

## Supplementary File: Multilevel Logistic Regression Equation

Each of the eight models use the same estimation method. Each has a dependent variable that measures respondent support for the energy source, random effects at the county and state level, and a variety of independent variables including gender, age, race, education, metropolitan, conservative ideology, environmental beliefs, global warming belief, mining county, and renewable energy county. Our regression equation is thus:

$$y_i = \beta_0 + \alpha_{\text{state } [i]} + \alpha_{\text{county } [i]} + \beta_{\text{gender}} \cdot \text{gender}_i + \beta_{\text{age}} \cdot \text{age}_i + \beta_{\text{race}} \cdot \text{race}_i + \beta_{\text{education}} \cdot \text{education}_i + \beta_{\text{metro}} \cdot \text{metro}_i + \beta_{\text{ideology}} \cdot \text{ideology}_i + \beta_{\text{envbeliefs}} \cdot \text{envbeliefs}_i + \beta_{\text{gwbelief}} \cdot \text{gwbelief}_i + \beta_{\text{mining}} \cdot \text{mining}_i + \beta_{\text{renewable}} \cdot \text{renewable}_i + \epsilon_i$$

where  $y_i$  is predicted level of support for each energy source for respondent  $i$ ,  $\beta_0$  is the regression intercept,  $\epsilon$  is an error term, and:

$$\alpha_{\text{state}} \sim N(0, \sigma^2_{\text{state}}) \text{ for } \text{state} = 1, \dots, 3).$$

$$\alpha_{\text{county}} \sim N(0, \sigma^2_{\text{county}}), \text{ for } \text{county} = 1, \dots, 105)$$

where  $\alpha_{\text{state}}$  and  $\alpha_{\text{county}}$  are random effects for each state and county surveyed, respectively.