



EnergyWhiz 2026

Critter Comfort Cottage (C3)

RULES



What is the C3 competition?

Critter Comfort Cottage (C3) challenges teams to design and build a cost-effective, comfortable home for a critter using energy-efficient, green building design and construction techniques. The team will also create a communication and marketing piece that describes the features and benefits of their creation. A critter in the context of this competition, is any living creature, such as a mammal, bird, fish, insect, arachnid, amphibian, or reptile. Teams develop their project, complete a webpage and then showcase their work in-person at **EnergyWhiz**.

Who May Compete

The Critter Comfort Cottage competition is open to teams of 2-6 students in grades 3-8. The competition is divided into two divisions:

- **Elementary (3rd - 5th grade)**
- **Middle School (6th - 8th grade)**

Mixed grade level teams will compete in the division of the highest grade level student.

NOTE: Schools or clubs that have registered more than three C3 teams per division may be requested to select up to three of their teams to represent their organization at the in-person components of C3. This may be necessary depending on the number of overall teams enrolled. *Because competitions run concurrently, individual students may only participate in two (2) EnergyWhiz competitions as team members.*

Important Dates

Events	Date
Project Webpages Due	Tuesday, April 14, 2026 by 6:00 pm
Web Pages Available for Public Viewing/Comments	Monday, April 20, 2026
Student/Team Names & Risk and Release Forms Due	Wednesday, April 22, 2026 by 6:00 pm
EnergyWhiz Event at FSEC	Saturday, April 25, 2026

Requirements

Teams are to design and build a full-sized pet home that provides shelter and comfort for their critter while being as energy and resource efficient (green) as possible. Renewable energy technologies that enhance the comfort or quality of life for their critter are encouraged.

Teams are expected to:

- research the habits and needs of the critter so that the “cottage” is safe and comfortable.
- research the materials used in construction.
- understand what materials may be toxic to the critter and only use those that are non-toxic.
- consider temperature regulation, air flow, containment (if necessary for the critter)
- consider the habitat’s intended location, indoors or outdoors



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Note: If reusing components from a previous year, the new design must be at least 50% different from entries submitted in a previous year. Projects that are deemed unsafe will be disqualified.

Web Page

Each team will create a web page on the EnergyWhiz site that showcases their Critter Comfort Cottage. This web page will be used to judge the habitat and will be viewed by other students and the public.

Below are the minimum requirements. Teams are encouraged to use the evaluation judging criteria as a guide to enhance their web page and maximize their score.

1. Photo & Basic Info	
	Team name
	Name of the School
	First name(s) and last initials of students on the team (no last names on the public page)
	Grade level of each team member
	Type of critter (pet) the structure will house
	A clear, high resolution photo of the completed Critter Comfort Cottage (use this as the <i>Featured Image</i> on your page).
2. Design Documentation	
	Photos - a <u>minimum of four</u> close-up, high resolution, photos of parts of the habitat that you want to showcase
	A list of any help received from non-team members (i.e. home improvement store staff, internet, parents, teacher, etc.). Include in this section any help you had with power tools, plans you downloaded, or items that you had pre-cut at a store or shop.
	A list of parts used in construction, including any recycled parts used
3. Critter Test	
	Include a statement of how the habitat performed when a live animal was introduced into the space. If this is not possible, such as a project for a wild animal, include a statement of how the habitat performed in the environment it was designed for during different weather conditions.
4. Descriptive Video – (less than 5 minutes) to be included on your web page and hosted on our Vimeo site that includes one or more team member(s) detailing the items listed below. (Note: The video may be edited and/or pieced together or included in separate segments on the web page.)	
	Explain why the team chose their particular animal
	Explain why this design was chosen, and how it provides a good home for the animal
	Describe the special features of the habitat—close-ups are strongly encouraged
	List each team member's contribution to the project
	Describe the energy efficient design features and renewable energy technology included in the design



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Teams are encouraged to use the Evaluation and Judging criteria as a guide to what extras they may want to include in their web page. Below are some examples of what the web page may include:

- extra photos of the design, building and testing process
- an explanation of unusual and/or recycled parts used in their animal home
- photos of an animal inhabiting the design
- an explanation of the challenges encountered and what the team did to overcome them
- project log - entries made on workdays documenting the engineering process
- list of internet sites used in the research process
- marketing material the team will be presenting at the EnergyWhiz event

Communications and Marketing

Each team will create a marketing piece to accompany their design that highlights the energy efficient design, any green or renewable energy features, and the quality of the habitat for the selected animal. The marketing piece can be in any format and should be geared toward the general public. Creativity is encouraged! The examples below are not meant to be exclusive and may include:

- brochure/flyer/handouts
- video clip/television commercial
- poster

Teams will also be judged on how well the design is marketed to the judging team. This includes team member knowledge and verbal presentation to the judges.

