



## **BEEP Energy STARS 2019-2020t** **Challenging Energy and Environment**

Bosque School - Albuquerque, New Mexico

Project Advisor: **Barbara Lazar**

Student Leaders: **Maddie Traweek, Christopher Lambrecht, Maya Falcon, Brooklyn Bird, Safiya Daruger**

The **B.E.E.P.** (Bosque Energy & Environment Peeps) **Energy STARS reconvened** as an extracurricular club to deepen our knowledge about energy conservation and awareness, and our environmental impact throughout our school and community. We met to explore, experiment, communicate, and have fun doing energy. We followed the steps in *Blueprint for Success* to organize our work. Our goal is to **educate ourselves, other students and our community about how to save energy and reduce our energy footprint.** We learned through different activities, outreach, and demonstrations.

### **To deepen our understanding and awareness, and develop leadership, we:**

- Learned about forms and sources through hands-on activities and kits like Science of Energy
- Learned, then taught about energy conservation and efficiency
- Used the *Energy Light Box* and *Hand Crank Generator* to learn about efficiency

### **Our school's awareness improved, because of:**

- Announcements of facts, tips, jokes, and challenges, about conservation and efficiency
- Pledges made by students and staff to save energy and resources
- We are learning about and supporting new resource-saving at our school
- Two *Energy Weeks* improved a culture of energy awareness with students and staff

### **Our community benefited:**

- The influence of our club made a difference on how people think and the choices they make about energy.
- E-Recycling Event resulted in over 6,000 pounds of E-Waste



Through our activities and visibility in the community, we have shown that our work as the BEEP Energy STARS has been sustainable, and we have helped the school and community to better understand our world, its natural resources, and energy as it impacts our lives today.

## Goal #1

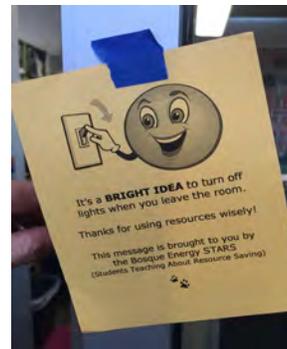
Convene the Energy Club – B.E.E.P (Bosque Energy & Environment Peeps) *Energy S.T.A.R.S* – *Students Teaching About Resource Saving* in order to pursue interests, learn and teach about energy and energy issues, learn from and support each other, and to jointly educate and reinforce energy consciousness and conservation efforts in our school and community.

### Energy Activities GOAL #1

- Revive the **Energy STARS (Students Teaching About Resource Saving)** – B.E.E.P. Bosque Energy Education Peeps and set goal to meet twice a month
- Review **NEED Blueprint for Success** – Steps 1-8. Begin with *Science of Energy*, Energy Sources (Infobooks and Round-up)
- Research **energy saving ideas** – websites, NEED links, EIA Kids, PNM
- Learn about concept of **Carbon Footprint/environmental impact**
- Plan for Activity **Open House (Goal #3)**.
- Begin to plan activities for **October Energy Awareness Month (see Goal #3)** and **March Energy Week (see Goal #5)** to announce energy tips regularly during the **Daily announcements at our Morning Meeting**
- Students learned about energy sources using **Energy Round-Up**, and learned **ENERGY CHANTS**.
- Planned two **school-wide energy awareness weeks**.



**Making big plans!**



## Student Leadership #1

- Students revive the **Energy Activity Block**– an extracurricular time that meets twice a month during the school day
- Students recruit for **BEEP Energy STARS**
- Students decide to work together **to support** each others' club activities and **outreach** opportunities
- Students help teach each other about the **Science of Energy** and **Sources of Energy** – “**Kids-Teaching-Kids**” method works well!
- Students learn to use and monitor energy usage with a **Kill-a-Watt meter**
- Students **tour the school and conduct an basic energy survey** to identify potential ways to conserve and recommend energy-saving features and investigate energy-efficient devices that have been on campus.
- Students implement at least one energy activity per semester
- Students learned to use an **energy light box** and a **handcrank generator** to demonstrate and explain **energy concepts** and **light bulb efficiency**



**Are you interested in learning about energy and the environment?**

Following a hands-on, activity-based, kids-teach-kids model, you can have fun and learn about the science of energy, where our energy comes from, promote energy awareness in our community, explore hands-on activities such as building generators, solar ovens, wind turbines, hydrogen fuel cell cars, and learn about how to reduce your carbon footprint.

Be a part of the  
**BEEP: Energy S.T.A.R.S. Club**  
\*BEEP – (Bosque Energy and Environment Project)  
 \*Energy S.T.A.R.S. (Students Teaching About Resource Saving)

