

MAKE AN IMPACT



SAVE ENERGY, SAVE MONEY, SAVE THE PLANET

CENTER FOR CLIMATE AND ENERGY SOLUTIONS

Engaging Schools on Energy & Climate: Lessons from the Make an Impact Program

November 20, 2013

Center for Climate and Energy Solutions

The Center for Climate and Energy Solutions (C2ES), formerly the Pew Center on Global Climate Change, brings together business leaders, policy makers, scientists, and other experts to provide credible information, straight answers and innovative solutions to address global climate change.

Our areas of focus and expertise include:

- **Policy analysis** (state, federal, and international)
- **Innovative technology solutions**
- **Climate science** (impacts, adaptation, communication)
- **Markets and business**



Business Environmental Leadership Council (BELC)





Make an Impact has grown from an employee engagement project to a full-scale program that **empowers individuals and communities to take meaningful action toward sustainability and dollar savings.**

- 4 corporate partners
- 7 branded websites and calculators
- 43 events in 20 states
- Programs on 4 continents

Benefits are far-reaching:

- Enhances organization's reputation
- Engages and empowers employees and communities
- Leverages existing tools and programs
- Detailed reporting quantifies impact

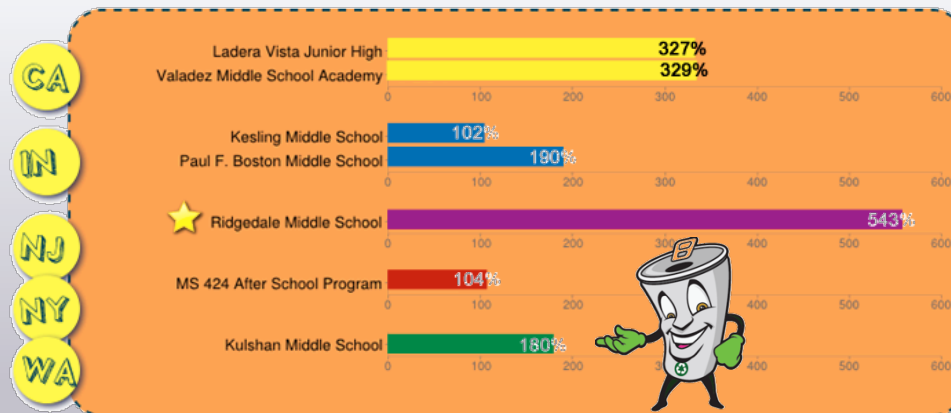
Change Our 2morrow Schools' Challenge

Make an Impact: CO2 Schools' Challenge is a school and community program designed to promote energy efficiency in our homes through a fun and engaging online competition

- 25,000 people engaged
- 24 schools across the US
- 41 million lbs CO2 commitments (same amount captured by 15,000 acres of forests!)
- \$29,000 in grants awarded

Make an
Impact!

Change Our 2morrow
(CO2)



Online Program Tools

Student Resource Center

The screenshot shows the top navigation bar with buttons for 'At Home', 'On The Move', 'At The Store', 'In The Yard', 'At The Curb', and 'At Work'. Below this is the 'Student Center' header with a cartoon trash can character holding a banner that says 'Student Center'. To the left are five menu items: 'Schools' Challenge', 'Energy & Climate Change', 'Games & Resources', 'Top Ten Tips', and 'Key Questions'. The main content area features a 'Welcome to the Student Center!' message and a 'Take The Schools' Challenge' graphic with a schoolhouse icon. Below the welcome message, there are instructions on how to explore resources and get involved, followed by a 'To get started:' section with three bullet points: 'Check out our Top 10 Tips on how to start reducing your carbon footprint', 'Get answers to our Key Questions about global warming', and 'Have fun with our Games and Resources!'.

Pledge List

The screenshot shows the 'Change Our 2morrow PledgeList' website. At the top, it says 'SAVE ENERGY. SAVE MONEY. SAVE THE PLANET.' and includes logos for ALEZIA, CPES, and the CENTER FOR CLIMATE AND ENERGY SOLUTIONS. Below the navigation bar, there's a search bar and a 'Sign Out' button. The main heading is 'Change Our 2morrow PledgeList'. The text below explains the challenge: 'Did you know that your actions can change the world? Choices that you make at home, school, and everywhere in between can impact our planet in both positive and negative ways. As a participant in the Make an Impact: Change Our 2morrow Schools' Challenge you have the opportunity to commit to making a difference! The checklist below offers 10 easy things that you can do to save money, save energy, and save the planet. Choose the actions that you want to pledge to complete, and submit the form to see how much energy you'll save AND get your school one step closer to winning the challenge!' Below this is a dropdown menu to 'Choose your school:'. The main content is a checklist of 10 items, each with an icon and a checkbox: 1. Wash your hands right when the water gets warm. 2. Recycle plastic, aluminum and paper. 3. Use natural light as much as possible, and turn off the lights in rooms that you aren't using. 4. Replace incandescent light bulbs with CFLs in your home.

Carbon Calculator

The screenshot shows the 'Carbon Calculator' website. It features a progress bar with three steps: 1. Click on the tabs below to see your recommended actions. 2. Check off the actions you will take this year. 3. Click 'Save Pledges' on each tab when you are done! Below the progress bar, there are tabs for 'Home', 'Transportation', 'Recycling', 'Outdoors', and 'Work'. The results section shows 'Your total is 0 lbs/year' and 'U.S. Average total is 50100 lbs/year'. A bar chart compares 'Home: 22300 lbs CO2/year' and 'Transportation: 26800 lbs CO2/year'. Below the results, there's a 'Thank You' message and a 'Save as PDF' button. At the bottom, there's a table with three columns: 'TOTAL POTENTIAL SAVINGS', 'COMMITTED TO SAVING', and 'DONE - ESTIMATED SAVINGS!'.