Competition Day at EnergyWhiz - Showcase Your Project!

Note: Because competitions run concurrently, individual students may only participate in two (2) EnergyWhiz competitions as team members.

Check-In – (Outside Front of FSEC Building)

Upon arrival, the coach, teacher or their adult designee will need to stop at the C3 Check-In table located near the C3 project area to pick-up their information packet, containing:

- Schedule
- Booth assignment (10' x 12' booth space with a 6' table)
- Step by step (procedural) directions for the day
- Table sign
- Certificates of participation

Each team will have a booth space with a table where they will display their project. Team members will discuss their animal habitat and explain the energy efficient, green design, and construction features of their project with the judges, as well as present their marketing strategy. Teams will also display to the public. A representation or likeness of the team's critter is to be displayed along with the pet home at EnergyWhiz; no live critters are allowed. **Any team that brings a live critter to C3 will be disqualified.**



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Oversized projects: In the event that a team is unable to transport their design to the competition, the team must include a photo of their project to display in their booth. They must be able to explain their project through additional supporting materials such as documents, videos, schematics, charts, etc., to adequately represent their design and student construction.

Cancelation – (Due to Rain and/or Dangerous Weather)

The WOW! portion of judging may be canceled; awards will continue based on preliminary design judging.

No pets (except for service animals) will be allowed at EnergyWhiz.

Evaluation and Judging Criteria

C3 projects will be previewed online by multiple judges and provided with an initial score based on the rubric that follows. Final review of all projects happens in-person at EnergyWhiz.

Wow! 1st Place Awards: One **Wow!** Award will be given to the top team in each division with the best presentation, marketing strategy, delivery, and overall presence at EnergyWhiz.

Best Design 1st – 3rd Place Awards: Given to top scoring teams for Best C3 Design in each division.

The judges will evaluate each project for the Wow! Award based on the following:

CATEGORY	WOW!	MAX POINTS
Presentation:	How well does the team communicate? Are they enthusiastic? Do they approach & interact with the crowd?	15
Impression:	Do they give a positive first impression? Does the team have a unified appearance (i.e. team t-shirts, theme, etc.)?	15
Message:	How well does the team convey their message (i.e. suitable habitat, energy efficiency, green building practices, alternative energies that are used, etc.) How well does the team know their subject?	15
Marketing Materials:	Are the marketing materials professional looking? Do they inspire interest?	15
Wow! Factor:	Does the project have mass appeal? How creative is the team? Do they go above and beyond the average to promote their project?	20
Team Dynamics	Is there collaboration between team members? Does everyone have a role and contributed to the project? Do the team members convey the same information about their project? Do they adequately convey what they have learned?	20
	WOW! SCORE	100



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The judges will evaluate each project for Best C3 Design based on the following:

CATEGORY	DESIGN	MAX POINTS
Design Decisions:	How well does the team understand energy efficient/green building and design? How thorough are their design decisions? Was careful attention paid to parts selected and integration?	20
Critter Considerations:	How well does the team understand the habitat needs of their chosen critter and was it applied appropriately? Was proper attention paid to the critter's safety? Were non-toxic materials used?	20
Green Building Tech:	Were recycled and/or green materials used? Did the team use passive and/or active renewable energy or energy efficiency in their design? How well is energy efficiency and green building practices represented in the project?	20
Construction Technique:	How well did the students construct their design? Is the design durable? Will it be sturdy enough for animal habitat in the selected environment?	15
Function:	Does the design provide a good habitat for the critter? Are the size and features appropriate? Will the habitat maintain appropriate temperatures? Was the design tested? How was it tested?	15
Creativity:	How creative is the design? Is it a novel or interesting solution to a problem?	10
	Design SCORE	100

GOOD LUCK TO ALL C3 TEAMS!

