



Climate Solutions: Mitigation and Adaptation

Climate solutions are based around two key terms: Mitigation and Adaptation. Mitigation is the action of reducing the severity and impact of the problem. In the climate context, its the act reducing greenhouse gas emissions. Adaptation is changing behavior to the deal with the situation. It requires that we understand the greenhouse gas emissions stay in our atmosphere for a long time. Carbon dioxide, for example, will stay in the atmosphere fore about 300 years. Therefore, the climate change that has occurred so far presents a long term issue, that presents unavoidable problems for us now, and into the future., that we need to adapt to.

This activity helps students grasp the terms, and explore a large range of climate solutions, in a collaborative environment. It requires students to consider if some actions are both mitigation and adaptation, and what solutions might be appropriate for teenagers and adults. It may provide a basis for debate, discussion and reflection.



Instructions:

Give out one or two images between 2 students.

Have students discuss the picture and the information, and whether they think it refers to mitigation, or adaptation, or both

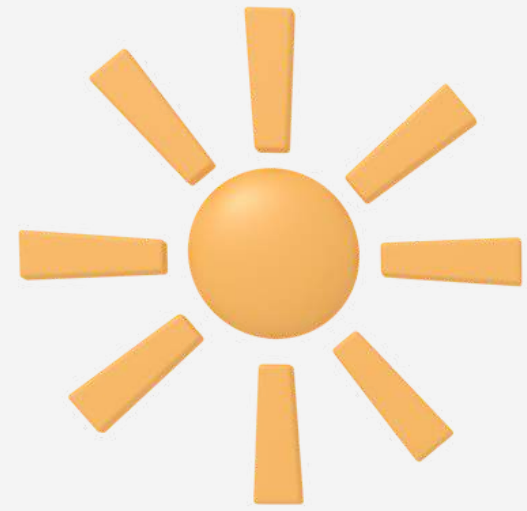
Create areas in the room for mitigation, adaptation and both. Have students move to an area where they feel their image belongs. If they have two images going to two areas, they will split up.

Have students chat in the group about whether the image belongs.