**BOSQUE SCHOOL**  
Challenging Education



Recruit, learn, and engage



| Month  | Read Date  | Charge   | Days | Diffuse kWh | Diffuse kWh | Net  | Cost | Cost | Cost |
|--------|------------|----------|------|-------------|-------------|------|------|------|------|
| Actual | 11/08/2015 | 1000000  | 30   | 0           | 0           | 100  | 0.0  | 0.0  | 0.00 |
| Actual | 11/18/2015 | 1100000  | 30   | 0           | 0           | 110  | 0.0  | 0.0  | 0.00 |
| Actual | 12/08/2015 | 1200000  | 30   | 0           | 0           | 120  | 0.0  | 0.0  | 0.00 |
| Actual | 12/18/2015 | 1300000  | 30   | 0           | 0           | 130  | 0.0  | 0.0  | 0.00 |
| Actual | 01/08/2016 | 1400000  | 30   | 0           | 0           | 140  | 0.0  | 0.0  | 0.00 |
| Actual | 01/18/2016 | 1500000  | 30   | 0           | 0           | 150  | 0.0  | 0.0  | 0.00 |
| Actual | 02/08/2016 | 1600000  | 30   | 0           | 0           | 160  | 0.0  | 0.0  | 0.00 |
| Actual | 02/18/2016 | 1700000  | 30   | 0           | 0           | 170  | 0.0  | 0.0  | 0.00 |
| Actual | 03/08/2016 | 1800000  | 30   | 0           | 0           | 180  | 0.0  | 0.0  | 0.00 |
| Actual | 03/18/2016 | 1900000  | 30   | 0           | 0           | 190  | 0.0  | 0.0  | 0.00 |
| Actual | 04/08/2016 | 2000000  | 30   | 0           | 0           | 200  | 0.0  | 0.0  | 0.00 |
| Actual | 04/18/2016 | 2100000  | 30   | 0           | 0           | 210  | 0.0  | 0.0  | 0.00 |
| Actual | 05/08/2016 | 2200000  | 30   | 0           | 0           | 220  | 0.0  | 0.0  | 0.00 |
| Actual | 05/18/2016 | 2300000  | 30   | 0           | 0           | 230  | 0.0  | 0.0  | 0.00 |
| Actual | 06/08/2016 | 2400000  | 30   | 0           | 0           | 240  | 0.0  | 0.0  | 0.00 |
| Actual | 06/18/2016 | 2500000  | 30   | 0           | 0           | 250  | 0.0  | 0.0  | 0.00 |
| Actual | 07/08/2016 | 2600000  | 30   | 0           | 0           | 260  | 0.0  | 0.0  | 0.00 |
| Actual | 07/18/2016 | 2700000  | 30   | 0           | 0           | 270  | 0.0  | 0.0  | 0.00 |
| Actual | 08/08/2016 | 2800000  | 30   | 0           | 0           | 280  | 0.0  | 0.0  | 0.00 |
| Actual | 08/18/2016 | 2900000  | 30   | 0           | 0           | 290  | 0.0  | 0.0  | 0.00 |
| Actual | 09/08/2016 | 3000000  | 30   | 0           | 0           | 300  | 0.0  | 0.0  | 0.00 |
| Actual | 09/18/2016 | 3100000  | 30   | 0           | 0           | 310  | 0.0  | 0.0  | 0.00 |
| Actual | 10/08/2016 | 3200000  | 30   | 0           | 0           | 320  | 0.0  | 0.0  | 0.00 |
| Actual | 10/18/2016 | 3300000  | 30   | 0           | 0           | 330  | 0.0  | 0.0  | 0.00 |
| Actual | 11/08/2016 | 3400000  | 30   | 0           | 0           | 340  | 0.0  | 0.0  | 0.00 |
| Actual | 11/18/2016 | 3500000  | 30   | 0           | 0           | 350  | 0.0  | 0.0  | 0.00 |
| Actual | 12/08/2016 | 3600000  | 30   | 0           | 0           | 360  | 0.0  | 0.0  | 0.00 |
| Actual | 12/18/2016 | 3700000  | 30   | 0           | 0           | 370  | 0.0  | 0.0  | 0.00 |
| Actual | 01/08/2017 | 3800000  | 30   | 0           | 0           | 380  | 0.0  | 0.0  | 0.00 |
| Actual | 01/18/2017 | 3900000  | 30   | 0           | 0           | 390  | 0.0  | 0.0  | 0.00 |
| Actual | 02/08/2017 | 4000000  | 30   | 0           | 0           | 400  | 0.0  | 0.0  | 0.00 |
| Actual | 02/18/2017 | 4100000  | 30   | 0           | 0           | 410  | 0.0  | 0.0  | 0.00 |
| Actual | 03/08/2017 | 4200000  | 30   | 0           | 0           | 420  | 0.0  | 0.0  | 0.00 |
| Actual | 03/18/2017 | 4300000  | 30   | 0           | 0           | 430  | 0.0  | 0.0  | 0.00 |
| Actual | 04/08/2017 | 4400000  | 30   | 0           | 0           | 440  | 0.0  | 0.0  | 0.00 |
| Actual | 04/18/2017 | 4500000  | 30   | 0           | 0           | 450  | 0.0  | 0.0  | 0.00 |
| Actual | 05/08/2017 | 4600000  | 30   | 0           | 0           | 460  | 0.0  | 0.0  | 0.00 |
| Actual | 05/18/2017 | 4700000  | 30   | 0           | 0           | 470  | 0.0  | 0.0  | 0.00 |
| Actual | 06/08/2017 | 4800000  | 30   | 0           | 0           | 480  | 0.0  | 0.0  | 0.00 |
| Actual | 06/18/2017 | 4900000  | 30   | 0           | 0           | 490  | 0.0  | 0.0  | 0.00 |
| Actual | 07/08/2017 | 5000000  | 30   | 0           | 0           | 500  | 0.0  | 0.0  | 0.00 |
| Actual | 07/18/2017 | 5100000  | 30   | 0           | 0           | 510  | 0.0  | 0.0  | 0.00 |
| Actual | 08/08/2017 | 5200000  | 30   | 0           | 0           | 520  | 0.0  | 0.0  | 0.00 |
| Actual | 08/18/2017 | 5300000  | 30   | 0           | 0           | 530  | 0.0  | 0.0  | 0.00 |
| Actual | 09/08/2017 | 5400000  | 30   | 0           | 0           | 540  | 0.0  | 0.0  | 0.00 |
| Actual | 09/18/2017 | 5500000  | 30   | 0           | 0           | 550  | 0.0  | 0.0  | 0.00 |
| Actual | 10/08/2017 | 5600000  | 30   | 0           | 0           | 560  | 0.0  | 0.0  | 0.00 |
| Actual | 10/18/2017 | 5700000  | 30   | 0           | 0           | 570  | 0.0  | 0.0  | 0.00 |
| Actual | 11/08/2017 | 5800000  | 30   | 0           | 0           | 580  | 0.0  | 0.0  | 0.00 |
| Actual | 11/18/2017 | 5900000  | 30   | 0           | 0           | 590  | 0.0  | 0.0  | 0.00 |
| Actual | 12/08/2017 | 6000000  | 30   | 0           | 0           | 600  | 0.0  | 0.0  | 0.00 |
| Actual | 12/18/2017 | 6100000  | 30   | 0           | 0           | 610  | 0.0  | 0.0  | 0.00 |
| Actual | 01/08/2018 | 6200000  | 30   | 0           | 0           | 620  | 0.0  | 0.0  | 0.00 |
| Actual | 01/18/2018 | 6300000  | 30   | 0           | 0           | 630  | 0.0  | 0.0  | 0.00 |
| Actual | 02/08/2018 | 6400000  | 30   | 0           | 0           | 640  | 0.0  | 0.0  | 0.00 |
