

# CO-CREATE ECO-COLLER: HOW TO

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## What is an Eco-Cooler?

An eco-cooler is an approach to using school-waste, such as soda bottles and wood, to create increased airflow in classrooms to reduce heat.



\*An example of how a school has used basins to collect used water. Please note, greywater should never be used for drinking.

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## Why do eco-coolers matter to the climate and the environment?

- They can reduce indoor temperatures and improve learning environment conditions
- They are a low-cost and sustainable solution to cooling without electricity
- They repurpose plastic bottles to reduce waste and promote recycling

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## How are eco-coolers connected to the broader climate action teacher champion toolkit?

Eco-coolers contribute to overall stewardship of the environment by showing learners another way to recycle plastic waste, while promoting the importance of classroom heat management.

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## Materials Needed for the eco-cooler:

- Twenty-five large plastic bottles with caps and bottoms removed
- One 1m by 1m frame made of wood/cardboard to hold the bottles
- Tools for cutting and assembling the eco-cooler frame, such as scissors to cut end off caps and bottom of bottles

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### How do I set up the eco-cooler?

1. Collect transparent plastic bottles and cut off the bottom half, leaving the top half intact, remove the cap.
2. Cut the wood sheet to fit the width of the window (not covering completely)
3. Arrange the cut bottles in a grid like pattern with 3-8 columns and 5-10 rows, depending on window size
4. Install the eco-cooler frame over windows – secure if needed using string or nails.
5. Open windows to allow outside air to flow through the bottles, creating a cooling effect as it passes through the bottles.
6. Maintain your eco-coolers, replacing components when necessary and constructing additional units around the classroom if additional cooling is required.

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### What will I see if the eco-cooler is working?

- Noticeable decrease in classroom temperature, providing a more comfortable learning environment.
- Increased awareness of sustainable cooling methods and the importance of recycling plastic waste.