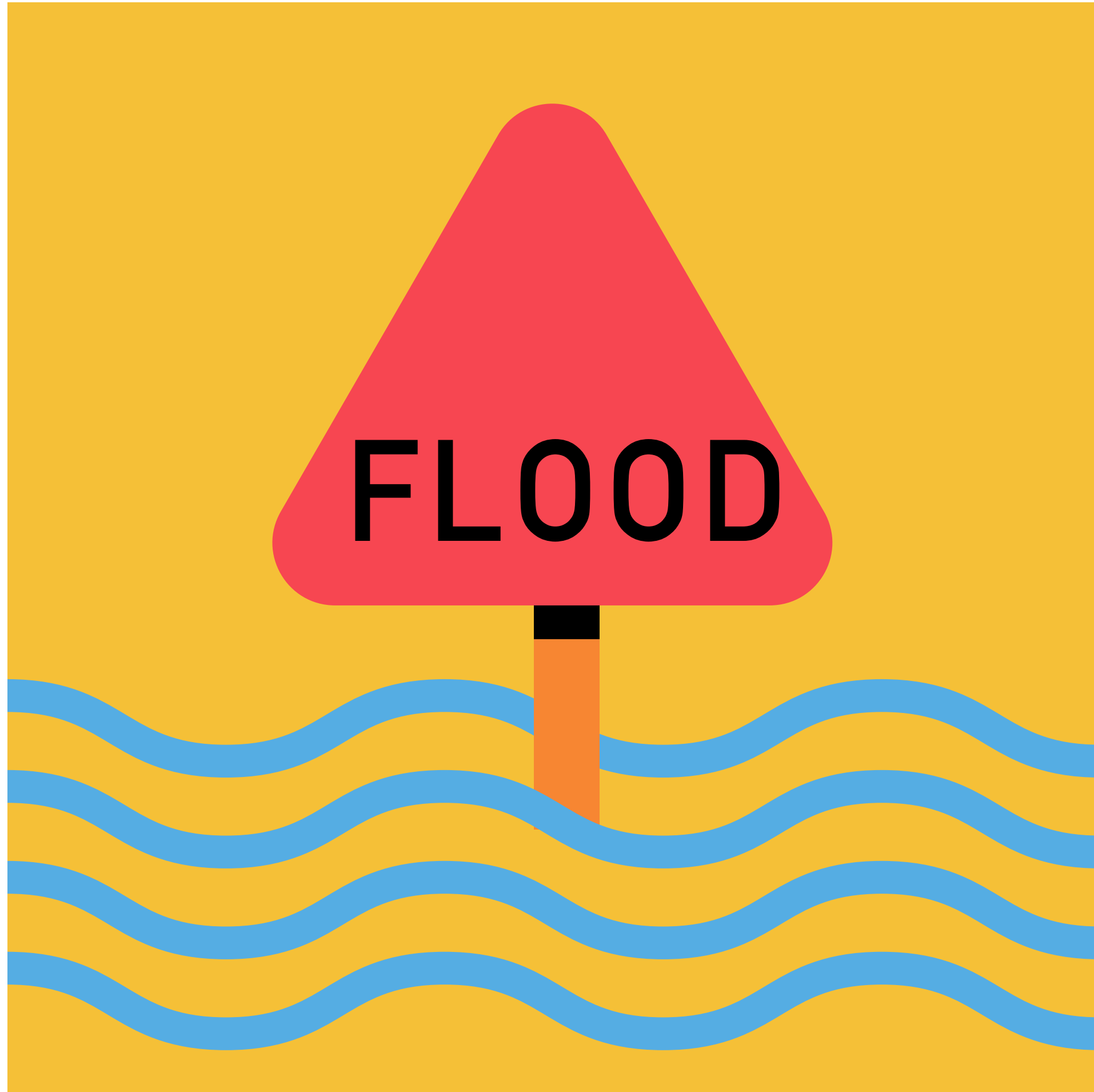
Have the each side now divide into 'adult action' or a 'teen action'.

Discuss or collate the adaptations or mitigations or both, for adults and teens on the board.

Use the information to create a response to the issue - whether that be a debate, poem, piece of art, persuasive piece, song, role play, letter to the editor, etc..



Switching off lights, turning off and unplugging appliances and devices not in use saves energy, and helps us become more respectful of our resources.



Making plans for, and implementing actions to protect people and communities from flood.



Refitting and / or
redesigning of
houses and
buildings can make
them more energy
efficient.



Building community connects and includes people. This helps people to help others. Buying from those that grow and create locally reduces travel, helps consume food that is in season, and puts money into small business. It can help minimize food waste, recycle and reuse better, and reduce emissions.





Revegetation around areas likely to be eroded, or flooded, helps stabilize the grounds, protect the environment, increase plant life, and take CO₂ out of the atmosphere



