



CLIMATE CHANGE IN ANN ARBOR

The City of Ann Arbor has a long history and track record of being a progressive city with strong community engagement. Recently, the City has fallen behind peer communities in regards to implementing climate and sustainability actions. Moreover, the City faces challenges keeping the community informed of and engaged in emerging and ongoing programs due to the City's many university students and other transient residents. As home to the University of Michigan, Ann Arbor also faces the challenge that a significant percentage of property within City limits is owned by the University.

CLIMATE CHANGE IN ANN ARBOR



Rising Temperatures:

Average air temperature in A2 has increased by nearly 1°F since the 1900s and is expected to rise 3°F to 7°F by 2050.



Hot Days:

Ann Arbor is likely to experience 12 to 36 more days per year over 90°F by mid-century and 30 to 42 more days per year over 90°F by end of-century.



More Precipitation:

Total annual precipitation has increased by over 44% since the 1950s and will likely continue to increase in the future, though types of precipitation will vary (i.e., more winter precipitation in the form of rain or ice).



More Extreme Precipitation:

The total volume of rain falling during extreme events has increased by 37% since 1981 and the number of heavy rainfall events has increased by over 41% since the 1950s. These trends are both projected to continue increasing.

DID YOU KNOW

- Ann Arbor passed a goal of generating 100% of municipal energy from clean and renewable sources by 2035.
- Ann Arbor adopted a Climate Action Plan in December 2012 that sets a goal of a 25% reduction in community emissions by 2025 and an 90% reduction by 2050.
- Since 2000, the City has seen a roughly 14% drop in community-wide greenhouse gas emissions.
- The City's Office of Sustainability and Innovations is working with an equity advisor to ensure sustainability and climate programs are addressing the needs of the most vulnerable.
- The University of Michigan, whose main campus is in Ann Arbor, has set an ambitious target of being carbon neutral.
- The City receives 177 Michigan Stadiums worth of precipitation per year; that's 23 more than 30 years ago.
- The work plan for the City's new Office of Sustainability and Innovations can be found at a2gov.org/sustainability.

CHALLENGES

Historically, limited financial resources have been dedicated to implementing climate and sustainability actions.

Over 55% of Ann Arbor's housing units are rentals with a predominantly transient population, making community engagement an ongoing effort.

By 2040, residents age 65 and older are projected to make up 22.6% of Ann Arbor's population – a 164% increase in the 65 and older population from 2010 to 2040.

The climate is changing faster than anticipated, leading to more intense, frequent, and reoccurring impacts.

OPPORTUNITIES

In July 2018, the city created the new Office of Sustainability and Innovations, which is uniquely positioned to advance sustainability and climate action across the organization, city, and region.

The community is deeply aware of its reliance on the area's natural systems, including the Huron River, the source of 80% of Ann Arbor's drinking water.

The City and the University are exploring collaborations to significantly reduce local emissions while reestablishing themselves as global sustainability champions.

REDUCING ANN ARBOR'S CONTRIBUTION TO CLIMATE CHANGE

The Office of Sustainability and Innovations has a work plan to help the City achieve its 25% community-wide greenhouse gas reduction target by 2025. You can find the work plan and additional details at: <http://www.a2gov.org/sustainability>. Highlights of the work plan include:

■ **Sustaining Ann Arbor Together:** Neighborhood grant program to enhance local sustainability while building connections with your neighbors. Learn more at <http://a2gov.org/sa2t>.

■ **Energy Efficiency in Homes and Rentals:** Including work to help all residents reduce their energy bills and explore renewable energy options.

■ **Net Zero Energy Affordable Housing:** Designed to reduce the operational burden on affordable housing units, freeing up resources for the creation of more affordable housing in the community.

■ **Resilience Hubs:** Community centers that support existing community needs while also fostering resilience during a disaster.

■ **100% Clean and Renewable Municipal Operations:** Which outlines the City's living strategy for ensuring all City operations are powered with renewable energy.



CLIMATE ADAPTATION

Ann Arbor is already experiencing climate impacts and has created a Climate Action Plan and a community Climate Partnership to help the city adapt.

Watch the video: <http://bit.ly/1K4ulXm>



EXTREME STORMS

Ann Arbor has seen a 41.2% increase in the strongest (1%) storms from 1951-2012.

Watch the video: <http://bit.ly/1LeBUJL>



EXTREME HEAT

Ann Arbor is already experiencing warmer average temperatures and temperatures are expected to continue increasing.

Watch the video: <http://bit.ly/1GjkYeJ>



CHANGING FORESTS

Ann Arbor's maple, beech, and birch forests will be slowly replaced by oak and hickory forests from the south over the coming century.

Watch the video: <http://bit.ly/1CBKLnA>