

Abby Finis, Great Plains Institute

Poster Title: Meeting the Climate Deadline in Minnesota

Abstract: To help Minnesota cities achieve greenhouse gas emissions reductions at scale, it is useful to know the emissions profiles of many cities and their willingness to act in order to effectively organize those communities into cohorts where they can have the greatest impact. Emissions profiles can be looked at in two ways: one is by sector, which includes residential, commercial/industrial, and transportation. The other is to look at energy type, including electricity, natural gas, and transportation fuels. We can use this information to create profiles of cities and categorize them based on their unique characteristics. Categorization of energy profiles allows us to gain deeper insight into how various cities use energy so that technical assistance can be tailored to achieve greater reductions. Cities with commercial-dominant emissions profiles, for example, would achieve the greatest emissions reductions by focusing on the commercial sector. These cities would make good candidates for a commercial building benchmarking cohort. When looking at emissions profiles by energy type, cities would be organized by electric utility provider. In Minnesota there are different challenges and opportunities for cities in investor-owned utility service territories as opposed to municipal or cooperative. Xcel Energy is the largest electric utility in the state and has announced goals to be 85% carbon free by 2030 and 100% carbon free by 2050. This greatly reduces the burden on cities in Xcel Energy territory to achieve reductions from electricity emissions so they can focus instead on transportation and gas. Alternatively, communities not in Xcel Energy territory can work together to identify solutions to reduce barriers to clean electricity. In addition to understanding cities' emissions profiles, it is also important to understand where a city is at in terms of its willingness to act. Minnesota is fortunate to have a critical mass of communities that are deeply engaged in sustainability actions and increasingly willing to act on climate mitigation, though not all cities are in the same place. City performance and desire to act will play an important role in determining how to best assist cities by meeting them where they are. Using emissions data and our knowledge of city participation in various energy/climate programs and projects, we can begin to conceptualize where cities are to target assistance to help move them to where they need to be to meet climate goals.