß von Treibhausgasen deutlich zu reduzieren, werden schwere Stürme, Dürren, Brände und Überflutungen schon bald von der Ausnahme zur Regel.**

Low-Urgency Frame (Germany, robustness check)

«Die langfristigen Auswirkungen des Klimawandels in Deutschland werden innerhalb der nächsten 30 Jahre deutlich schlimmer»

Die meisten Wissenschaftler sind sich darüber einig, dass die vom Menschen produzierten Treibhausgase die Erderwärmung verursachen. Zu diesen Treibhausgasen zählen z.B. das Kohlenstoffdioxid (CO2) und Methan (CH4). In den letzten Jahren haben wir in Deutschland schwere Stürme erlebt, wie z.B. Xavier, Kyrill und Herwart. Solche Extremwettereignisse werden in Zukunft durch den Klimawandel verstärkt. Neben schweren Stürmen gehören dazu auch gefährliche Dürren, Brände und Überflutungen. Auch ein Anstieg des Meeresspiegels wird vorausgesagt. **Einige Wissenschaftler warnen, dass die Auswirkungen des Klimawandels innerhalb der nächsten 30 Jahre deutlich schlimmer werden. Falls es nicht gelingt, in den nächsten 30 Jahren den Ausstoß von Treibhausgasen deutlich zu reduzieren, werden schwere Stürme, Dürren, Brände und Überflutungen langfristig von der Ausnahme zur Regel.**

Robustness-Check Results

The results of the robustness check experiment in Germany confirm the results of the main experiments. In the main analysis of the robustness check survey experiment, we exclude respondents who do not perceive climate change to be a serious problem today nor in future. We also re-run the models including all 809 respondents as robustness check analysis. For the main and robustness check analyses, there is no statistically significant difference between the high-urgency and low-urgency frame with regard to both outcome variables, the policy support for general mitigation and policy support for costly mitigation. All in all, the models of the robustness check lend support to our findings from the main experiment, namely, that simple reframing the temporal distance to climate change risks is unlikely to have an impact on citizens' attitudes and political behaviors.

SI-Table 27: Robustness Check (Germany) - Table includes OLS regression results with robust standard errors showing the main effects of framing treatments on policy support for general mitigation and costly mitigation (trade-off)

	General Mitigation	Costly Mitigation (Trade-Off)
Intercept (Low Urgency)	5.632 (0.066)***	4.708 (0.067)***
High Urgency	0.020 (0.092)	0.047 (0.095)
R^2	0.000	0.000
Adj. R^2	-0.001	-0.001
Num. obs.	732	732
RMSE	1.248	1.287

***p < 0.001, **p < 0.01, *p < 0.05

SI-Table 28: Robustness Check(Germany) - Table includes OLS regression results with robust standard errors showing the main effects of framing treatments on policy support for general mitigation and costly mitigation (trade-off) including all respondents, also those that do not perceive climate change to be a problem today nor in future

	General Mitigation	Costly Mitigation (Trade-Off)
Intercept (Low Urgency)	5.447 (0.070)***	4.586 (0.068)***
High Urgency	-0.016 (0.100)	0.043 (0.096)
R^2	0.000	0.000
Adj. R^2	-0.001	-0.001
Num. obs.	809	809
RMSE	1.419	1.370

***p < 0.001, **p < 0.01, *p < 0.05

SI-Table 29: Robustness Check (Germany) - Table includes OLS regression results with robust standard errors showing the marginal effects of framing treatments on policy support for general mitigation and costly mitigation

	General Mitigation	Costly Mitigation (Trade-Off)
Intercept (Low Urgency)	4.750 (0.323)***	4.050 (0.226)***
High Urgency by Problem today and in future	0.163 (0.443)	0.374 (0.371)
R^2	0.035	0.027
Adj. R^2	0.032	0.023
Num. obs.	732	732
RMSE	1.227	1.272

***p < 0.001, **p < 0.01, *p < 0.05

SI-Table 30: Robustness Check Survey (Germany) - Table includes OLS regression results with robust standard errors showing the marginal effects of framing treatments on policy support for general mitigation and costly mitigation including all respondents, also those that do not perceive climate change to be a problem today nor in future