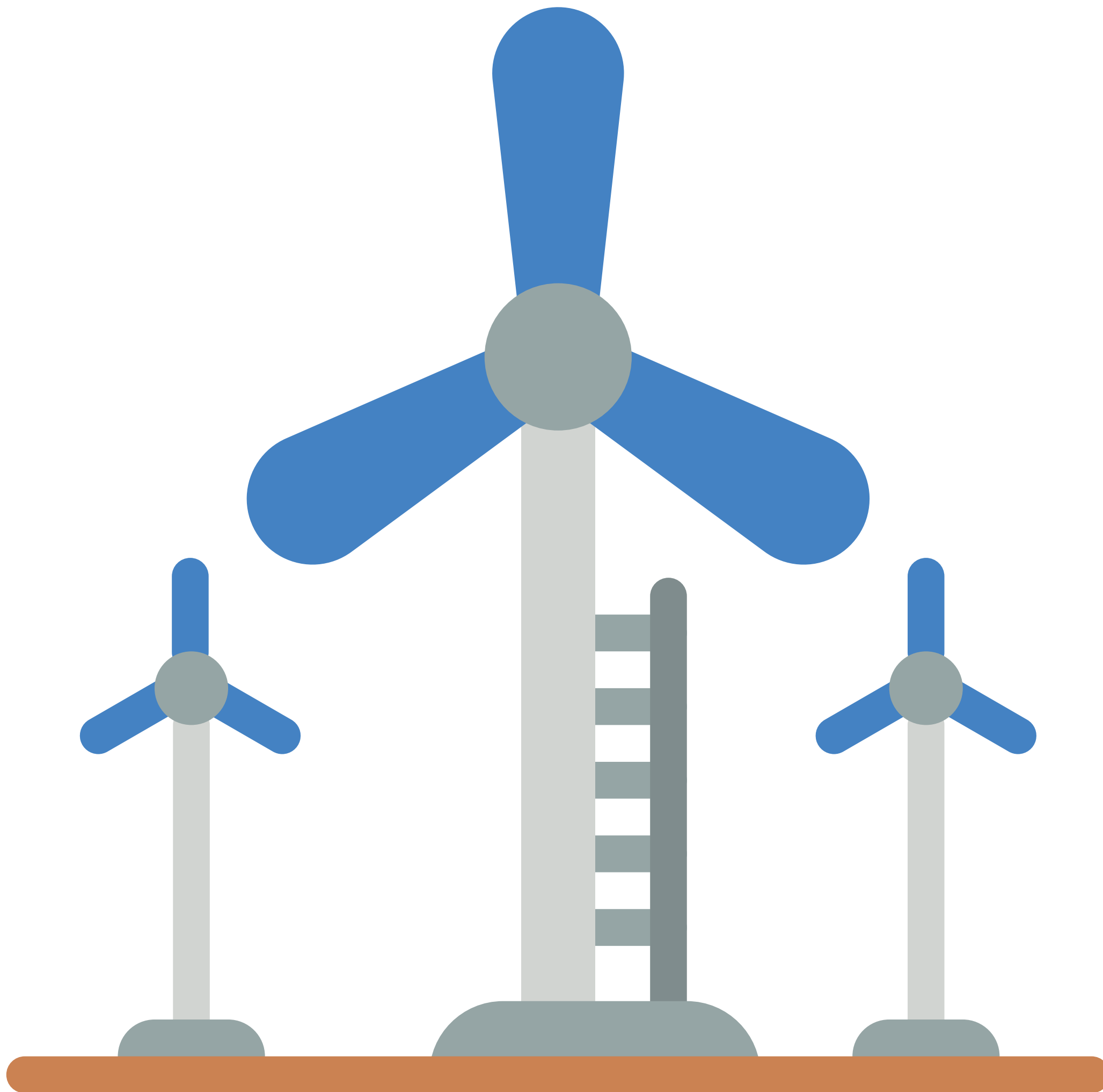
Riding, walking scooting or skating are great ways to reduce the use of fossil fuel emissions. Other great ways are using the bus, or car pooling.



