

# POWER UP

2017-2018 SCHOOL YEAR



## RESPECT THE FLAGS

is a free 45-minute, in-class program for second, third and fourth grade students. It is a hands-on and interactive presentation that teaches students about the colored flags used to mark underground pipes and wires, and how to recognize, react to and report a natural gas leak. Teachers may choose to add our NEW carbon monoxide safety overview to this session. See page 2 for more details.



## EMPOWERED KIDS™

is a free 45- to 60-minute interactive program designed to educate K-6 students about utilities and how to be safe. The app-based program helps students learn to identify electrical and natural gas hazards at home, school and in their neighborhood. Download the app for free on the Google Play or Apple® App stores.



## THINK! ENERGY

is a free 60-minute, interactive presentation teaching the importance of renewable resources and environmental stewardship. Each student receives energy efficient items to install at home.

The programs are officially endorsed by the Michigan Department of Education and correlate with the Grade Level Content Expectations and Common Core State Standards. Visit [ConsumersEnergy.com/kids](http://ConsumersEnergy.com/kids) or email [education@ConsumersEnergy.com](mailto:education@ConsumersEnergy.com) to request a free presentation. We also offer home school self-study curriculums for middle and high school on our website under the lesson plans section.



# CARBON MONOXIDE: KNOW THE RISKS

**C**ARBON MONOXIDE (CO) is a silent killer, but can be avoided with the right knowledge.

A new interactive safety presentation is now available through the Respect the Flags education app., the latest resource in our safety education program. The lesson, ideal for students in K-6, is also available to the public.

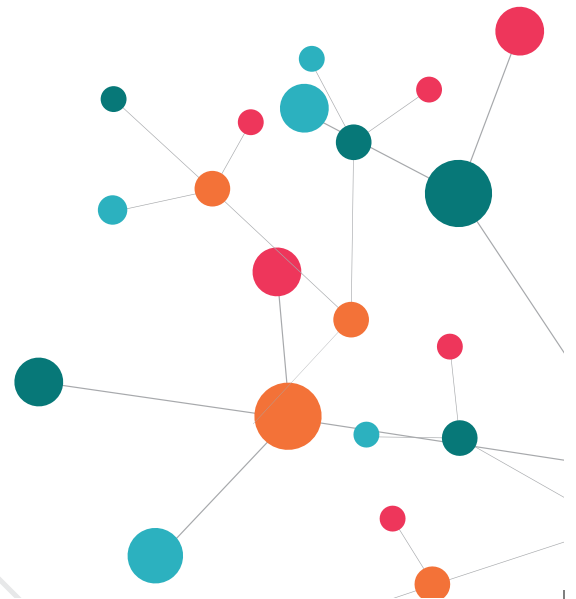
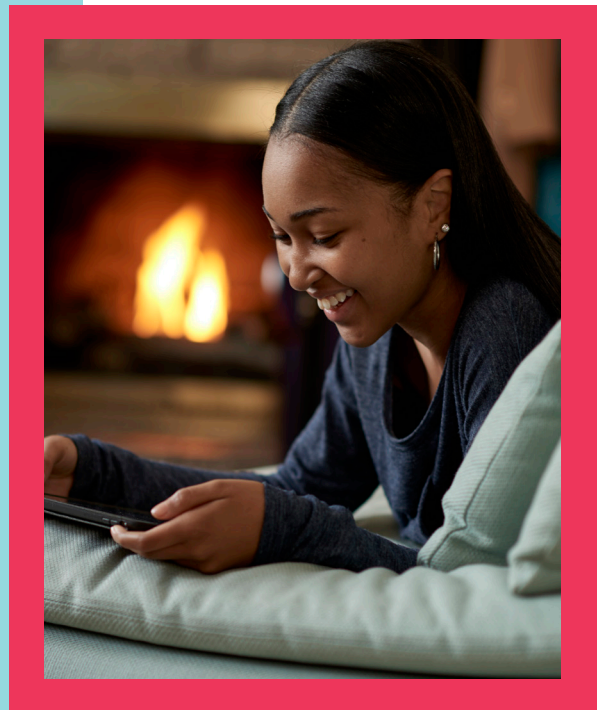
The tablet-based application 'EmPOWERed Kids' walks teachers through an educational lesson to empower and educate students on Carbon Monoxide safety. Building on the previous natural gas and electric lessons, this safety presentation provides a supplemental tool for practicing smart and safe Carbon Monoxide precautions.

