

Promote Cool Roofs

Action Updates

This action is available for the current certification cycle and was newly added in 2023.

Objective

Promote the use of cool roofs to reduce energy demand and utility costs, decrease greenhouse gas emissions, and mitigate the urban heat island effect.

What to Do

Cool roofs use highly reflective, highly emissive materials to reflect light and heat from buildings. Cool roofing options include both building materials and painted coatings, which can be a more affordable, easier option for both new and existing buildings.

The more you do, the more points you earn

 Promote cool roofs through your municipality's building or permitting office. This must include information on the municipal website, and may also include posters and brochures in the municipal office building. (5 points)

Submit: Description of education activities and one sample piece of educational materials, such as a screenshot of the website and hyperlink to the cool roofs education resources section of the municipal website or a photo of the information posted in a municipal office or public space.

Timeframe for Credit: Eligible for new action credit and rolling credit. This action falls under the action type "Websites, Maps, Inventories, Checklists, Assessments, Plans, Ordinances, Policies, Regulations and Resolutions" (see "Timeframe for Credit" Guidance Document for submission requirements).

2. Retrofit one or more municipal or school buildings with a cool roof, either a painted coating or with building materials. (15 points per building, with a maximum of 45 points)

Submit: The name and address of the retrofitted building(s), a contract, purchase order, or similar documentation showing that the work was done, the date the project was completed, and photos of the new cool roof.

Timeframe for Credit: Eligible for new action credit. This action falls under the action type "Implementation Projects" (see "Timeframe for Credit" Guidance Document for submission requirements).

- 3. Enable and promote cool roofs in local zoning regulations and/or building codes. (20 points for implementing one of the two options below)
 - a. Revise zoning regulations or building codes to ensure existing rules do not prohibit implementation of cool roofing strategies on new and existing buildings. Regulatory barriers might include design regulations on roofing colors or materials. You may also update the relevant portions of your zoning regulations or building codes to explicitly allow cool roofs.

OR

b. Create a new cool roof ordinance requiring cool roofs in new construction. See resources section for example ordinances.

Submit: A PDF of your municipality's officially adopted zoning regulations with the relevant portions highlighted and/or described (for 5.9.1 a) or PDF of your municipality's officially adopted cool roof ordinance (for 5.9.1 b).

Timeframe for Credit: Eligible for new action credit and rolling credit. This action falls under the action type "Websites, Maps, Inventories, Checklists, Assessments, Plans, Ordinances, Policies, Regulations and Resolutions" (see "Timeframe for Credit" Guidance Document for submission requirements).

Timeframe for Credit

Actions can either be "New" or considered for "Rolling Credit."

New Action Credit. Any action completed within the past three years (from January 1 of the year seeking certification) is eligible for potential certification points. If you are applying for recertification in your year of expiration, you may not claim *New Action Credit* for items that previously received credit.

Rolling Credit. For any action older than three years (from January 1 of the year seeking certification), you must demonstrate ongoing, currently relevant, and meaningful impact in your community to be considered for certification points. If you are applying for recertification in your year of expiration, you must apply for *Rolling Credit* for any item that previously received credit, even if it was completed within the past three years.

View the "Timeframe for Credit" Guidance Document for detailed submission requirements.

Engaging Partners

Sustainable CT encourages regional collaboration and other forms of partnership. For every action, please complete the "partners" box in your submission, indicating the name(s) of any municipalities and/or organizations you partnered with (if any) and a brief description of your municipality's role. For additional information, please see the Partners Guidance Document.

Potential Municipal and Community Collaborators

Appropriate municipal and community stakeholders should be involved, with specific collaborators dependent upon the action items selected above. Staff from the building, planning and zoning, and engineering departments, and a representative from the planning and zoning, or energy commission could be helpful in implementing this action.

Why This Matters

Cool roofs are an effective strategy to mitigate the urban heat island effect. The urban heat island effect is the phenomenon in which urban or suburban areas experience higher temperatures than outlying areas, due to the greater presence of buildings, roads, and other similar infrastructure. Because this built infrastructure absorbs and re-emits heat more than greenery or bodies of water, urban areas can experience daytime temperatures 1-7° F higher than surrounding areas and nighttime temperatures 2-5° F higher than surrounding areas. The EPA reports that cool roofing materials can stay 50-60° F cooler than conventional roofing materials.

Funding

If available, below are potential funding sources specific to this Action. For a complete listing of potential funding opportunities to assist with implementing Sustainable CT Actions, please visit the Sustainable CT Grants Portal, which is searchable by Action. Please also visit the Support for Your Town page for opportunities for technical assistance and other supports.

- <u>Urban Act Grant Program</u>
- Municipal Grant Program (MGP)
- <u>Sustainable CT Community Match Fund</u>

Resources

Toolkits, Calculators, Guidance Documents, General Information

- US Environmental Protection Agency, <u>Using Cool Roofs to Reduce Heat Islands</u>
- Oak Ridge National Laboratory, <u>Cool Roof Calculator</u>
- US Department of Energy, <u>Guide to Cool Roofs</u>
- US Department of Energy, <u>Guidelines for Selecting Cool Roofs</u>
- Global Cool Cities Alliance, <u>A Practical Guide to Cool Roofs and Cool Pavements</u>
- UN Environment Programme, Beating the Heat: A Sustainable Cooling Handbook for Cities

Organizations and Relevant Programs

- US Environmental Protection Agency, <u>Heat Island Effect</u>
- Global Cool Cities Alliance
- Cool Roof Rating Council

Benefits

In addition to helping mitigate the urban heat island effect, cool roofs can reduce energy demand and energy use. This can reduce greenhouse gas emissions and lower energy bills. Since some of the populations most affected by and most vulnerable to the urban heat island effect are also among the populations experiencing higher energy burdens, cool roofs provide social and equity benefits as well.