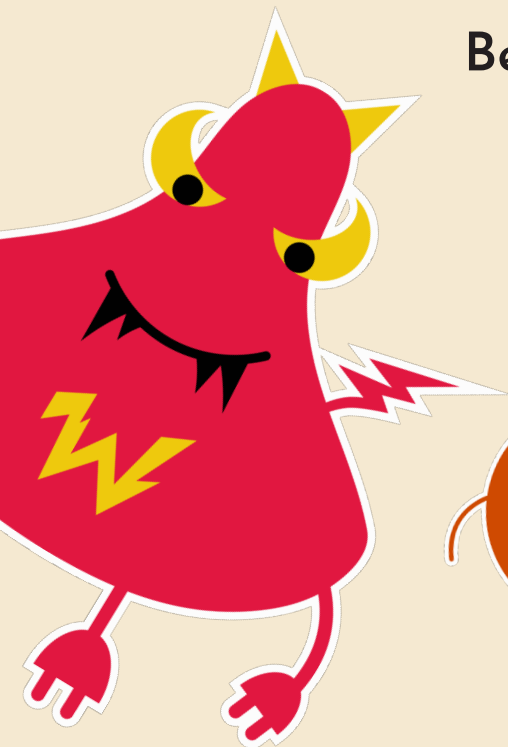
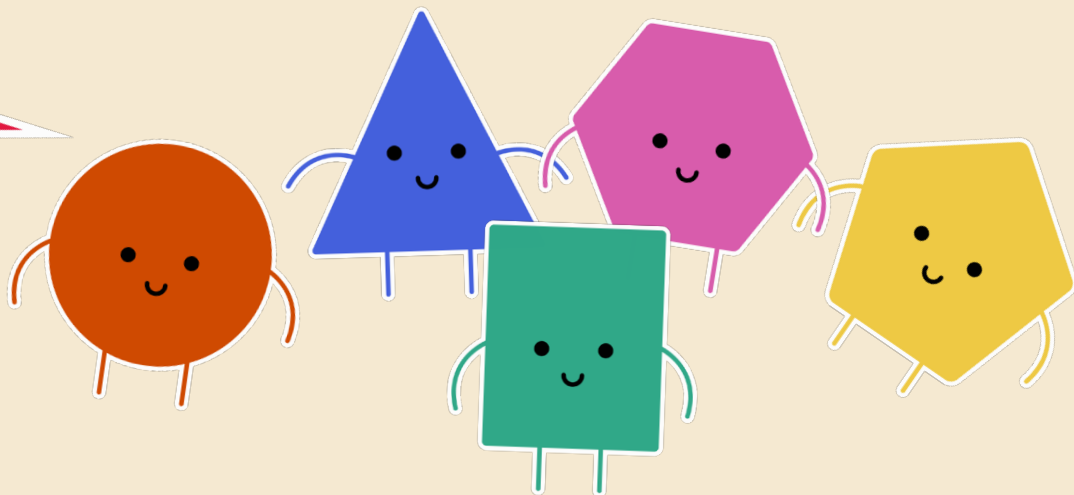




Be the Watt Warriors who together defeat
Waste-a-Watt and his army of monsters
fueled by wasted energy



ENERGY-SAVING GAME



WATT WASTE WARRIORS

SPPS ENERGY CHALLENGE

BEHAVIORAL ENERGY EFFICIENCY + KIT (BEEK)

BEEK is a hands-on program that turns energy conservation into a learning adventure. By merging the **Watt Waste Warriors** interactive learning game with **Xcel Energy Kits**, we empower students to detect, tag, and eliminate energy waste in their schools and homes.

Our mission is to provide an engaging, low-cost solution that reduces utility bills for families, especially in low-income households, while positioning students, teachers and schools as leaders in community sustainability.

A COLLABORATIVE EFFORT Led by the University of Minnesota and funded by the U.S. EPA, BEEK is a partnership between Northeastern University, Iowa State, NLR (National Laboratory of the Rockies), and the Partners in Energy team (St. Paul Public Schools, Xcel Energy, and the Center for Energy and Environment).

A PROVEN APPROACH

BEEK is modeled on the award-winning efargo [K-12 ENERGY Challenge](#), which was implemented across Fargo, ND.