"The hope for the Carbon Monoxide safety presentation is to effectively reach more than our present service territories and encourage students to not only be educated, but take the information they learn home to share with their families as well," said Michelle Mitchell, Education Programs Lead.

The lesson covers a variety of topics, including:

- Safety Tips
- Symptoms of Carbon Monoxide Poisoning
- What to do if your CO alarm goes off

For more information on other available lesson plans visit [ConsumersEnergy.com/kids](http://ConsumersEnergy.com/kids)





## CAREER CORNER AVA KIBLAWI

**F**OR CHEMICAL ENGINEER AVA KIBLAWI, working at Consumers Energy for the past seven years has been a rewarding experience. While no two days are the same working with Land & Water Management—she enjoys coming into work every day.

### **Could you describe your typical Day?**

My day can change quite a bit. I work a lot with different parts of the business and with different agencies, such as the U.S. Environmental Protection Agency (EPA) and U.S. Department of Energy. My role can vary depending what is going on at our generation plants. Our plant leads may want to try out a new product, need help fixing some equipment or just want our perspective on something.

I also spend a lot of time collecting information about how much water we are using, how much fuel we burn, how many different products we are using for different reports and estimate our annual reports.

### **What is the best part of your job?**

I get to work with a team to help meet our goals for water conservation. We have set a goal to reduce our water use by 20 percent originally by 2020, and we are on track to complete that by the end of this year (2017)! Each plant has great ideas about

reducing our usage, and we have a lot of support throughout the company.

I also love that that I can follow the policy side of the job. In the environmental department, we implement the regulations and recommendations and also get involved with changes that are being made. It is important to do the right thing for the environment while finding ways to save for our customers.

### **What is the most challenging aspect of your job?**

I've learned that sometimes the grey areas are the hardest to deal with. In my case, it can be difficult when there isn't a specific rule in place and we have to make a judgment call on what is the best thing for the environment and for our customers. Sticking to your gut and doing what you think is right in the face of resistance or people that don't agree can be really challenging, but ultimately it's where you can make the most important impact.

### **What advice would you give to students?**

Don't worry about making a mistake or messing something up. That happens to everyone, and sometimes we can make pretty big mistakes. The most important thing is to keep moving forward to overcome the challenges and learn from them.

# OFF THE CLOCK

## IAN WINDISCHHOFER

Robotics Volunteer  
and Customer Service  
Representative

**I**N MAY OF 2017, 14-year-old Logan Windischhofer helped elevate his high school Robotics team from a small town in Vestaburg, Mich., to the world stage. As a first year member of the Vestabots, Logan had no idea how far the team would go.

“I joined to do something new and different with my time,” said Logan. “It was a chance for me to work on social skills and a place where I could bring my thoughts and designs to life.”

Logan was the only freshman on the driving team – the members who run the robot during competition – as well as the main designer for the primary function of the robot. He created the “Gear Catcher” and a robot that used different components to retrieve gears from one portion of the field and bring them to a designated spot on the other side of the arena. Over the course of the season the Vestabots competed in four competitions, including their conference title win at the district competition in Shepherd, Mich. and the FIRST Robotics State Championship at Saginaw Valley State University where they finished 5th – propelling them toward the World Competition held in St. Louis, Mo.



The Consumers Energy Foundation also assisted in the success of the Vestabots by recognizing Ian Windischhofer’s volunteer efforts with a \$300 volunteer grant that helped the team travel to the World Competition and finish 18th overall.