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| Actual | 03/08/2018 | 6600000  | 30   | 0           | 0           | 660  | 0.0  | 0.0  | 0.00 |
| Actual | 03/18/2018 | 6700000  | 30   | 0           | 0           | 670  | 0.0  | 0.0  | 0.00 |
| Actual | 04/08/2018 | 6800000  | 30   | 0           | 0           | 680  | 0.0  | 0.0  | 0.00 |
| Actual | 04/18/2018 | 6900000  | 30   | 0           | 0           | 690  | 0.0  | 0.0  | 0.00 |
| Actual | 05/08/2018 | 7000000  | 30   | 0           | 0           | 700  | 0.0  | 0.0  | 0.00 |
| Actual | 05/18/2018 | 7100000  | 30   | 0           | 0           | 710  | 0.0  | 0.0  | 0.00 |
| Actual | 06/08/2018 | 7200000  | 30   | 0           | 0           | 720  | 0.0  | 0.0  | 0.00 |
| Actual | 06/18/2018 | 7300000  | 30   | 0           | 0           | 730  | 0.0  | 0.0  | 0.00 |
| Actual | 07/08/2018 | 7400000  | 30   | 0           | 0           | 740  | 0.0  | 0.0  | 0.00 |
| Actual | 07/18/2018 | 7500000  | 30   | 0           | 0           | 750  | 0.0  | 0.0  | 0.00 |
| Actual | 08/08/2018 | 7600000  | 30   | 0           | 0           | 760  | 0.0  | 0.0  | 0.00 |
| Actual | 08/18/2018 | 7700000  | 30   | 0           | 0           | 770  | 0.0  | 0.0  | 0.00 |
| Actual | 09/08/2018 | 7800000  | 30   | 0           | 0           | 780  | 0.0  | 0.0  | 0.00 |
| Actual | 09/18/2018 | 7900000  | 30   | 0           | 0           | 790  | 0.0  | 0.0  | 0.00 |
| Actual | 10/08/2018 | 8000000  | 30   | 0           | 0           | 800  | 0.0  | 0.0  | 0.00 |
| Actual | 10/18/2018 | 8100000  | 30   | 0           | 0           | 810  | 0.0  | 0.0  | 0.00 |
| Actual | 11/08/2018 | 8200000  | 30   | 0           | 0           | 820  | 0.0  | 0.0  | 0.00 |
| Actual | 11/18/2018 | 8300000  | 30   | 0           | 0           | 830  | 0.0  | 0.0  | 0.00 |
| Actual | 12/08/2018 | 8400000  | 30   | 0           | 0           | 840  | 0.0  | 0.0  | 0.00 |
| Actual | 12/18/2018 | 8500000  | 30   | 0           | 0           | 850  | 0.0  | 0.0  | 0.00 |
| Actual | 01/08/2019 | 8600000  | 30   | 0           | 0           | 860  | 0.0  | 0.0  | 0.00 |
| Actual | 01/18/2019 | 8700000  | 30   | 0           | 0           | 870  | 0.0  | 0.0  | 0.00 |
| Actual | 02/08/2019 | 8800000  | 30   | 0           | 0           | 880  | 0.0  | 0.0  | 0.00 |
| Actual | 02/18/2019 | 8900000  | 30   | 0           | 0           | 890  | 0.0  | 0.0  | 0.00 |
| Actual | 03/08/2019 | 9000000  | 30   | 0           | 0           | 900  | 0.0  | 0.0  | 0.00 |
| Actual | 03/18/2019 | 9100000  | 30   | 0           | 0           | 910  | 0.0  | 0.0  | 0.00 |
| Actual | 04/08/2019 | 9200000  | 30   | 0           | 0           | 920  | 0.0  | 0.0  | 0.00 |
| Actual | 04/18/2019 | 9300000  | 30   | 0           | 0           | 930  | 0.0  | 0.0  | 0.00 |
| Actual | 05/08/2019 | 9400000  | 30   | 0           | 0           | 940  | 0.0  | 0.0  | 0.00 |
| Actual | 05/18/2019 | 9500000  | 30   | 0           | 0           | 950  | 0.0  | 0.0  | 0.00 |
| Actual | 06/08/2019 | 9600000  | 30   | 0           | 0           | 960  | 0.0  | 0.0  | 0.00 |
| Actual | 06/18/2019 | 9700000  | 30   | 0           | 0           | 970  | 0.0  | 0.0  | 0.00 |
| Actual | 07/08/2019 | 9800000  | 30   | 0           | 0           | 980  | 0.0  | 0.0  | 0.00 |
| Actual | 07/18/2019 | 9900000  | 30   | 0           | 0           | 990  | 0.0  | 0.0  | 0.00 |
| Actual | 08/08/2019 | 10000000 | 30   | 0           | 0           | 1000 | 0.0  | 0.0  | 0.00 |
| Actual | 08/18/2019 | 10100000 | 30   | 0           | 0           | 1010 | 0.0  | 0.0  | 0.00 |
| Actual | 09/08/2019 | 10200000 | 30   | 0           | 0           | 1020 | 0.0  | 0.0  | 0.00 |
| Actual | 09/18/2019 | 10300000 | 30   | 0           | 0           | 1030 | 0.0  | 0.0  | 0.00 |
| Actual | 10/08/2019 | 10400000 | 30   | 0           | 0           | 1040 | 0.0  | 0.0  | 0.00 |
| Actual | 10/18/2019 | 10500000 | 30   | 0           | 0           | 1050 | 0.0  | 0.0  | 0.00 |
| Actual | 11/08/2019 | 10600000 | 30   | 0           | 0           | 1060 | 0.0  | 0.0  | 0.00 |
| Actual | 11/18/2019 | 10700000 | 30   | 0           | 0           | 1070 | 0.0  | 0.0  | 0.00 |
| Actual | 12/08/2019 | 10800000 | 30   | 0           | 0           | 1080 | 0.0  | 0.0  | 0.00 |
| Actual | 12/18/2019 | 10900000 | 30   | 0           | 0           | 1090 | 0.0  | 0.0  | 0.00 |
| Actual | 01/08/2020 | 11000000 | 30   | 0           | 0           | 1100 | 0.0  | 0.0  | 0.00 |
| Actual | 01/18/2020 | 11100000 | 30   | 0           | 0           | 1110 | 0.0  | 0.0  | 0.00 |
| Actual | 02/08/2020 | 11200000 | 30   | 0           | 0           | 1120 | 0.0  | 0.0  | 0.00 |
| Actual | 02/18/2020 | 11300000 | 30   | 0           | 0           | 1130 | 0.0  | 0.0  | 0.00 |
| Actual | 03/08/2020 | 11400000 | 30   | 0           | 0           | 1140 | 0.0  | 0.0  | 0.00 |
| Actual | 03/18/2020 | 11500000 | 30   | 0           | 0           | 1150 | 0.0  | 0.0  | 0.00 |
| Actual | 04/08/2020 | 11600000 | 30   | 0           | 0           | 1160 | 0.0  | 0.0  | 0.00 |
| Actual | 04/18/2020 | 11700000 | 30   | 0           | 0           | 1170 | 0.0  | 0.0  | 0.00 |
| Actual | 05/08/2020 | 11800000 | 30   | 0           | 0           | 1180 | 0.0  | 0.0  | 0.00 |
| Actual | 05/18/2020 | 11900000 | 30   | 0           | 0           | 1190 | 0.0  | 0.0  | 0.00 |
| Actual | 06/08/2020 | 12000000 | 30   | 0           | 0           | 1200 | 0.0  | 0.0  | 0.00 |
| Actual | 06/18/2020 | 12100000 | 30   | 0           | 0           | 1210 | 0.0  | 0.0  | 0.00 |
| Actual | 07/08/     |          |      |             |             |      |      |      |      |