	General Mitigation	Costly Mitigation (Trade-Off)
Intercept (Low Urgency)	3.414 (0.230)***	3.138 (0.281)***
High Urgency	-0.414 (0.336)	0.045 (0.381)
High Urgency by No problem today but in future	0.283 (0.549)	-0.349 (0.523)
High Urgency by Problem today and in future	0.446 (0.349)	0.026 (0.393)
R^2	0.238	0.112
Adj. R^2	0.231	0.104
Num. obs.	809	809
RMSE	1.244	1.296

***p < 0.001, **p < 0.01, *p < 0.05

VII. Supplemental Note: Survey Instrument (English version)

Start of Block: 1. a. Section: Introduction_Consent Form

Q178 Please read the following statement carefully. If you choose to participate in this survey, please check the box “I have read and understood the consent form and agree to participate in this survey.” If you choose not to participate, please click on the “Cancel” button at the bottom of this page and leave the survey. This survey is carried out for a research project conducted by ETH Zurich. Its objective is to better understand public opinion concerning climate policy. The survey is solely for scientific purposes. It has no commercial or government-related purpose. There are no known risks for participants in this survey, nor any costs. The information you provide in this survey will not be stored or used in any way that could reveal your personal identity.

- ◯ I have read and understood the consent form and agree to participate in this survey (1)
- ◯ Cancel (2)

Q179 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

End of Block: 1. a. Section: Introduction_Consent Form

Start of Block: 1.b. Section: Welcome Page

Q79 Dear participant,
Welcome to the survey. We appreciate your contribution very much. Our research will only produce meaningful results if you read and think about each question carefully and express your true personal opinion. Thank you for keeping this in mind! We anticipate that it will take you around 20 minutes to complete this survey.
Please do not use the “Back” button of your browser during the survey.

Q80 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

End of Block: 1.b. Section: Welcome Page

Start of Block: 2. Section: General Socio Demographics

QID863 Are you male or female?

- ◯ Male (1)
- ◯ Female (2)

QID864 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

*

QID865 Please enter your birth year.

_____

QID866 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

QID867 What is the highest level of education you have completed?

▼ Some education, but no high school degree (4) ... Master's degree or more (8)

QID868 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

*

QID869 Please enter your zip code.

_____

Q244 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

Q241 In which state do you currently reside?

▼ Alabama (1) ... I do not reside in the United States (53)

QID871 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

Q434 Are you eligible to vote in the United States in general and presidential elections?

- ○ Yes (1)
- ○ No (2)

Q435 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

End of Block: 2. Section: General Socio Demographics

Start of Block: 3. Section: Intro Consumption Behavior

Q395 Now, we will ask you some questions about your food and mobility habits. Thank you for your answers.

Q396 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

End of Block: 3. Section: Intro Consumption Behavior

Start of Block: 3b. Section: Food Consumption Habits

Q899 How often do you eat meat products for your main meal (e.g. dinner or lunch) in an average week?

- Very often (7 times for main meal/week) (1)
- Often (5-6 times for main meal/week) (2)
- Sometimes (3-4 times for main meal/week) (3)
- Rarely (1-2 times for main meal/week) (4)
- I eat fish, but no meat products (7)
- I am Vegetarian (no meat and fish products) (6)
- I am Vegan (no animal products) (5)

Q50 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

Display This Question:
If How often do you eat meat products for your main meal (e.g. dinner or lunch) in an average week? = Very often (7 times for main meal/week)
Or How often do you eat meat products for your main meal (e.g. dinner or lunch) in an average week? = Often (5-6 times for main meal/week)
Or How often do you eat meat products for your main meal (e.g. dinner or lunch) in an average week? = Sometimes (3-4 times for main meal/week)

Q902 How difficult would it be for you personally to reduce your consumption of meat products to once or twice per week (for your main meal)?

- ○ Very difficult (1)
- ○ Difficult (2)
- ○ Somewhat difficult (3)
- ○ Neither difficult nor easy (4)
- ○ Somewhat easy (5)
- ○ Easy (6)
- ○ Very easy (7)

Q51 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

End of Block: 3b. Section: Food Consumption Habits

Start of Block: 3a. Section: Mobility Consumption Habits

Q52 How often do you use a car (as driver or passenger) in an average week?