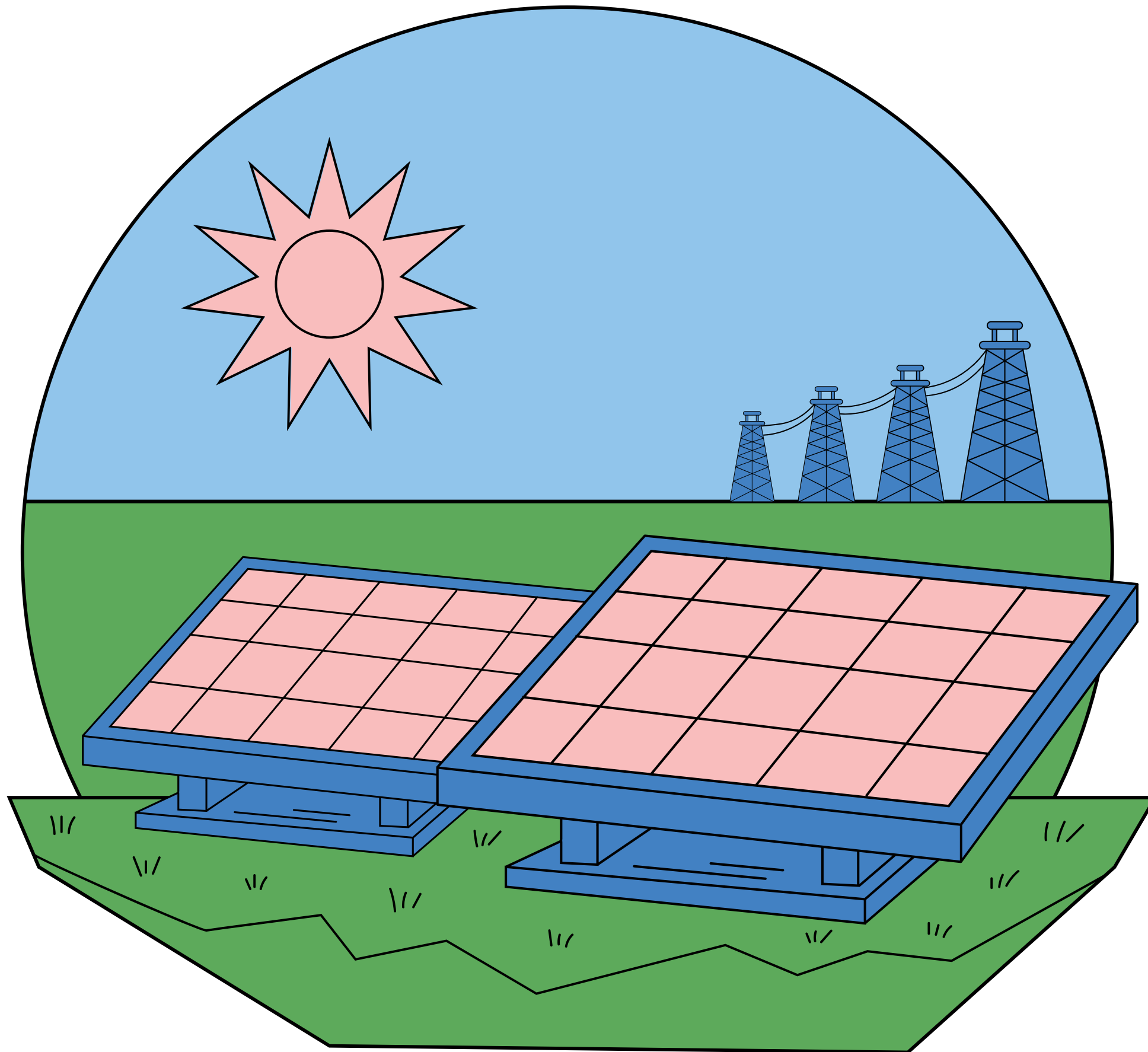
A plant based diet reduces our consumption of animal products, reduces land and water use, and CO2 emissions, as well as providing health benefits. It can also be accessed by more people.