## Energy Content and Resources GOAL #1

- NEED website - [www.need.org](http://www.need.org)
- NEED *Blueprint for School Energy Teams*
- NEED *Monitoring and Mentoring*,
- *NEED Exploring Solar Energy*,
- NEED *Science of Energy kit*,
- *NEED Energy Games and Icebreakers*
- Dr. Jessie Barrie, Head of School; Ms. Pat Preib, Head of Middle School; Ms. Leslie O'Hanlon, Interim Head of Middle School, Mr. Kirk Ward, Director of Facilities, Ms. Sky Jenkins Service Learning
- Mr. Robert Lazar, APS Water and Energy Conservation Coordinator
- Dept of Energy Kids Page web site - [www.eia.gov.kids/kids](http://www.eia.gov.kids/kids)

## Evaluation GOAL #1

- **Regular and positive involvement and feedback** from school staff and students
- Energy STARS/BEEP membership **remained intact throughout the year**
- Energy STARS /BEEP news and **information featured in school newsletter the Bosque Buzz** 5+ times throughout the year – reaching over 1000 families (students, alumni, trustees, community)
- Staffuly and students “brag” about their classroom-based energy conservation efforts (“Come see! I turned off my lights during prep!”)
- School **culture of energy consciousness** is contagious – former Energy STARS in the upper school continue energy and environmental interests in their Service Learning projects



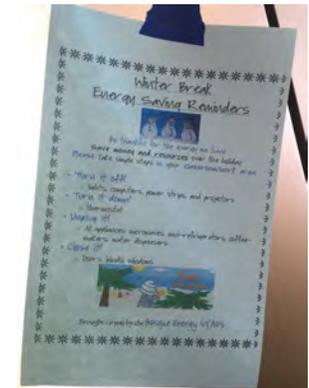
March 19, 2020



**10 Ways to Make Your Home More Energy Efficient**

1. Change your light bulbs to LEDs.
2. If possible, wash your clothes in cold water.
3. Sealing cracks, gaps, leaks, and adding insulation can **save up to 10%** on home heating and cooling costs.
4. Clean or replace all filters in your home regularly. Dirty filters make your system work harder and run longer than necessary.
5. Use your microwave instead of your stove when cooking.
6. To ensure your appliances are running efficiently, defrost your refrigerator and freezer before ice buildup becomes **1/4-inch thick**.
7. During warmer months, close blinds, shades and drapes on the sunny side of your home to help keep your home's temperature cooler and reduce the work for you AC. Open shades during cooler months to let the sun warm your home.
8. Don't peek in the oven while baking! Every time you peek, the temperature **can drop 25 F**, making your oven use more energy to bring the temperature back up.
9. Turn off the lights when they're not in use. Lighting accounts for **about 12%** of a typical residential utility bill.
10. Don't leave your mobile phone plugged in overnight. It only takes a couple of hours to charge.

Challenging the community to do one thing....



## Goal #2

- Participate in the School Community Open House (A View of Bosque) and Club Fair
- Teach the community about energy basics and the advantages of energy efficient choices

### Energy Activities GOAL #2

- Learn and review energy efficiency concepts
- Promote the school and club at Open House
- Teach visitors about energy efficiency and carbon footprint
- Demonstrate light box and hand crank generator
- Distribute energy facts and tips

### Student Leadership GOAL #2

- Students in BEEP Energy STARS determined **self-leadership by attending** this “optional” opportunity
- Students use the knowledge, information and tools to teach adults and student visitors to Open House Club Fair
- Students distribute a **checklist/reminders for “powering down”** over extended school breaks: Thanksgiving and Winter Break
- Students request more energy-saving **events and activities** following this workshop – and **recruit more** Energy STARS club kids!



**A View of Bosque**

**AN OPEN HOUSE FOR OPEN MINDS.**

Discover what Bosque School has to offer your child!

**BOSQUE SCHOOL** CLICK HERE TO VIEW THE EVENT DETAILS

**Admission Open House**  
Sun, October 6, 2019  
2:00 pm

Do you have friends or family that are interested in learning more about the Bosque School experience? Now is their chance to find out what life is like on campus and meet students, faculty, and alumni! Please send them [this link](#) and encourage them to join us this Sunday.



## Energy Content/Resources GOAL #2

- NEED *Blueprint for School Energy Teams*
- NEED *Energy Games and Icebreakers*
- *NEED Monitoring and Mentoring*
- Mr. Robert Lazar – Albuquerque Public Schools Water and Energy Conservation Coordinator
- Mr. Kirk Ward, Bosque School Facilities Director



## Evaluation GOAL #2

- Student involvement increased –**new members joined!**
- Students talked to/taught over 250 student and adult visitors
- Knowledge and experience is used to **plan further activities** to increase awareness and knowledge of our school's carbon footprint/environmental impact

Public speaking and leadership skills grow – Maya explains energy flow to the Dr. Barrie, Head of School.