TOTAL POTENTIAL SAVINGS	COMMITTED TO SAVING	DONE - ESTIMATED SAVINGS!
\$170 /yr 1200 lbs CO2e/yr	\$0 /yr 0 lbs CO2e/yr	\$0 /yr 0 lbs CO2e/yr

YOUR CURRENT CALCULATIONS

TOTAL POTENTIAL SAVINGS	COMMITTED TO SAVING	DONE - ESTIMATED SAVINGS!
\$170 /yr 1200 lbs CO2e/yr	\$0 /yr 0 lbs CO2e/yr	\$0 /yr 0 lbs CO2e/yr

Resources & Educational Materials

Make an Impact!

Change Our 2morrow
(CO2)

Teacher's Guide

Suggested Grade Level:

- Grades 6-8

Subject Focus:

- Science
- Energy
- Environment
- Climate Change

Materials &

Preparations:

- A lamp
- One CFL bulb, 13 watt
- One incandescent bulb, 60 watt
- A kilowatt meter
- A thermometer
- A calculator

Time:

- Demonstration: 10 to 15 minutes
- Mathematic portion: 15 to 25 minutes

An Energy Expedition:

Seeking Out Our Lighting Choices

Summary of Lesson:

The Teacher will demonstrate temperature differences between two types of light bulbs and then introduce other energy efficient actions that save money and energy at home. Students will learn about ideas related to energy use and energy efficiency. Students will link and connect these concepts to what actions can be taken.

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Change Our 2morrow
(CO2)

Teacher's Guide

Suggested Grade Level:

- Grades 6-8

Subject Focus:

- Science
- Energy
- Environment
- Climate Change

Materials &

Preparations:

- Blank BINGO boards
- Pen or pencil
- List of catchwords and definitions (for teacher only)
- CO2 Schools' Challenge Efficiency Toolkit
- Incentive or prize

Time:

- BINGO: 10 to 20 minutes per round (depending on the number of BINGOs called)
- Class discussion of vocabulary: 10 to 15 minutes

Change Our 2morrow

Catchword Bingo

Objectives:

Students will learn energy saving tips and become familiar with common Schools' Challenge terminology. Students will see and experience real energy savings by interacting with tools from the CO2 Schools Challenge Efficiency Toolkit.

Introduction & Background:

Being aware of your own energy use is important for many reasons. In order to reduce your impact and the impact of your family, or community, it is necessary to learn about energy efficiency. Do your part by actively participating in classroom learning, and then sharing what you learn at home. Implementing energy saving techniques will help combat the impacts of climate change and create a better tomorrow.

Procedures:

1. Hand out to each student one blank BINGO board.
2. Have students prepare their BINGO boards by writing one catchword in each square, until all squares are filled (there will be extra terms left over). The catchwords are listed underneath the BINGO board, at the bottom of the page.
3. To Play: Read aloud one randomly chosen catchword and its definition at a time to students. If the catchword is an item from the CO2 Schools Challenge Kit, make sure that all students can see the item. Have students mark each matching term with any type of symbol or mark in the box to show that box has been called. The CFL space is a "free" space.
4. Continue this process until a student announces they have 5 catchwords in a row, column, or diagonally, which is BINGO.
5. Have the student read aloud the catchwords to ensure the definitions are correct and it is a valid BINGO.
6. Decide on an incentive or prize for the winning students. This could be extra points on an upcoming assignment, a special treat, or a free homework pass, to name a few options. It is at the leisure of the Teacher to decide.
7. Have students create in as many rounds as time allows.



The average American meal travels 1500 miles to get from farm to plate. Buy local!

Make an Impact: CO2

Join the challenge and Change Our 2morrow (CO2)!
Visit www.alcoa.com/makeanimpact

YOUR SCHOOL CAN WIN
\$5,000 & other great prizes!



MAKE AN IMPACT! USE ENERGY SMART. SAVE THE PLANET!



Join the challenge. Scan this QR code.



Lessons Learned

- Media attention is a great tool
- Informed & excited location leads are critical
- Technology: stay one step ahead



ALCOA MIDDLE SCHOOL PRINCIPAL JIM KIRK holds up the \$1,000 check that the school won for being named a regional runner-up in the Make an Impact: Change Our 2morrow (CO2) program.

ONE GIANT STEP Alcoa Middle School reduces carbon footprint, wins \$1,000

By Matt Stewart
mattst@thedailytimes.com

Alcoa Middle School's students are taking steps to reduce their carbon



important, and the students really respond when they see larger companies like ALCOA supporting and leading the charge."

Making a lasting impact

Local middle school students taking part in challenge to help manage energy use



Kesling Middle School students fill out surveys about how much energy is used in homes. Kesling and Boston middle schools are competing in Alcoa Howmet's nationwide Make an Impact: Change Our 2morrow challenge, which urges students to recruit as many households as they can in effectively managing energy use. Photo by Bob Wellinski

By Matt Fritz
mfritz@thedailytimes.com
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LA PORTE — Boston and Kesling middle schools are in the middle of a fight. The battle is to see which one can make the greatest environmental impact. The schools are competing in Alcoa Howmet's nationwide Make an Impact: Change Our 2morrow challenge, a competition that urges students to recruit as many households as they can in effectively managing energy use.

The challenge involves the use of an online carbon calculator where people can log in using their email addresses and, after participating in a study, learn how much energy they waste in their homes and how they can stop it. The challenge, a partnership between Alcoa and the Pew Center on Global Climate Change, is designed to help reduce the carbon footprint in local communities, said Terra Grinnell, the human resources manager at Alcoa Howmet La Porte.

Please see Energy, Page A3



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Thank you for your time!

For more information please contact

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