“Without the grant we wouldn’t have been able to make it to worlds,” said Ian, Customer Service Representative and Logan’s father. “The team functioned with the barest of bones and still ended 18th in the world. The company always strives to ‘Generate a Genius,’ but I never would have realized how good of a designer my son was if it wasn’t for the STEM opportunities the company supports.”

With one year, hundreds of hours of work, a conference title and world recognition under their belt, the Vestabots are already gearing up for next year’s competition with bigger and better ideas.



# TAKING ON TRASH

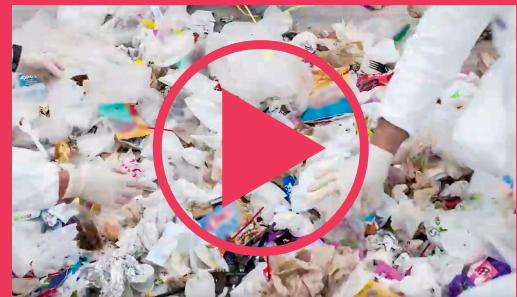
**C**ONSUMERS ENERGY EMPLOYEES never dreamed the company could recycle enough waste to fill five football fields stacked from goal-to-goal, 100 feet deep. But that's precisely what's happened since launching our voluntary recycling program in 1992. In fact, we're on pace to meet a goal to save 1 million cubic yards of landfill space two years ahead of schedule.

The company started by recycling about a dozen types of waste, including mercury equipment, cardboard, paper, plastic, glass and metals. Traditionally, our recycling program helped save about 40,000 yards of landfill space per year. That total has doubled during the last five years, primarily due to increased engagement.

In 2015, we launched a network of volunteer "Green Teams" throughout the company to promote landfill avoidance and lead projects and initiatives that reduce the company's environmental impact. Green Teams also organize local sustainability and volunteer events such as "dumpster dives" to sort recyclable materials from trash. A dumpster dive at the Parnall facility in Jackson reduced 22 bags of trash to about half of a bag.

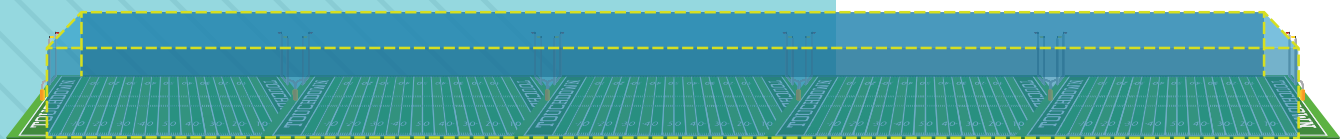
## Our goals for the future include:

- Establishing recycling centers at all company facilities.
- Implementing a "green chemistry" initiative that would include an inventory of all chemicals used at company facilities and all the hazardous waste generated.



## Dumpster Diving at Consumers Energy

As part of an effort to avoid 1 million cubic yards of landfill waste, members of our Green Teams experimented by sorting through a day's worth of trash at our Jackson headquarters.



1 million cubic yards of landfill space.

**The equivalent of five football fields stacked from goal line to goal line, 100 feet deep.**

Size of standard semi truck

# 2017–2018 SAFETY CALENDAR

Every year, students in grades 2-6 statewide submit drawings for a chance to be featured in our annual safety calendar. The calendar features key safety messages students learned through a Consumers Energy safety presentation about natural gas, electricity and Carbon Monoxide. To schedule a presentation and give your students a chance to be featured in the 2018-2019 calendar, visit [ConsumersEnergy.com/kids](http://ConsumersEnergy.com/kids) or email [education@cmsenergy.com](mailto:education@cmsenergy.com).