## Goal #3

- Recognize October Energy Action Month with theme: *Take a BITE out of Energy Vampires.*
- Teach, promote, challenge, and raise awareness of energy usage in our schools, our families, and community.
- Build on past years' culture of energy awareness and encourage energy conservation

### Energy Activities GOAL #3

- Adopt a theme: *Take a BITE out of Energy Vampires*
- Research **energy vampires** – NOT the friends that wear you out!
- Make **pledge forms** for SPECIFIC actions to conserve
- Make a display – looks like a **vampire cape!**
- Reserve time and space to make **announcements** to gathered students and at lunch
- Offer **ideas and suggestions** to students, staff, and community
- Promote and **report in Bosque Buzz - Electronic Newsletter**
- Energy **vampire cape** with specific energy-saving ideas is displayed in public area of library

### Student Leadership GOAL #3

- Students create theme: *Take a BITE Out of Energy Vampires*
- Students review and **research energy facts** – especially those relating to “energy vampires”
- Students **make announcements** to school about specific facts about energy vampires and ways of saving
- Students create pledge forms and distribute and promote during lunch
- Students post pledges on the energy vampire's cape- to create a visual reminder of strategies



**Beware Energy Vampires and the Phantom Load**

Thursday, Oct 24, 2019

We are here with the BEEP Energy STARS Club. October is Energy Awareness/Action Month, and we want to close out the month by offering you the chance to think about the ways small acts can make a big difference.

Starting Monday, you can sign a pledge to lower your carbon footprint and save energy by changing small behaviors.

For example: you can use L.E.D. lightbulbs; walk, bus, or bike to school; use a power strip, or even plant a tree.

Look for us and our energy demo next Monday in **Budagher Hall** at lunch!

**Beware the PHANTOM LOAD! Take a BITE out of ENERGY VAMPIRES!**



**Researching our October Energy Awareness Month theme; making announcements to the student body during Morning Meeting; supporting students with ideas to make ONE CHANGE in behavior/habits**

### Energy Content/Resources GOAL #3

- NEED *Intermediate and Secondary Energy Info Books*
- NEED *Projects and Activities Booklet*
- US Energy Information Administration Kids' Page [www.Eia.gov/kids](http://www.Eia.gov/kids)
- NEED website - [www.need.org](http://www.need.org)
- *NEED Energy Games and Icebreakers*

### Evaluation GOAL #3

- Students writing facts and tips **reinforce** what was learned earlier in the year
- Informal **feedback from school community** about facts and tips
- **Bosque Buzz Electronic Newsletter** reaches 1000+ families, Trustees, and community each week – **BEEP Energy STARS are highlighted for the first time this year**
- Over 100 specific energy-saving ideas are shared
- New students join the BEEP Energy STARS- former STARS give support
- School **pride** at being energy aware and efficient



**Finn and Mary – former Energy STARS – support the middle school club!**



#### Energy Vampires and Phantom Outlets

10/31/2019

October is Energy Awareness and Action Month, and the BEEP (Bosque Energy and Environment Project) Energy STARS (Students Teaching About Resource Saving) club have kicked off their first energy awareness campaign. The theme for their Halloween week campaign is aptly named "The Phantom of the Outlet: Take a Bite out of Energy Vampires."

"Phantom" loads, or outlets, refer to the energy consumed by a device when it is turned off, but still plugged in. This is one of the ways people can be "energy vampires" without even realizing it.

Students in Ms. Barb Lazar's BEEP Energy STARS club want to end Energy Awareness and Action Month by offering fellow students the chance to think about what small acts they can take to make a big difference. They did this by storming both the middle and upper school lunches on Monday, October 28 to collect energy pledges. By the end of upper school lunch, they had a large bat-shaped paper cutout brimming with orange and purple pledges filled out by Bosque students. Students pledged to unplug their gaming consoles when they weren't using them, recycle plastic water bottles, turn off lights when they leave a room, and the list goes on.

During lunch, Brooklyn '26 was manning a light exhibit that demonstrated the difference in energy usage between various types of light bulbs, highlighting the importance of using LED bulbs. Others in the group—Maddie '25, Chris '26, Maya '26, Iris '26, Safiya '26, and Alyssa '26—were busy telling people about the importance of conserving energy and the little steps we can take to lower our carbon footprints.

The BEEP Energy STARS club is going to analyze the pledges and consider how they will help lower our carbon footprint here at Bosque.

The group also has some suggestions for you on how you can lower your energy consumption:

- Use LED bulbs
- Turn everything OFF when not in use (lights, computers, appliances, chargers)
- Walk, bus, carpool, or bike to school
- Plant a tree
- Recycle plastics, paper, aluminum
- Use a power strip for your electronics; flip the switch when not in use
- Unplug your game console
- Unplug your phone charger
- Turn off lights when you leave the room

Sign an energy pledge today and check out all the pledges that have been made on the giant bat hanging up in the Ford Library.



## Goal #4

- Learn about electronic waste, then promote, participate, and host Bosque School-sponsored community E-Recycling event.
- Participate and support school-wide recycling and responsible resource use

## Energy Activities GOAL #4

- Learn about **consequences of electronic waste** in the environment
- Tech Director arranges event with **Albuquerque Recycling**
- Promote with announcements and **signs** around school
- **Assist community** members during drop-off by carrying and sorting electronics
- Continue and increase recycling efforts at school

## Student Leadership GOAL #4

- Students **promoted** the E-recycling event with announcements and posters
- Students encouraged peers to **participate**
- Students worked with the tech directors, Albuquerque Recycling director, and with **community members of diverse ages** and backgrounds.
- Students assisted community members in **transporting** old/unwanted electronics
- Students **sorted** and filled 8+ cases/pallets \_ over 6000 pounds
- Student teams educate the community with PSA's and ads about recycling
- Student teams collect from school classrooms and work areas (school was closed before we had chance to weigh recycling)



### E-Recycling Event

Hosted by

**BOSQUE  
SCHOOL**

4000 Bosque School Road NW, Albuquerque, NM  
Truck will be parked in the front of the school.  
Saturday, March 7th, 2020 10 AM – 1 PM

This event is intended to provide the general public the opportunity to safely retire electronics to prevent them from ending up in the landfill. The students learn about protecting the environment and the importance of proper recycling. Electronics accepted for recycling include:

Computers/Servers/Monitors/Laptops/Printers/Scanners/Stereos/ Copiers/Fax Machines/Radios/Stereos/Rechargeable Batteries/UPS Batteries/Phones/Cell Phones/Cords & Wire/Computer peripherals/Ink and Toner Cartridges/Cameras/ Computer game assemblies/ CD and DVD players.

(Please no CRT Tube style or rear projection TVs, paper or light bulbs!)

