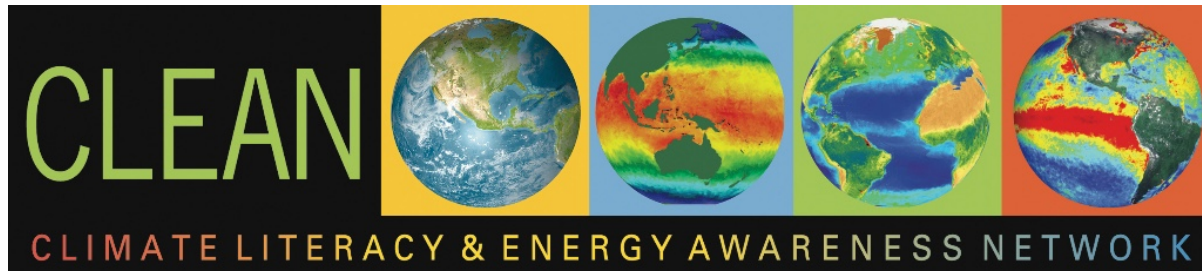
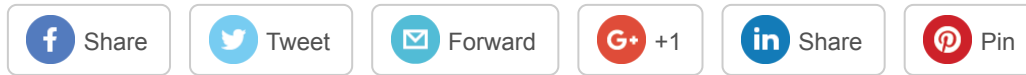


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[Riparian Restoration Video](#) | [Energy Engineering Activity](#) | [Act on Climate](#)

## ***CLEAN STEM Flash***

A Timely Climate and Energy E-Learning Series to Use and Share

### **Topic: Solutions for climate change**

Resources for those willing to act.

#### **CLEAN Resource Feature**

**Video:** [The Second Solution: Riparian Restoration](#)

This video illustrates how one community's sustainable solution to help keep stream water cool enough for healthy fish also has the added benefit of removing CO2 from the atmosphere.

*Video length: 4:57 min.*

*Audience: Middle School, High School, College Lower*

Take a look at some more CLEAN resources focused on [restoration](#).

Show your students this video about one community's solution to

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great example of the benefits of community solutions to solve sustainability conflicts.

### CLEAN Resource Feature

#### Activity: [Zero-Energy Housing](#)

Students investigate passive solar building design with a focus solely on heating. They learn how insulation, window placement, thermal mass, surface colors, and site orientation play important roles in passive solar heating.

Browse CLEAN for more resources on [solar heating](#).

Students use information on sustainable heating to design and build their own model houses, and test them for thermal gains and losses during a simulated day and night. Teams compare designs and make suggestions for improvements.



### In the News: [Act on Climate](#)

Sustainability, Energy, and Environment Community (SEEC) at the University of Colorado Boulder recently launched their new [Act on Climate](#) website to "answer the questions most frequently asked by those willing to act."

Browse the site for information on climate science and actions you and your students can take to mitigate climate change, from food choices to transportation to energy and more!

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## Americans emit a lot

The U.S. emits about 36,000 pounds of CO<sub>2</sub> per person every year ([calculation details](#)). This means a typical American family (3 people) contributes about 108,000 pounds of CO<sub>2</sub>. That's enough gas to fill about 10 hot air balloons — each about 60 feet tall — in only 12 months. That much CO<sub>2</sub> weighs about the same as two full garbage trucks!

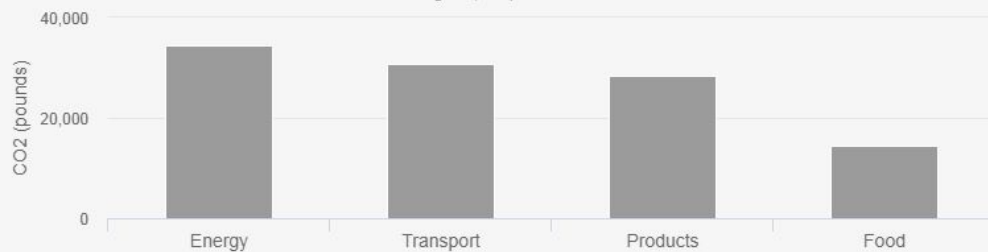
Yearly carbon emissions for a typical 3-person American family



(data for graph)

Yearly carbon emissions for the family by category

totalling 108,000 pounds of CO<sub>2</sub>



(data for graph)

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CLEAN supports teaching and learning about climate and energy with 700+ free peer-reviewed, scientifically accurate, and classroom-ready resources.

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