

- A Pair work** Would you support a technology that might reduce global warming, but which could possibly damage the environment in other ways? Discuss and share your ideas with the class.

Bright Ideas

With talk of global warming, it seems everyone is looking for ways to help the environment. One of the most hopeful technologies is the compact fluorescent light bulb, which promises to save the environment by reducing energy consumption.

Compact fluorescent light bulbs, or CFLs, last up to 10 times longer than ordinary light bulbs and use 75 percent less energy. Although the bulbs are more expensive, they burn cooler than incandescent bulbs, generating 70 percent less heat, so less air conditioning is needed in the summer. In addition, people can save money through lower energy bills and won't have to replace the bulbs as frequently.

But while CFLs sound great, there is a problem. Each compact fluorescent light bulb contains about five milligrams of mercury – enough to fit on the tip of a ballpoint pen. As long as it's in the bulb, the mercury is not a threat, and in fact, the energy savings mean less mercury ends up in the atmosphere from coal burning electrical plants.



However, a big concern is what happens when the CFL bulb burns out. Instead of throwing CFLs in the garbage, they need to be taken to a hazardous waste recycling center where the material can be handled in a safe and environmentally responsible manner. Unfortunately, most consumers are unaware of the mercury hazard, so many CFLs may end up in landfills and eventually in our groundwater, which is difficult and expensive to clean up. Furthermore, warnings on the packages are in small print, so most CFLs are sold and distributed without proper disposal warnings.

Another fear is what happens when the bulbs break. While the amount of mercury in CFLs is minimal, you should still be careful. Mercury can be poisonous if inhaled in sufficient quantities, although getting sick from one broken bulb is unlikely.

Experts agree that more must be done to make disposal easier for consumers and to make sure the mercury does not end up in the water or air. While it's going to be a challenge, it's important that people are educated and aware in order to allow the full environmental impact of this "bright idea."

- B** Write the phrases in the correct columns in the chart. Then add one more item to each list.

less need for air conditioning
last longer and use less energy
when broken, mercury can be released

no proper disposal warnings
contain five milligrams of mercury
mercury ends up in the groundwater

Benefits of using CFLs	Concerns about using CFLs

- C Group work** Discuss these questions. Then share your answers with the class.

1. What are some similar technologies that can reduce energy consumption and help the environment?
2. What technologies are still needed?