

# ACS podcast: Grow a garden on your roof to battle climate change

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"Green" roofs, those increasingly popular urban rooftops covered with plants, could help fight global warming, scientists in Michigan report in the latest episode in the American Chemical Society's (ACS) award-winning podcast series, "Global Challenges/Chemistry Solutions."

The scientists found that replacing traditional roofing materials in an [urban area](#) the size of Detroit, with a population of about one million, with green would be equivalent to eliminating a year's worth of carbon dioxide emitted by 10,000 mid-sized SUVs and trucks. Their study, the first of its kind to examine the ability of [green roofs](#) to sequester carbon which may impact [climate change](#), appears in ACS' semi-monthly journal *Environmental Science & Technology*.

The podcast is available without charge at iTunes and from ACS at [www.acs.org/globalchallenges](http://www.acs.org/globalchallenges).

It features audio clips of Kristen Getter, Ph.D., who is with the Department of Horticulture Michigan State University, East Lansing, Mich. Getter explains how her team discovered that that green roofs are multi-functional. They reduce heating and air conditioning costs, for instance, and retain and detain storm water. Researchers knew that green roofs also absorb [carbon dioxide](#), a major greenhouse gas that contributes to [global warming](#), but nobody had measured the impact until now, she says.

Getter encourages people living in urban areas to plant gardens on their

roofs.

Global Challenges/Chemistry Solutions is a series of podcasts describing some of the 21st Century's most daunting problems, and how cutting-edge research in chemistry matters in the quest for solutions. This sweeping panorama of global challenges includes dilemmas such as providing a hungry, thirsty world with ample supplies of safe food and clean water; developing alternatives to petroleum to fuel society; preserving the environment and assuring a sustainable future for our children; and improving human health.

Future podcasts will discuss improving human health, developing alternatives to petroleum, preserving the environment and assuring a sustainable future for our children. The series has won the Gold Medal as the best podcast in the national awards competition sponsored by Association TRENDS, the national newspaper for associations.

Source: American Chemical Society ([news](#) : [web](#))

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