



What Are the Benefits of Electrification and Decarbonization?

The real and costly impacts of the climate crisis are irrefutable and that was especially obvious on the ground in Michigan during 2021. Severe, climate-induced weather events over the summer caused more than one million Michiganders to lose power, some for a week or more.

All this came on the backend of a decade in which our state has experienced massive flooding and dam failures, high water levels and erosion that destroyed public and private property, major crop failures from erratic spring temperatures, and polar vortexes that challenged Michigan families to keep the heat on.

1 CLIMATE ACTION

Burning fossil fuels like gas or oil to provide heating, cooling, and hot water in buildings is a big source of air pollution and greenhouse gas emissions. Eliminating the carbon emissions from buildings through decarbonization efforts helps meet [Michigan's emission reduction goals](#) to mitigate climate change.

2 MANAGING UTILITY COSTS

Natural gas costs are [projected to rise substantially](#) over the next decade due to unstable supply. While electricity costs will also rise, their increase will be less than gas. Switching to an all-electric home is a more affordable and stable option for powering buildings – electrification is estimated to reduce energy costs by [\\$377 per household](#). Managing only one bill (electric) instead of two also helps relieve energy stress on homeowners.

3 ELECTRIFICATION

The four pillars of building decarbonization – energy efficiency, electrification, renewable energy, and smart grid enabled programs – are all also strategies to make homes high-performing and resilient against both rising energy costs and climate change. When we make these upgrades in Michigan's affordable housing stock, it keeps the buildings well-maintained and lowers the operating costs for years to follow.

4 HEALTHY HOUSING + IMPROVED INDOOR AIR QUALITY

Gas appliances like [stoves](#), furnaces, boilers, and hot water heaters, that burn fossil fuels directly in the home create harmful emissions. Just like pollution from power plants, burning fossil fuels in the home creates pollutants such as carbon dioxide, carbon monoxide, and nitrogen oxide. These pollutants can cause increased risk of asthma, aggravated respiratory symptoms, and cardiovascular effects, [especially in children](#). Using electric appliances instead of combustion appliances removes this source of pollutants in your home and improves indoor air quality, which creates a healthier home environment.



ELEVATE

Equity through climate action