



## STUDENTS ON GREEN ROOFS



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Climate change is recognized as the biggest threat facing humanity, and the green roof community can stay ahead of the curve. First let's work together and with other disciplines to develop meaningful practices and policies: strive for designs that support ecosystem functions, biodiversity and health; roofscapes that help to improve local conditions; buildings that provide comfort and resilience in face of an uncertain future.

We can also align ourselves with the anticipated evolution of market responses to climate change. Carbon has become a hot currency item, for example, and green roofs can serve as partial solutions for cutting carbon emissions in several ways. In some cases research is ongoing; in others we might consider investigation. In all cases, let's collaborate and contribute some meaningful ideas to a healthy future on our planet!

There is no lack of research topics for green roofs but if we root our attention to the perspective of climate change speculations we might tackle region-specific items like:

*Thermal performance.* A number of research institutes have quantified the heat flux mitigation of various green roof types and measured the amount of energy conserved in different seasons. Inevitably, such data will be required for any climatic region where green roofs are to be considered a strategy for achieving this benefit.

*Carbon sequestration:* As with ground-level planting projects, green roofs don't qualify for 'Gold Standard' carbon offsets but, official certifications and currency exchange aside, what is the carbon balance of a green roof? How do shallow Sedum roofs compare with more diversely planted roofs? What about nutrient cycles?

*Sustainability:* Further to Life Cycle Analyses of green roofs, what are the ecological footprints of the individual green roof components/ materials? What constitutes their manufacture; can they be locally produced? Are different regions developing their own sustainable green roof infrastructure?

These just off the top of my head. If you have any thoughts, please consider posting them to the Forums page! See you in Minneapolis!

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