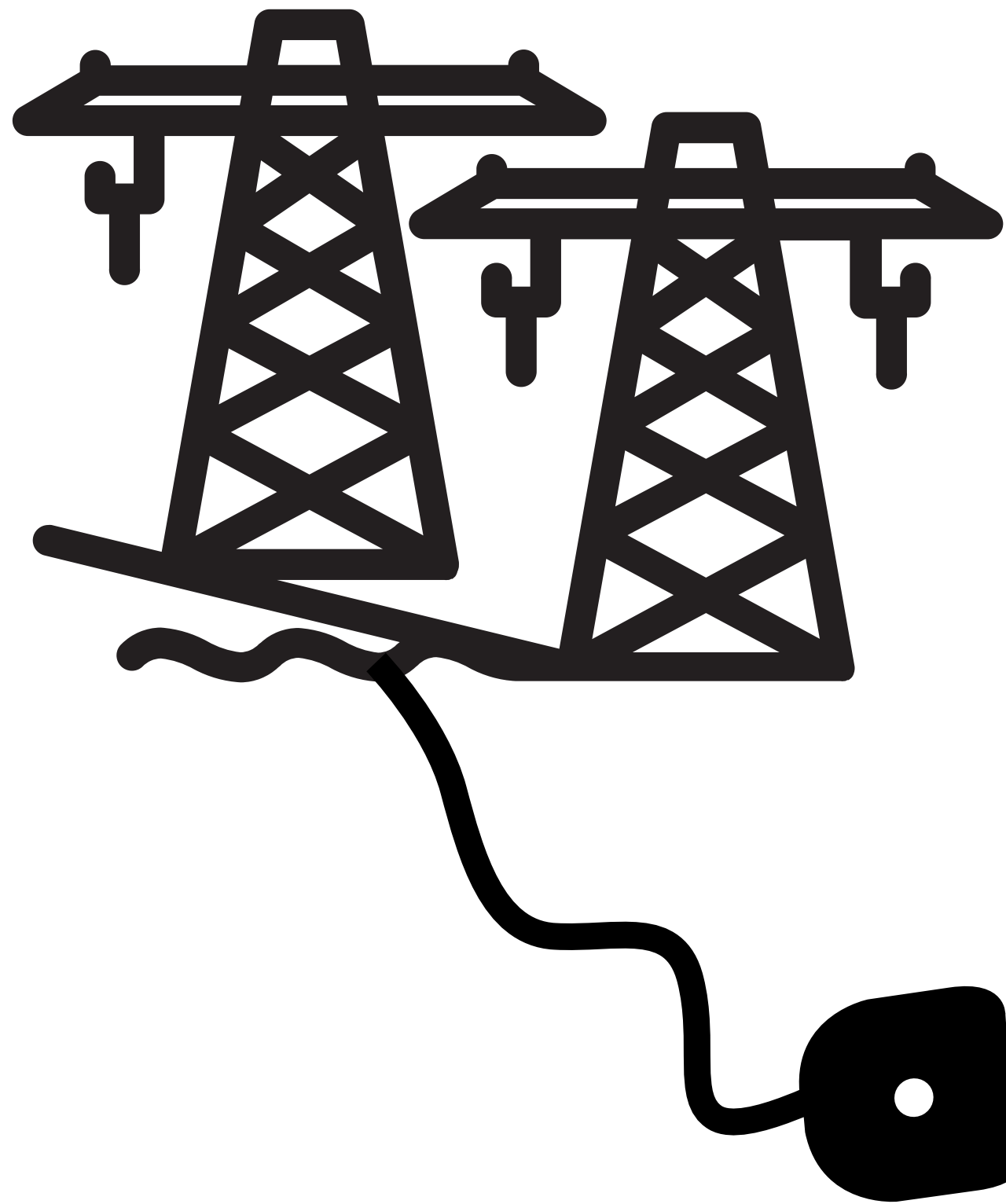
Deforestation for farming, city and town development has reduced the amount of trees in our environment. Trees are the earth's lungs. They breathe in carbon, and breath out oxygen. They can reduce the amount of greenhouse gasses. Therefore, planting more trees can help us deal with the impact of climate change



