



**CLEAR  
CREEK  
AMANA**

**COMMUNITY SCHOOL DISTRICT**

# GREEN SAILS

Clear Creek Amana's Sustainability Newsletter

**NOV. & DEC. 2020**



## *In this newsletter:*

District Energy Review  
[Page 01](#)

Sustainability in the  
Classroom  
[Page 02](#)

Student Article  
[Page 03](#)

Sustainability Challenge  
[Page 03](#)

## ***DISTRICT ENERGY REVIEW***

### **Percent change in building electric usage**

These numbers may be impacted change in operation practices due to COVID-19.

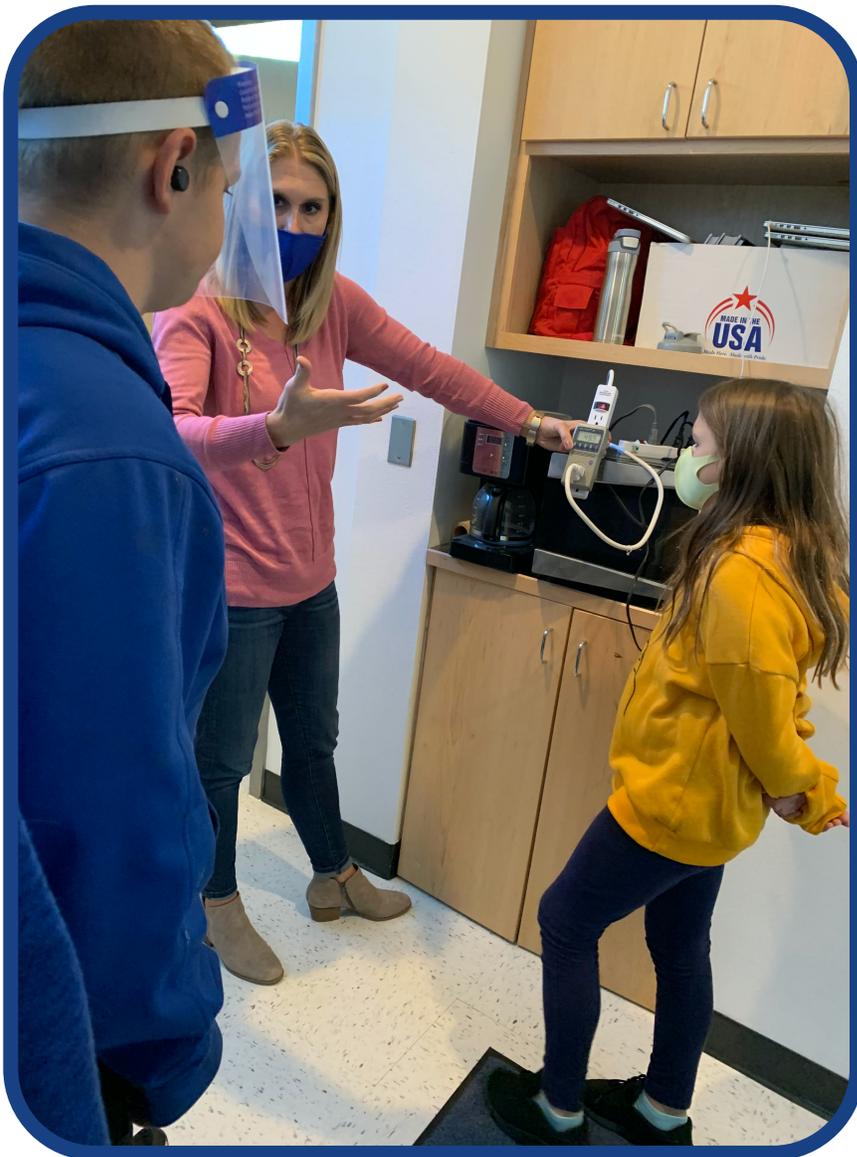
| <b>SCHOOL</b>          | <b>OCT. 19-20</b> |
|------------------------|-------------------|
| Amana Elementary       | -10.7%            |
| Clear Creek Elementary | +25.5%            |
| North Bend Elementary  | +45.7%            |
| Oak Hill Elementary    | -30.4%            |
| Tiffin Elementary      | +31.1%            |
| CCA Middle School      | +3.4%             |
| CCA High School        | +3.7%             |

# GREEN LEADER OF THE MONTH

If you see any one in the district doing amazing things in sustainability please nominate them here. We want to recognize their great work!

<https://forms.gle/t13uc8T7E7I7guHn6>

## SUSTAINABILITY IN THE CLASSROOM



The STEM 8th Grade Exploratory is exploring sustainability and its relationship to STEM. During the 30 days students will learn about sustainability from 4 perspectives: Food, Energy, Water, and Stuff. So far, students have explored the impact the things they purchase have on the planet and determined what their personal footprint is. Then, they learned about energy, its importance in our modern world and how we get electricity. They then performed an energy audit of several areas of the middle school.

Pictured: Mrs. Boeset teaching students how to use a Kill-a-Watt meter and also discussing phantom energy.

# STUDENT ARTICLE

## How Do Insects Survive Winter?

As the temperatures continue to flux and drop towards winter, save for gatherings of Boxelder bugs on the outsides of houses and the occasional stray house fly, insects all seem to disappear. Yet, once spring and summer eventually come again, bugs also return in full force, whether its ones we love like bees and butterflies, or whether its those we think less highly of, like wasps and mosquitoes. How do such small creatures manage to survive freezing temperatures and get out of it like nothing happened? Insects have multiple methods to survive winter. One method, migration, is excellently presented by Monarch butterflies, where they fly en-masse from their northern breeding grounds into southwestern Mexico. Another method, used by aquatic nymphs such as those from dragonflies, is to actively feed and grow underwater, even under ice, until they can leave as adults in spring. Lots of bug species also survive as eggs, larvae, and pupae, either through protection through cover such as leaf litter and soil, or by producing natural antifreeze to lower their freezing points. Adults can also produce this antifreeze when they go into diapause, a survival technique similar to vertebrate's hibernation where they go into a completely inactive state which lowers their metabolism enough for them to survive on their body's stored energy.

By: Adeline Lasswell



## MONTHLY CHALLENGE

**Show us how you and your family are creating less waste this holiday season!**

**Email submissions to [ericadodge@ccaschools.org](mailto:ericadodge@ccaschools.org)**