

CARP Information Sheet

Green Infrastructure

Green infrastructure is the inclusion of plants and trees in urban or suburban areas. They can provide benefits including stormwater absorption, reduced community energy use, improved aesthetics, and cleaner air. Below are some examples of green infrastructure.

- **Green roofs** are roofs on buildings that are covered in plant life. Green roofs cool buildings by storing heat energy. Plants and soil also store carbon and clean the air around them. More detailed information on green roofs can be found [here](#).
- **Parks and trees** provide shade for the public, reduce the Urban Heat Island effect, (UHI: find out more [here](#)) and help clean the air.
- **Urban Agriculture** brings farming into residential and/or commercial spaces. Community and residential gardens are examples of urban agriculture. Learn more about urban farming [here](#).

Cooling Strategies and Technologies

As average temperatures in Antioch increase, cooling down our communities will become more and more important. Below are strategies and technologies that can reduce temperatures in our communities.

- **Cool pavements** are pavement materials that absorb less heat and stay cooler in the sun. They reduce the Urban Heat Island effect, which is largely fueled by materials that absorb and release heat, such as asphalt. More information on cool pavements can be found [here](#).
- **Reflective roofs** are similar to reflective pavements. However, because they do not need to support heavy traffic, higher reflectivity can be achieved. More info on cool roofs can be found [here](#).
- **Solar Panel Canopies** are a type solar panel infrastructure that also provides shade. You may have seen them in the Lone Tree Golf Course and Antioch High School parking lots!
 - o **Image above:** solar panel canopies at Lone Tree Golf Course
- **Cooling centers** are places open to the public that allow people to cool down on hot days. Examples of cooling centers parks and swimming



pools, as well as other publically open that provide air conditioning, such as libraries, government buildings, and shopping centers.

Energy

Energy demand and energy use is expected to increase in Antioch in the coming years. Additionally, more Public Safety Power Shutoffs (PSPS) are expected as fire risk increases. Below are strategies that may help make our energy systems stronger and help transition to cleaner energy.

- A **Microgrid** is a localized electric grid that can operate connected to the centralized electric grid (macrogrid) or independently from the centralized electric grid. More information on microgrids can be found [here](#).
- **Community Choice Aggregation (CCA)** supports more local control over electricity sources and more potential access to clean energy sources. Power is obtained from an alternative supplier, but transmission and distribution service remains in the hands of the existing utility provider. More information on CCA's can be found [here](#).

