



SUSTAINABILITY DESIGN CHALLENGE

DESIGN CHALLENGE: How might we improve food production, food management or transportation to reduce food waste?

Note: This is a guiding statement to assist you in choosing a problem. The problem you choose should be focused and specific.

THE PROBLEM

Globally, 30–40% of food produced for consumption is wasted every year. Wasted food represents a massive social, environmental, and economic loss.

Socially, 800 million people are undernourished globally, and in the U.S. one in seven people are food insecure. Environmentally, food loss and waste is a massive resource drain, using 21% of U.S. fresh water and generating about 8 percent of global greenhouse gas emissions. In fact, if it were measured as a country, food waste would rank third in the world for harmful emissions, behind the United States and China. Economically, food loss and waste globally cost up to \$940 billion per year and the food we waste contributes 4.4 gigatons of carbon dioxide equivalent into the atmosphere every year. When we dramatically reduce food waste, we also address hunger, capture more economic opportunity, and protect our planet.

While food waste is an important global issue, we want to be mindful of the differences in the reasons why waste occurs. In developed countries, most food is wasted at the consumer and retail level, from people throwing away excess food or grocery stores rejecting “imperfect” looking produce. In developing countries, food is often lost during harvest, or on the journey from farm to market. As our world becomes more globally connected, our food supply chains are more integrated, and therefore a systems level approach is all the more important for reducing waste.

Resources

Drawdown, The Most Comprehensive Plan Ever Proposed to Reverse Global Warming, Edited by Paul Hawken

Sponsored by: Climate Action KC, www.mkccac.org

Contact: Matt Riggs, Mid-America Regional Council, mriggs@marc.org

Joan Leavens, joanleavens@me.com (Climate Action Plan Committee, JOCO Food Policy Council)

KC STEM Contact: Ann Zimmerman, Contest Administrator, zimmermanab@kcstem.org



Scholarships will be awarded to top projects.