# EXPERIMENT: WHAT'S THAT SMELL?

To watch the experiment, visit the short link to the YouTube video: [bit.ly/ce-smell](https://bit.ly/ce-smell)

## Materials:

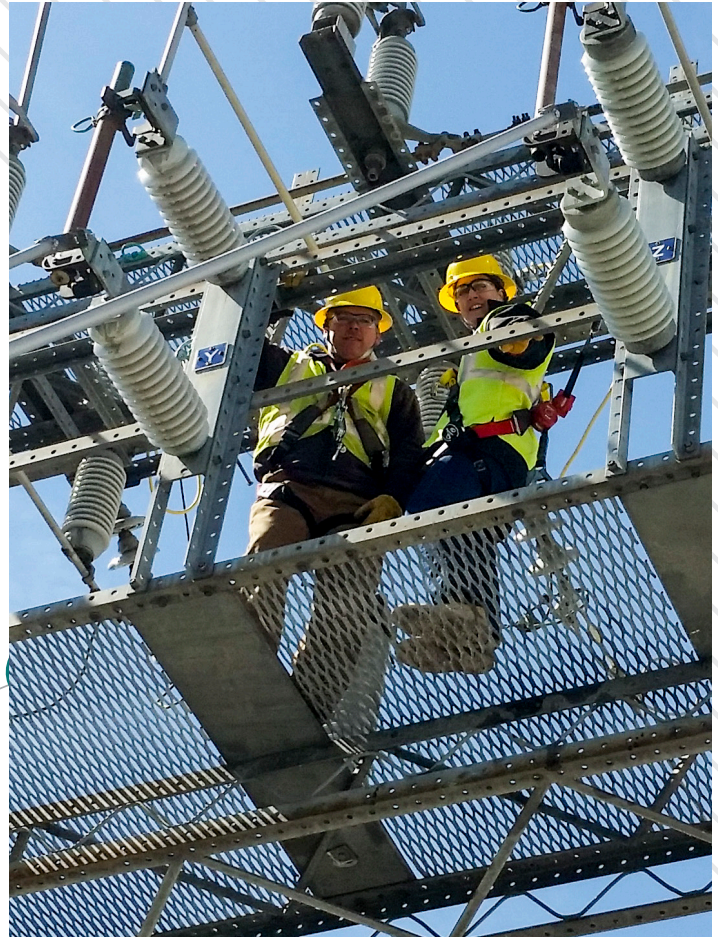
- Blindfold
- 4 empty jars
- Materials to fill jars (i.e. crayons, erasers, fruit, vegetables, flowers, gum/mints)

## Directions:

- 1 Fill 3 of the jars with chosen random items and leave 1 jar empty.
- 2 Blindfold students and smell each of the jars with items in them. Guess the smell that is in the jar for fun.
- 3 Have the student smell the empty jar. Once they guess what it is, have the student take off the blindfold and realize there is nothing but air in the jar.
- 4 Ask them if they know what Carbon Monoxide is or what it smells like.
- 5 Explain that Carbon Monoxide (CO) is a deadly, colorless, odorless, tasteless and poisonous gas. You cannot tell if CO is in the air so it is crucial to have a CO alarm on every level of your home.

Learn more at  
[ConsumersEnergy.com/cosafety](https://ConsumersEnergy.com/cosafety)





## CAREER CORNER SPECIAL EDITION

# Meet Our CEO - Patti Poppe

### What did you want to be when you grew up?

Originally, as a young girl, I wanted to be a news anchor.

However, I was good at math and science and realized making a difference in the world through solving big problems was what I was meant to do.

### What is your advice for students interested in engineering or the energy industry?

From lineworkers to natural gas service workers, accountants and human resource consultants, to engineers of every type and information technology specialists – there is something for everyone in the energy industry. The opportunities are endless to leave your mark. Find something that truly interests you and your days will be filled with purpose (and fun)!

### What is your education background?

After graduating from Napoleon High School in Napoleon, Mich., I earned my bachelor's and master's degrees in industrial engineering from Purdue University. I also earned a master's degree in management from Stanford University's Graduate School of Business.

### What are you most proud of in your career?

I am most proud of the team at Consumers Energy. When others are taking shelter from the dark and cold, my co-workers head out to keep the lights and heat on for customers. The Consumers Energy team members are world class performers delivering hometown service for our families, friends and neighbors in Michigan.