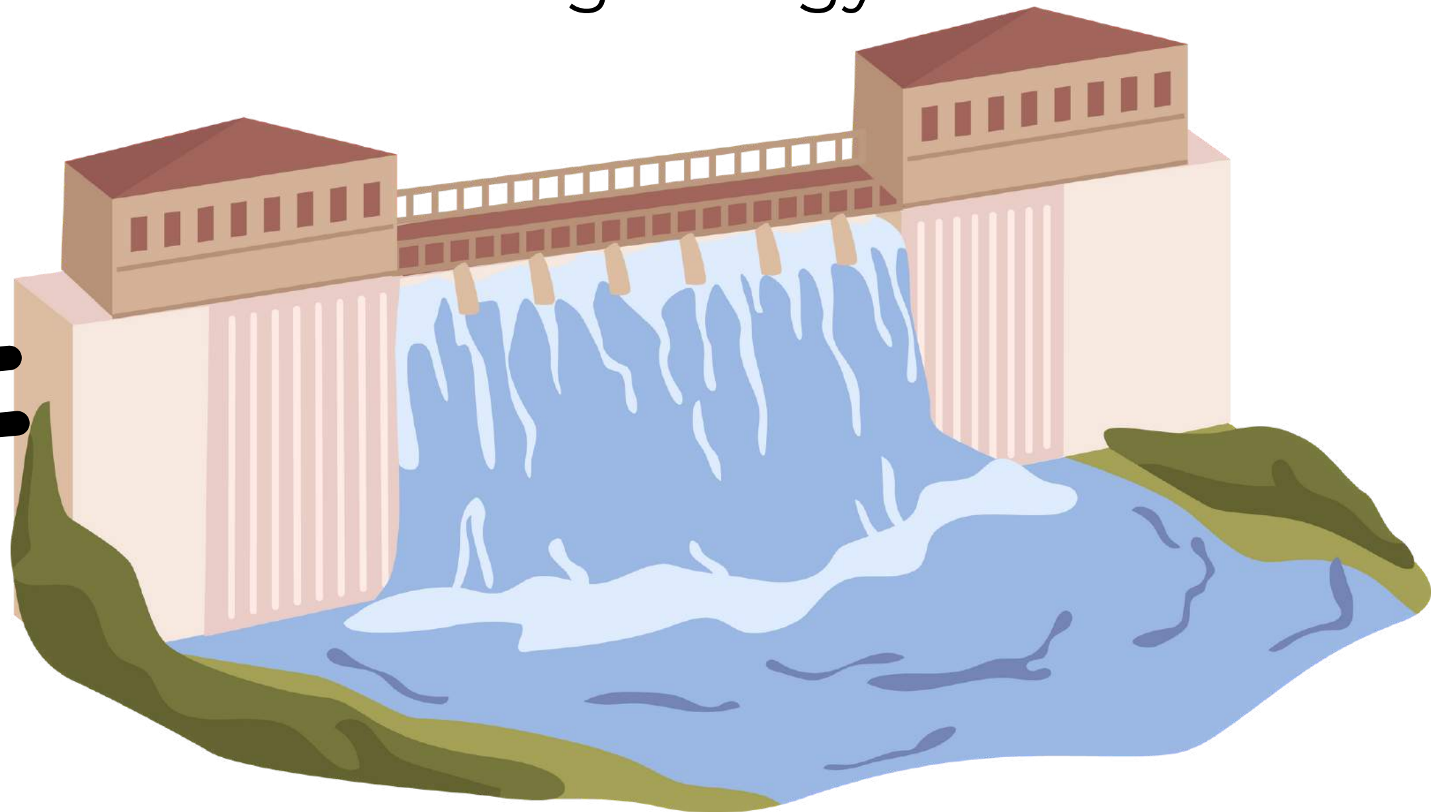
Wind is a renewable energy source. It does not create greenhouse gas emissions when creating energy.



Solar power is a renewable energy source. It does not create greenhouse gas emissions when creating energy.



Hydro electric power is a renewable energy source. It does not create greenhouse gas emissions when creating energy.