- ○ Very often (7 times or more per week) (4)
- ○ Often (5-6 times per week) (5)
- ○ Sometimes (3-4 times per week) (6)
- ○ Rarely (1-2 times per week) (7)
- ○ Almost never (8)

Q53 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

Display This Question:
If How often do you use a car (as driver or passenger) in an average week? = Rarely (1-2 times per week)
Or How often do you use a car (as driver or passenger) in an average week? = Sometimes (3-4 times per week)
Or How often do you use a car (as driver or passenger) in an average week? = Often (5-6 times per week)
Or How often do you use a car (as driver or passenger) in an average week? = Very often (7 times or more per week)

Q164 What is the source of power of the car that you use most frequently?

- ○ Gasoline (1)
- ○ Diesel (2)
- ○ Biogas (3)
- ○ Petroleum Gas (4)
- ○ Hybrid (5)
- ○ Electricity (7)
- ○ Other: (6) _____

Q165 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

Display This Question:
If How often do you use a car (as driver or passenger) in an average week? = Very often (7 times or more per week)
Or How often do you use a car (as driver or passenger) in an average week? = Often (5-6 times per week)
Or How often do you use a car (as driver or passenger) in an average week? = Sometimes (3-4 times per week)

Q54 How difficult would it be for you personally to reduce using a car to once to twice per week?

- Very difficult (4)
- Difficult (5)
- Somewhat difficult (6)
- Neither difficult nor easy (7)
- Somewhat easy (8)
- Easy (9)
- Very easy (10)

Q56 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

End of Block: 3a. Section: Mobility Consumption Habits

Start of Block: 4. Consideration of Future Consequences

Q428 Now we would like to ask you some more general questions. Thank you for your answers.

Q429 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

End of Block: 4. Consideration of Future Consequences

Start of Block: 4.a. Section: Consideration of Future Consequences

Q1380
For each of the statements below, please indicate whether or not the statement is characteristic of you.

	Extremely uncharacteristic (1)	Uncharacteristic (2)	Somewhat uncharacteristic (3)	Neither characteristic nor uncharacteristic (4)	Somewhat characteristic (5)	Characteristic (6)	Extremely characteristic (7)
I consider how things might be in the future. (1)	○	○	○	○	○	○	○
Often I engage in a particular behavior to achieve outcomes that may only result many years from now. (5)	○	○	○	○	○	○	○
I mainly act to satisfy my immediate concerns, figuring the future will take care of itself. (6)	○	○	○	○	○	○	○

Q414 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

End of Block: 4.a. Section: Consideration of Future Consequences

Start of Block: 4.b Section: Consideration of Future Consequences

Q1379
For each of the statements below, please indicate whether or not the statement is characteristic of you.

	Extremely uncharacteristic (1)	Uncharacteristic (2)	Somewhat uncharacteristic (3)	Neither characteristic nor uncharacteristic (4)	Somewhat characteristic (5)	Characteristic (6)	Extremely characteristic (7)
I am willing to sacrifice now to achieve future outcomes. (19)	○	○	○	○	○	○	○
I think that sacrificing now is usually unnecessary since problematic future outcomes can be dealt with at a later time. (28)	○	○	○	○	○	○	○
I only act to satisfy immediate concerns, figuring that I will take care of future problems that may occur at a later date. (32)	○	○	○	○	○	○	○

Q413 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

End of Block: 4.b Section: Consideration of Future Consequences

Start of Block: 5. Section: Climate Skepticism

Q59 Now, we are interested in your opinion about climate change. How much do you agree or disagree with the following statements?

	Strongly disagree (15)	Disagree (16)	Somewhat disagree (17)	Neither agree nor disagree (18)	Somewhat agree (19)	Agree (20)	Strongly agree (21)
I am uncertain whether climate change is really happening. (4)	○	○	○	○	○	○	○
Humans are the main cause of climate change. (5)	○	○	○	○	○	○	○
Climate change is already today a very serious problem. (6)	○	○	○	○	○	○	○
Climate change is not responsible for an increase of serious extreme weather events (e.g. floods, hurricanes, droughts). (8)	○	○	○	○	○	○	○
Climate change will be a serious problem for future generations. (9)	○	○	○	○	○	○	○

Q60 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

End of Block: 5. Section: Climate Skepticism

Start of Block: 6. Section: Assessment of knowledge and prior interest

Q430 On a scale from 1-7, will people have to make major changes in the way they live to reduce the effects of climate change (7) or can technology solve the problem without requiring major changes (1)?