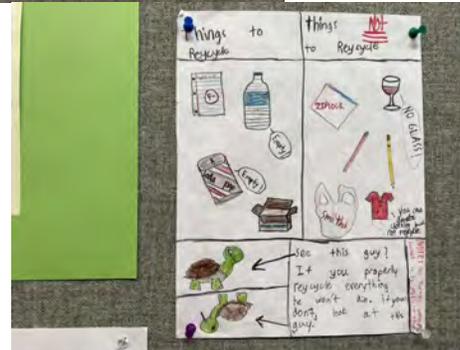
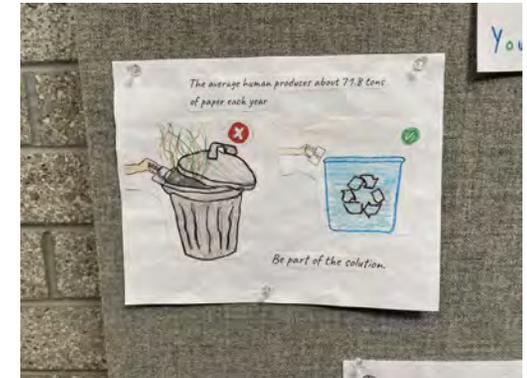
FEEs: No charge for computing devices except as follows: Hard Drive Data Destruction - \$5 per hard drive, Printers and microwaves - \$5, CRT Monitors - \$20  
— LCD Flat screen TV's \$10 each

For more information visit:  
<https://www.albuquerquerecycling.net/> or call (505) 249-9495



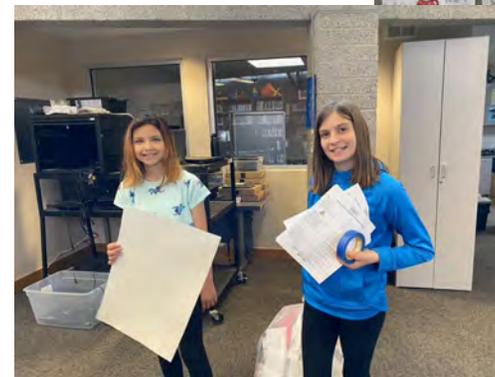
## Energy Content/Resources GOAL #4

- NEED *The Story of Trash*
- NEED *Museum of Solid Waste and Energy*
- NEED *Talking Trash*
- Albuquerque Recycling, Inc.
- Mr. Curt Bland, Director of Technology
- Mr. Matt Fike
- Ms. Sky Jenkins and Ms Sheila Gijelva, Service Learning Dep't.
- Mr. David Heithaus, Account Executive, Albuquerque Recycling, Inc.



## Evaluation GOAL #4

- Increase in involvement by students on a weekend event.
- Added even more students to Energy STARS!
- Ongoing recycling becomes part of school culture (school was closed due to COVID19 before we could finish the weight data collection of recycled paper)
- Food Waste is decreasing (but unable to measure due to school closure)
- Collected and filled over 8 cases/pallets of electronics that will NOT be in landfills and waste stream –over 6,000 pounds!



## Goal #5

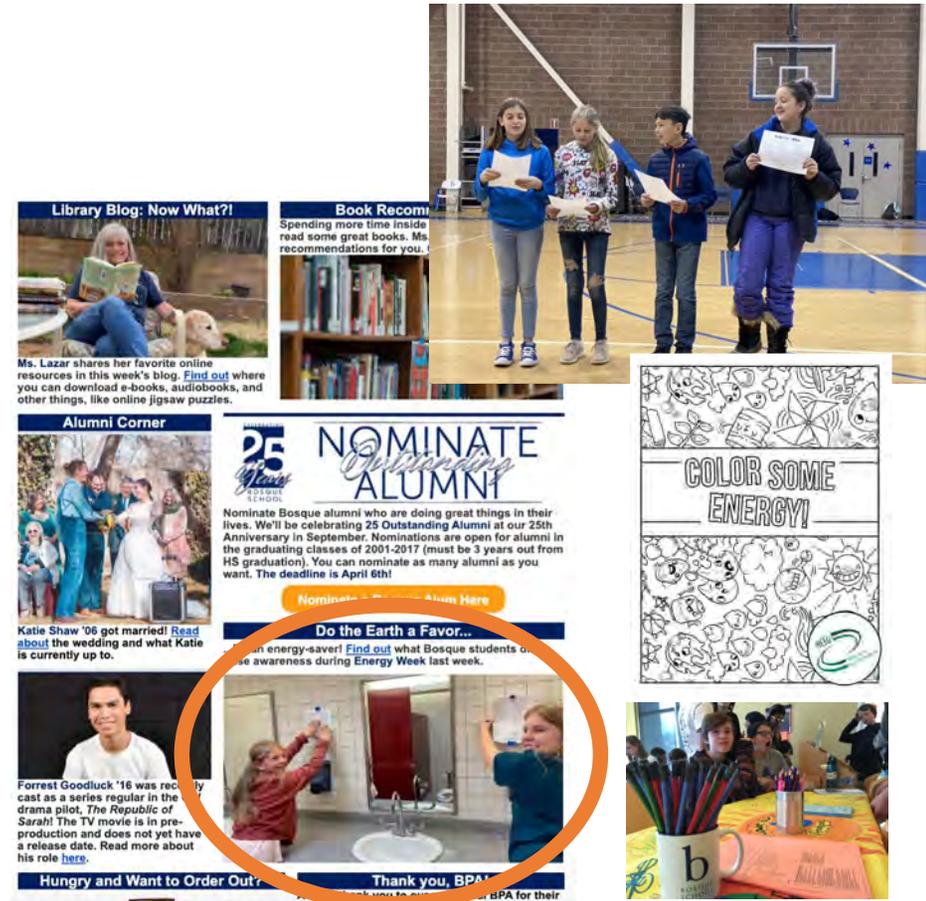
- Plan and carry out a **NEED Energy Week** to teach, promote, challenge, and raise awareness of energy usage in our schools, our families, and community.
- Celebrate Energy Week by promoting and sustaining a culture of energy awareness and encouraging energy conservation

### Energy Activities GOAL #5

- Students announce **Energy Tips, Jokes, Facts, and Challenges** for morning announcements
- Students review and **research energy facts**
- Students distribute posters announcing daily **Energy Conservation Challenges** for the week
- Encourage students and staff to sign an **energy pledge to conserve and save**, distributing Energy Conservation Contracts to those who wish to conduct energy surveys at home
- Provide **energy puzzles, NEED pencils, and solar beads** to those who sign
- Information published in the Bosque Buzz Electronic **Newsletter** that reaches over 1000 families, community, Board of Trustees
- Prior to shut-down, inform school community of shut-down procedures.

