

Policy defines both domestic and global climate action. Governmental action regarding climate change relies on elected officials working together on green legislation. Lobbying plays a vital role in the dynamics of elected officials. This project aims to explore the impact lobbying has on the passing of climate legislation in the United States by analyzing the American Clean Energy and Security Act as a case study for more general climate action. Specifically, we employ a compartmental system of differential equations describing the nonlinear dynamics between the legislative body, centrists, people in favor of the bill, people against the bill, and the final yes and no votes. In this work, we will perform a stability analysis and derive the basic reproduction number. We also use data from public lobbying records with a compartmental system of differential equations to numerically evaluate the impact of lobbying on the passage of a bill. After numerically verifying our results by comparing them to current literature and the results from 2009, this model acts as a promising new approach to understanding climate lobbying dynamics.