- ○ Technology can solve problem (1) (1)
- ○ (2) (2)
- ○ (3) (3)
- ○ (4) (4)
- ○ (5) (5)
- ○ (6) (6)
- ○ People have to make major lifestyle changes (7) (7)

Q431 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

Q112 As far as you know, how much do you think that the **consumption of meat products** contributes to climate change (global warming)?

- ○ Not at all (1)
- ○ A little bit (2)
- ○ A lot (3)
- ○ Don't know (4)

Q114 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

Q113 As far as you know, how much do you think that the **use of cars that run on fossil fuels** contributes to climate change (global warming)?

- ○ Not at all (1)
- ○ A little bit (2)
- ○ A lot (3)
- ○ Don't know (4)

Q115 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

End of Block: 6. Section: Assessment of knowledge and prior interest

Start of Block: 7.a. Section: Treatment 1 - Long-Term Climate Frame

Q85 **Please carefully read the following conclusion of a recently published article. You will then be asked about the content of this article.**

Q76
Most scientists agree that greenhouse gases emitted from human activity into the atmosphere cause global warming. These greenhouse gases include carbon dioxide (CO2) and methane (CH4). In recent years, we have experienced devastating storms, such as hurricanes Harvey, Irma and Katrina. In the future, climate change will intensify extreme weather events. In addition to heavy storms, this includes dangerous droughts, wildfires and flooding. A rise in the sea level is also predicted. **Some scientists predict that the consequences of climate change will get much worse over the next 30 years. Failing to significantly reduce emissions in the next 30 years will lead to more severe hurricanes, droughts, wildfires and floods becoming the norm instead of being rare events.**

Q77 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

End of Block: 7.a. Section: Treatment 1 - Long-Term Climate Frame

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Start of Block: 7.b. Section: Treatment 2 - Short-Term Climate Frame

Q86 **Please carefully read the following conclusion of a recently published article. You will then be asked about the content of this article.**

Q75
Most scientists agree that greenhouse gases emitted from human activity into the atmosphere cause global warming. These greenhouse gases include carbon dioxide (CO2) and methane (CH4). In recent years, we have experienced devastating storms, such as hurricanes Harvey, Irma and Katrina. Climate change is already intensifying extreme weather events. In addition to heavy storms, this includes dangerous droughts, wildfires and flooding. A rise in the sea level is already detectable. **Some scientists warn that the consequences of climate change will continue to get much worse over the next 5 years. Failing to significantly reduce emissions in the next 5 years will lead to more severe hurricanes, droughts, wildfires and floods continuing to become the norm instead of being rare events.**

Q78 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

End of Block: 7.b. Section: Treatment 2 - Short-Term Climate Frame

Start of Block: 7.c. Section: Treatment 3 - Long-Term Climate Frame + Context

Q1426 **Please carefully read the following conclusion of a recently published article. You will then be asked about the content of this article.**

Q1427
Most scientists agree that greenhouse gases emitted from human activity into the atmosphere cause global warming. These greenhouse gases include carbon dioxide (CO2) and methane (CH4). In recent years, we have experienced devastating storms, such as hurricanes Harvey, Irma and Katrina. In the future, climate change will intensify extreme weather events. In addition to heavy storms, this includes dangerous droughts, wildfires and flooding. A rise in the sea level is also predicted. **Some scientists predict that the consequences of climate change will get much worse over the next 30 years. Failing to significantly reduce emissions in the next 30 years will lead to more severe hurricanes, droughts, wildfires and floods becoming the norm instead of being rare events.**

As a measure to reduce greenhouse gas emissions, US politicians are discussing the possibility of reducing meat consumption and using fewer cars that run on fossil fuels. Manufacturing and driving cars that run on fossil fuels, such as gasoline and diesel, emits a large amount of greenhouse gases, such as CO2. Raising cattle, pigs and other livestock also emits a large amount of greenhouse gases, such as methane. In a recent statement, a group of scientists called for a significant reduction in meat consumption and the use of cars that run on fossil fuels in the USA. **The scientists wrote: "In order to achieve climate goals in the medium to long term, measures should be taken in future to halve the consumption of meat and the use of cars that run on fossil fuels."**