### Student Leadership GOAL #5

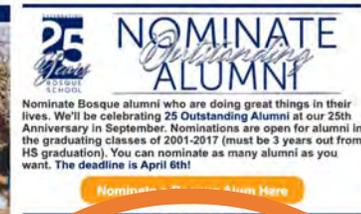
- Students initiate the idea to have an outreach at school in the form of an **Energy Week** based on the NEED Energy Week.
- Students research and select topics for **tips for newsletter and PSA's**
- Students submit energy tips, make **daily announcements** to the student body during Morning Meeting
- Students post **reminders and acknowledgments** for lighting, energy, and recycling
- Students post handwashing – 20-second-songs!
- Students help distribute and reinforce shut-down procedures



Ms. Lazar shares her favorite online resources in this week's blog. [Find out](#) where you can download e-books, audiobooks, and other things, like online jigsaw puzzles.



Katie Shaw '06 got married! [Read about](#) the wedding and what Katie is currently up to.



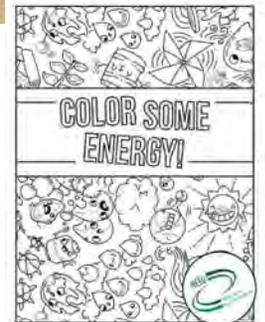
Do the Earth a Favor...  
Be an energy-saver! [Find out](#) what Bosque students of the past did to raise awareness during Energy Week last week.



Forrest Goodluck '16 was recently cast as a series regular in the drama pilot, *The Republic of Sarah!* The TV movie is in pre-production and does not yet have a release date. Read more about his role [here](#).



Thank you, BPA for their support of the Energy Week!



## Energy content/Resources GOAL #5

- NEED *Intermediate and Secondary Energy Info Books*
- NEED *Projects and Activities Booklet*
- US Energy Information Administration Kids' Page [www.Eia.gov/kids](http://www.Eia.gov/kids)
- NEED *Blueprint for School Energy Teams*
- NEED website - [www.need.org](http://www.need.org)
- *NEED Energy Games and Icebreakers*
- Mr. Kirk Ward – Bosque School Facilities Director
- Mr. Robert Lazar, APS Water and Energy Conservation Coordinator

## Evaluation GOAL #5

- Students writing facts and tips **reinforce** what was learned earlier in the year
- Informal **feedback from school community** about facts and tips
- **Bosque BUZZ Electronic Newsletter** reaches almost 1000 families, Trustees, and community each week – **BEEP Energy STARS were highlighted for 3 weeks**
- Over 350 names (students, staff, and parents) on the Energy Pledge!
- Classrooms and work areas have lights and computers **off when not in use.**
- School **pride** at being energy aware and efficient

# ENERGY WEEK

March 9-March 13, 2020

**Challenge/Activities to Lower our CARBON FOOTPRINT**

|                            | AT SCHOOL         | AT HOME                 |
|----------------------------|-------------------|-------------------------|
| <b>Mellow Monday:</b>      | low/no lights     | no/low TV use           |
| <b>Too-cool Tuesday:</b>   | low/no heat/cool  | no/low heat/cool        |
| <b>No-Waste Wednesday:</b> | no/low food waste | no/low one-use plastics |
| <b>Thirsty Thursday:</b>   | use water bottles | use water wisely        |
| <b>Footprint Friday:</b>   | unplug projectors | unplug unused chargers  |

**Bonus:** Persuade your family to change at least one light bulb to CFL (compact fluorescent) or LED (light-emitting diode)

Visit our information table to try out the new Light Box, learn about your carbon footprint, take home a Family/Home Energy Challenge Guide, and **sign the pledge** to conserve resources at school, at home, in the world

Brought to you by the B.E.E.P. Bosque Energy Education Peeps  
 -- Bosque School Energy STARS -- Students Teaching About Resource Saving

and N.E.E.D. -- National Energy Education Development check out: [www.need.org](http://www.need.org)

Fliers and announcements throughout the week **CHALLENGE** our staffuly and community to make a change

**ENERGY WEEK ANNOUNCEMENTS 2020**  
**Theme:** Do the earth a Favor – Be an Energy Saver!

It's the first day of Energy Week 2020!!! We are **BEEP** – the Bosque Energy Education Peeps. The goal during this week is help you to be more aware of our daily use of energy and resources, then practice conserving here and at home, and lower our carbon footprint.

Each morning, we will be encouraging you to sign an Energy Pledge to conserve energy and resources. We will also have some activities for you to try. **TODAY'S** conservation challenge is: **Use no or low lights at school, and use no or limited TV at home!**

Our energy information and tip today has to do with lightbulbs ...  
 If a 100 watt incandescent bulb is left on for **HALF** a day – EVERY day – for a **YEAR** – it would use so much electricity – enough to burn almost **400 POUNDS of coal!!** That's a lot of CO2 in the atmosphere!! That's a good reason to switch to CFL or LED bulbs, and...

What **WE** can do is use the lights we need, **BUT** turn off lights when we are not using them or when a room is empty!

And, now we have a joke of the day for you:  
 Did you hear that **Mr. Allen** wanted to plant a lightbulb?  
 Really?! Why???  
 He wanted to grow a **POWER** plant!!

Please think of what **YOU** can do to **DO THE EARTH A FAVOR- BE AN ENERGY SAVER!** Sign the energy pledge, and watch for Energy STARS throughout the week as we remind and reward your energy-saving behaviors!



## Goal #6

- Respond to coronavirus-related school closure with energy shutdown recommendations
- Model responsible use of resources by making home-made cloth masks

## Energy Activities GOAL #6

- Information published in the *Bosque Buzz* Electronic Newsletter that reaches over 1000 families, community, Board of Trustees
- When COVID19 surfaced, our Energy Week was cut short, but students shared hand-washing techniques
- Prior to shut-down, inform school community of shut-down procedures.
- Students used available materials to make cloth masks for family, friends, and to First Responders and the Navajo Nation



## Student Leadership GOAL #5

- Students post handwashing – 20-second-songs!
- Students help distribute and reinforce shut-down procedures
- Students find instructions, materials, and resources to make cloth masks.