- Energy Savings: [Turns energy conservation into an innovative game](#)
- Winning schools achieved 6.75%-16.23% energy reductions in 4-6 weeks of play ([Purposeful Play, Ch9, p 347-373](#)).
- Successful Implementation: efargo led the city to win the [Georgetown University Energy Prize](#).
- Award-winning game: efargo won the prestigious national [Architect R&D Award](#).



Empowering Students. Saving Energy. Sustainable Communities.



Are you ready to find and defeat
the monsters to save the energy?

TIMELINE & IMPLEMENTATION



- We respect your time. Stipends are available for teachers for participation.
- All digital dashboards, physical tags, and energy kits are provided.
- We value your input. Your feedback will help us fine-tune the game's design to ensure it fits your classroom's needs.
- You won't be in this alone. Our project team will

provide support, and ready-to-use kits/guides so you can focus on the learning and fun.

- Leverage play to increase student engagement, awareness, and help families reduce energy burden.
- Your students will see the direct impacts from their actions at school and at home.
- Students can win a tree planting for their school! Winning students also receive tree saplings.



Compete with other schools, earn points for your home and school. Capture the monsters and grow your gardens!

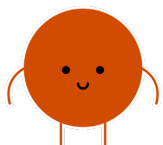
GAME NARRATIVE

Waste-A-Watt is a greedy super-villain who gains power from energy waste and hides energy-waste monsters in your schools and homes. The Watt Waste Warriors (students, teachers, staffs, and families) will work together to capture the evil Waste-A-Watt by finding and capturing the monsters.

GAME EXPERIENCE

In each session, using a combination of physical tags (monster stickers that mark the location of the energy waste) and a game interface on their school-provided tablet, students learn about identifying energy waste in the schools and homes and create solutions to prevent energy waste. Each complete session cycle has the following parts. This session cycle is repeated for different energy waste topics.

SESSION CYCLE	ACTION	HOW IT WORKS
1. Detect	Find the Waste Monsters	Find the hiding energy waste monsters in the digital game to learn about energy waste.
2. Tag	Tag the Waste in your home and school	Find the energy waste in your schools and homes and place a physical monster tag on the waste location.
3. Capture	Take Action	Capture the monster (remove the tags) and earn "Watt points" by taking energy-saving actions! Watt points act as fuel to grow your digital garden. Reduce waste and let nature thrive!
4. Grow	Reap Rewards	As your garden thrives, your points automatically flow into your school's "Grand Total." Schools with the most participation points receive tree planting in their schools.



GAME STRUCTURE

(FLEXIBLE IMPLEMENTATION)

Whether you have an hour each week or a full science block, Watt Waste Warriors is designed to be flexible. Teachers can choose how to run the game. We are available to assist.



SESSIONS	WHAT HAPPENS	FLEXIBILITY
S1. (Week 1) KICK-OFF	Introduce the game, sign students up, and gear up for the first "Monster Search"	REQUIRED
S2-5. (Week 2-5) BATTLE	The Watt Warriors are the students that battle the monsters. You may choose to implement one topic per week or use a schedule that works best for you and your students. Each topic is standalone and has multiple energy waste monsters that students can find, learn about, tag, capture, and count. You may choose to find and act on a minimum of 5 or more monsters per topic. Activities within each topic can range from 1-5 hours. Students can play at school, at home or both.	Select up to 4 topics: • Lighting • Devices and Appliances • Water • Heating/Cooling • Waste
S6. (Week 6) CELEBRATION	Celebrate student success, announce leaderboard winners, complete surveys and plant trees!	REQUIRED



Lower the energy bills in your home, win the game for your school. Winning schools get a tree planted in the school yard!

JOIN US TO DEFEAT THE ENERGY WASTE MONSTERS

Help students become Watt Warriors and make a real impact at your school and their homes!

Fill out the [interest form](#) or contact chelsea.moody@spps.org
(Facilities, Environmental Services)

This initiative is a key part of the [SPPS District Energy Action Plan](#), developed through the Partners in Energy Program. Support our board-approved commitment to reducing the District's carbon footprint and fostering climate action across our community.