Q1428 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

End of Block: 7.c. Section: Treatment 3 - Long-Term Climate Frame + Context

Start of Block: 7.d. Section: Treatment 4 - Short-Term Climate Frame + Context

Q1429 **Please carefully read the following conclusion of a recently published article. You will then be asked about the content of this article.**

Q1430
Most scientists agree that greenhouse gases emitted from human activity into the atmosphere cause global warming. These greenhouse gases include carbon dioxide (CO2) and methane (CH4). In recent years, we have experienced devastating storms, such as hurricanes Harvey, Irma and Katrina. Climate change is already intensifying extreme weather events. In addition to heavy storms, this includes dangerous droughts, wildfires and flooding. A rise in the sea level is already detectable. **Some scientists warn that the consequences of climate change will continue to get much worse over the next 5 years. Failing to significantly reduce emissions in the next 5 years will lead to more severe hurricanes, droughts, wildfires and floods continuing to become the norm instead of being rare events.**

As a measure to reduce greenhouse gas emissions, US politicians are discussing the possibility of reducing meat consumption and using fewer cars that run on fossil fuels. Manufacturing and driving cars that run on fossil fuels, such as gasoline and diesel, emits a large amount of greenhouse gases, such as CO2. Raising cattle, pigs and other livestock also emits a large amount of greenhouse gases, such as methane. In a recent statement, a group of scientists called for a significant and immediate reduction in meat consumption and the use of cars that run on fossil fuels in the USA. **The scientists wrote: "In order to achieve climate goals, measures should be taken immediately to halve the consumption of meat and the use of**

End of Block: 7.d. Section: Treatment 4 - Short-Term Climate Frame + Context

Start of Block: 7.e. Section: Climate Frame - Control Group

Start of Block: 8. Section: Concern

Q181 **Immediate consequences of climate change**

How much do you agree or disagree with the following statements? I am very concerned about the **immediate consequences of climate change** for...

	Strongly agree (8)	Agree (9)	Somewhat agree (10)	Neither agree nor disagree (11)	Somewhat disagree (12)	Disagree (13)	Strongly disagree (14)
...myself. (1)	○	○	○	○	○	○	○
...the region where I live in. (2)	○	○	○	○	○	○	○
...the United States. (3)	○	○	○	○	○	○	○
...other countries. (4)	○	○	○	○	○	○	○

Q182 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

End of Block: 8. Section: Concern

Start of Block: 9.a. Section: Factual Manipulation Check - long-term frame

Display This Question:
If English1 long Is Displayed
Or English2 long context Is Displayed

Q187 What was the main message in the article that you just read?

- ○ Unless action is taken within the next 30 years, the consequences of climate change will get much worse. (1)
- ○ Climate change is no serious problem. (3)
- ○ Climate change is good for the economy. (4)
- ○ Don't know. (5)

End of Block: 9.a. Section: Factual Manipulation Check - long-term frame

Start of Block: 9.b. Section: Factual Manipulation Check - short-term frame

Display This Question:
If English3 short Is Displayed
Or English4 short context Is Displayed

Q1068 What was the main message in the article that you just read?

- Unless action is taken immediately within the next 5 years, the consequences of climate change will get much worse. (1)
- Climate change is no serious problem. (3)
- Climate change is good for the economy. (4)
- Don't know. (5)

End of Block: 9.b. Section: Factual Manipulation Check - short-term frame

Start of Block: 10. Section: General Response Item

Q388 How much calm or dread do you feel when you think about the consequences of climate change?

- Extreme calm (8)
- Clam (9)
- Some calm (10)
- Some dread (12)
- Dread (13)
- Extreme dread (14)

Q389 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

Q116 Please tell us how much you agree or disagree with the following statements. In order to safeguard citizens against the consequences of climate change, the government needs to invest in…

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
...building flood, wildfire and storm protections. (1)	○	○	○	○	○	○	○
...immediate reductions of greenhouse gas emissions. (2)	○	○	○	○	○	○	○

End of Block: 10. Section: General Response Item

Start of Block: 11. Section: Costly Mitigation

Q432 US politicians are discussing the possibility of reducing meat consumption and using fewer cars that run on fossil fuels in order to reduce greenhouse gas emissions. Should the US government introduce measures immediately to...