## Energy content/Resources GOAL #5

- Center for Disease Control (CDC.gov) When and How to Wash Hands
- (CDC.gov) Use of Face Coverings to Help Slow Spread of COVID-19

## Evaluation GOAL #5

- Students and staff were singing the songs all around campus!
- So far, almost 100 masks made and distributed...so far...

**20-Second Songs to Sing While Washing your Hands**

**ABC's**  
A, B, C, D, E, F, G  
H, I, J, K, L, M, N, O, P  
Q, R, S, T, U, V  
W, X, Y, and Z  
Now I know my ABC's  
Next time won't you sing with me

**Old MacDonald**  
Old MacDonald had a farm, E-I-E-I-O  
And on his farm he had a cow, E-I-E-I-O  
With a moo moo here  
And a moo moo there  
Here a moo, there a moo  
Everywhere a moo moo  
Old MacDonald had a farm, E-I-E-I-O

**Itsy Bitsy Spider**  
The itsy-bitsy spider  
Climbed up the water spout  
Down came the rain  
And washed the spider out  
Out came the sun  
And dried up all the rain  
And the itsy-bitsy spider  
Climbed up the spout again

**Let it Go**  
Let it go, let it go  
Can't hold it back anymore  
Let it go, let it go  
Turn away and slam the door  
I don't care what they're going to say  
Let the storm rage on  
The cold never bothered me anyway

**Good As Hell (Lizzo)**  
I do my hair, too, check my nails  
Baby, how you feelin'? (Feelin' good as hell)  
Hair, too, check my nails  
Baby, how you feelin'? (Feelin' good as hell)  
Baby, how you feelin'? (Feelin' good as hell)  
Baby, how you feelin'? (Feelin' good as hell)

**Landslide (Fleetwood Mac) - repeat 2x**  
Well, I've been afraid of changing  
'Cause I've built my life around you  
But time makes you bolder, even children  
get older  
And I'm getting older, too.

**Africa (Toto) - repeat 2x**  
It's gonna take a lot to drag me away from you  
There's nothing that a hundred men or more could ever do  
I bless the rains down in Africa  
Gonna take some time to do the things we  
never had

Brought to you by the B.E.E.P. Bosque Energy Education Program  
- Bosque School Energy STARS - Students Teaching About Resource Saving

Bosque School will be closed for three weeks beginning Monday, March 16,

### Water and Energy Conservation Measures During School Closure

**PLEASE HELP!** While we are away from our classrooms and work spaces during this time our school will be unoccupied. We are asking that if you can turn off non-essential appliances it will have a significant impact on our energy bills. Simple energy efficiency "shut-down" measures over this time away will lower our environmental footprint and leave more money for academic needs. We should all look for ways to eliminate energy waste! It's critical that you do your part to shut down your classroom/work area.

#### Simple Energy Conservation Measures

- Turn off ALL non-essential computers, monitors, printers, scanners, and other peripherals
- Turn off and unplug TVs, Promethean/Smart Boards, document cameras, projectors, space heaters, and all other non-essential classroom/office equipment, including Chromebook charging carts
- Leave servers and copiers and printers on.
- Defrost, turn off, empty, and unplug refrigerators.
- Make sure all windows are closed and locked.
- Please check all toilets and faucets before you leave the building to make sure they are not running.

Brought to you by the B.E.E.P. Bosque Energy Education Program  
- Bosque School Energy STARS - Students Teaching About Resource Saving

## Calling All Families to Action



Bosque families, are you looking for ways to make a positive impact? Are you seeking purpose during this time? What will be your COVID-19 story? Learn about the Service Learning initiatives launched this week and find ways to get involved [here](#).



## Use of Cloth Face Coverings to Help Slow the Spread of COVID-19

**How to Wear Cloth Face Coverings**

- Wash your hands before and after you wear your face covering.
- Do not touch the front of your face covering.
- Do not use a face covering if it is wet.
- Do not use a face covering if it is soiled.
- Do not use a face covering if it is damaged.
- Do not use a face covering if it is uncomfortable.
- Do not use a face covering if it is difficult to breathe through.
- Do not use a face covering if it is difficult to see through.
- Do not use a face covering if it is difficult to hear through.
- Do not use a face covering if it is difficult to talk through.
- Do not use a face covering if it is difficult to eat through.
- Do not use a face covering if it is difficult to drink through.
- Do not use a face covering if it is difficult to sleep through.
- Do not use a face covering if it is difficult to exercise through.
- Do not use a face covering if it is difficult to work through.
- Do not use a face covering if it is difficult to play through.
- Do not use a face covering if it is difficult to travel through.
- Do not use a face covering if it is difficult to go through.
- Do not use a face covering if it is difficult to come through.
- Do not use a face covering if it is difficult to return through.

**How does one safely disinfect/clean a cloth face covering?**  
Wash with soap and water for 20 seconds. Dry thoroughly.

**How does one safely store a used cloth face covering?**  
Place in a clean, dry container or bag. Do not touch the front of the face covering. Wash hands after handling.

# Summary of Energy STARS 2019-2020 Goals

## Goal #1

- Convene the Energy Club – B.E.E.P (Bosque Energy Education Peeps) *Energy S.T.A.R.S – Students Teaching About Resource Saving* in order to pursue interests, learn and teach about energy and energy issues, learn from and support each other, and to jointly educate and reinforce energy consciousness and conservation efforts in our school and community.

## Goal #2

- Participate in the School Community Open House and Club Fair
- Teach the community about energy basics and the advantages of energy efficient choices

## Goal #3

- Recognize October Energy Awareness Month with theme: *Take a BITE out of Energy Vampires.*
- Teach, promote, challenge, and raise awareness of energy usage in our schools, our families, and community.

## Goal #4

- Learn about electronic waste, then promote, participate, and host Bosque School-sponsored community E-Recycling event.
- Participate and support school-wide recycling and responsible resource use

## Goal #5

- Plan and carry out a NEED Energy Week to teach, promote, challenge, and raise awareness of energy usage in our schools, our families, and community.
- Celebrate Energy Week by promoting and sustaining a culture of energy awareness and encouraging energy conservation

## Goal #6

- Respond to coronavirus –related school closure with energy shutdown recommendations
- Model responsible use of resources by making home-made cloth masks



Our final meeting! 😊