



Climate Resilience - What Does Adaptation and Mitigation Mean?

In 2024, Earth breached the milestone of having recorded temperatures over 1.5° Celcius (2.7° Fahrenheit) higher than the pre-industrial average for 12 consecutive months. The years following have recorded similar patterns, and **2026 is projected to be one of the hottest years on record.** Scientists expect this trend to continue in coming decades, leading to unprecedented heat waves and extreme weather events. The transition to clean energy is paramount to slowing climate change. However, we must also counter the current impact of rising temperatures and take steps to mitigate the snowballing effects of our warming Earth. **Climate resilience will be a crucial consideration for Colorado communities in the coming years, and it is characterized by two pillars: mitigation and adaptation.**

MITIGATION

Means reducing the amount of greenhouse gases in the atmosphere. This can be achieved by eliminating the sources of these emissions or by implementing means of taking carbon back out to the atmosphere by storing it somewhere else. Examples of mitigation can include:

- Increasing renewable sources of energy
- Protecting our forests (ex: reforestation)
- Carbon removal technologies
- Sustainable agriculture

ADAPTATION

Means being prepared for adverse effects of climate change and adjusting to current and future changes to maintain prosperity and growth in communities all over the world. Examples of adaptation include, but are not limited to:

- Infrastructure changes such as defense against floods and wildfires
- Behavior changes such as reducing exposure to high temperatures
- Adjusting agricultural practices to avoid food scarcity.

IN COLORADO...

An agricultural practice that addresses both adaptation & mitigation is **agrivoltaic farming**, which makes dual use of land by combining agriculture and solar energy production in the same field.

Other examples include: prescribed burns, watershed planning, and transitioning to renewable energy.



Colorado Agrivoltaic Learning Center

Sierra Club is committed to addressing climate change in a dynamic fashion to benefit Colorado communities, especially those disproportionately affected by climate change disasters such as drought and wildfires. Find [events near you](#) or fill out our [volunteer interest form](#) to join us in this effort!