	Strongly agree (8)	Agree (9)	Somewhat agree (10)	Neither agree nor disagree (11)	Somewhat disagree (12)	Disagree (13)	Strongly disagree (14)
...reduce the meat consumption by half? (1)	○	○	○	○	○	○	○
....reduce the use of cars that run on fossil fuels by half? (2)	○	○	○	○	○	○	○

Q433 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

End of Block: 11. Section: Costly Mitigation

Start of Block: 13. Section: Political Views

Q207 You have almost finished the survey. At the end of this survey, we would like to ask you some more general questions. Thank you for answering these last questions!

Q394 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

QID873 On a scale from 1 to 7, should the government regulate the economy less (1) more (7)?

- ○ Government should regulate the economy **less** (1) (15)
- ○ (2) (16)
- ○ (3) (17)
- ○ (4) (18)
- ○ (5) (19)
- ○ (6) (20)
- ○ Government should regulate the economy **more** (7) (21)

QID874 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

Q152 In political matters, people talk of “left” and “right”.
How would you place your views on a scale from left (1) to right (10)?

- Left (1) (1)
- (2) (2)
- (3) (3)
- (4) (4)
- (5) (5)
- (6) (6)
- (7) (7)
- (8) (8)
- (9) (9)
- Right (10) (10)

Q153 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

Q154 Do you usually think of yourself as a Democrat, a Republican, an Independent, or something else?

- Democrat (1)
- Republican (2)
- Independent (3)
- Something else (please specify) (4) _____
- Not close to any party (5)

Q155 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

Q33 How many people, including yourself, live in your household? Please include both adults and children.

- ◯ Adults (18+ years): (1) _____
- ◯ Children (below 18 years): (2) _____

Q180 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

Q29 Thinking back over the last year, what was your household's annual income before taxes (including all wages, salaries, dividends, pensions and government payments)?

▼ $24'000 or less (4) ... More than $225'000 (9)

Q30 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

Q31 Which statement best describes your current employment status?

- ◯ Working (paid employee) (4)
- ◯ Working (self-employed) (6)
- ◯ Not working (unemployed) (7)
- ◯ Not working (retired) (8)
- ◯ Not working (disabled/ill) (9)
- ◯ Not working (other) (10) _____

Q32 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

End of Block: 13. Section: Political Views

Start of Block: 14. Section: End of survey

Q149 You have reached the end of this survey. Thank you very much for your participation. We are interested in your feedback.
What did you like about this survey?

_____
_____
_____
_____
_____

Q436 What did you dislike about this survey?

_____
_____
_____
_____
_____

Q437 **Please click once more on the small arrow in the right lower corner of this page to save all your answers.**

Q150 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

End of Block: 14. Section: End of survey

Support for costly mitigation policy: climate - economy tradeoff (only robustness check)

Original question wording (German): Wie bewerten Sie die folgenden Aussagen?

Um den Klimawandel zu begrenzen, müssen wir die CO_2 -Emissionen reduzieren, auch wenn dies bedeutet, dass die Bundesregierung die öffentlichen Ausgaben in anderen Bereichen reduzieren muss.
Um den Klimawandel zu begrenzen, müssen wir die CO_2 -Emissionen reduzieren, auch wenn dies bedeutet, dass die Steuern steigen.
Um den Klimawandel zu begrenzen, müssen wir die CO_2 -Emissionen reduzieren, auch wenn dies bedeutet, dass das Wirtschaftswachstum reduziert wird.

Translation:

How do you rate the following statements?

To limit climate change, we need to reduce CO_2 emissions, even if this means that the federal government must reduce public spending in other areas.
To limit climate change, we need to reduce CO_2 emissions, even if this means that taxes are rising.
To limit climate change, we need to reduce CO_2 emissions, even if this means that economic growth is reduced.

Agreement to these items was measured on a 7-point Likert scale ranging “Strongly disagree” [“Stimme überhaupt nicht zu”] to “Strongly agree” [“Stimme voll und ganz zu”].