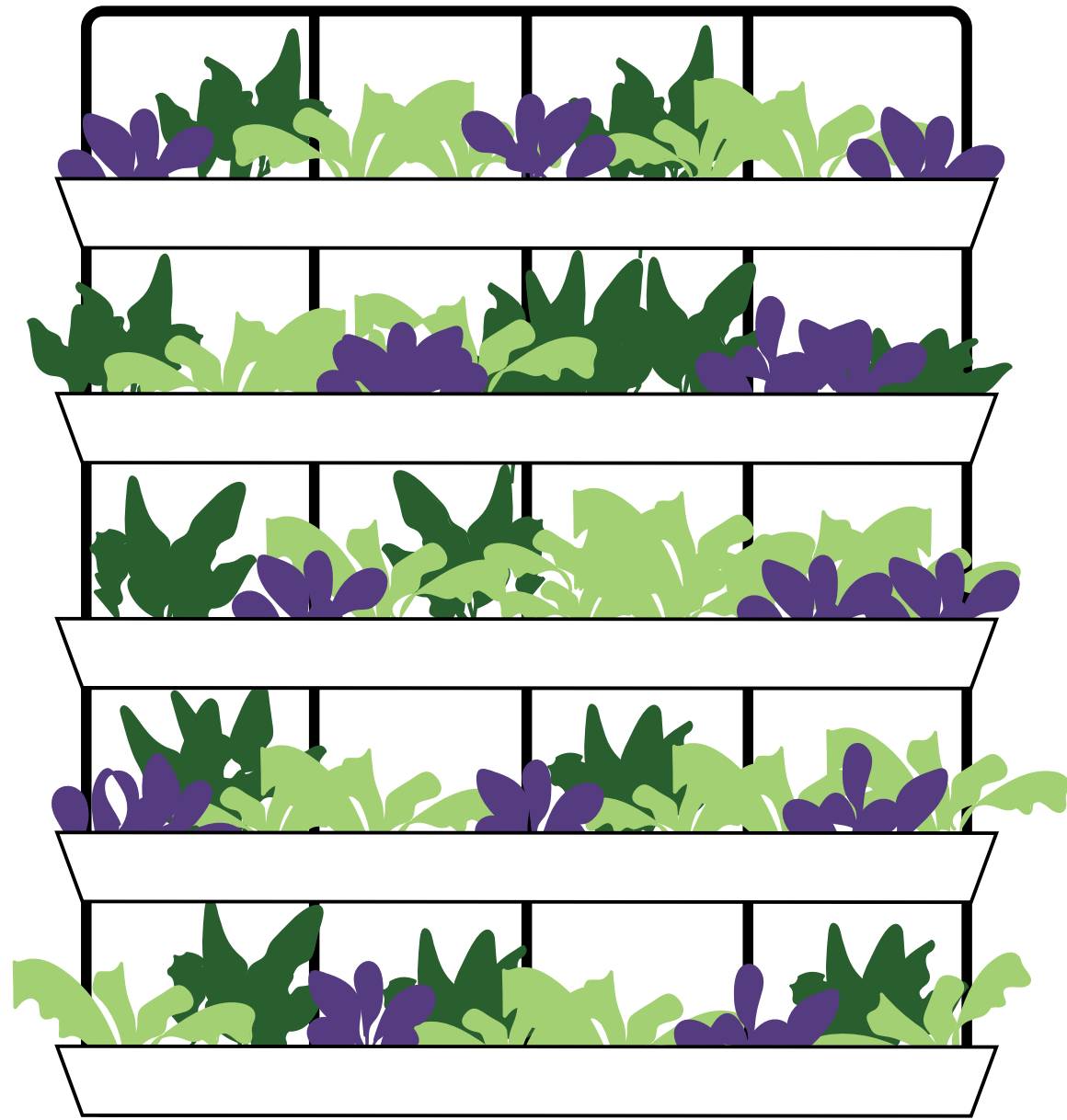


Discussions about climate solutions must include people who are most effected, but contribute least to climate change. Those in marginalized groups need to be able to contribute to policies and solutions, and be represented in decision making.



When possible, using electricity made from renewable sources, to power vehicles and machinery helps reduce greenhouse emissions





Changing the way we farm is necessary to use less land, use less chemicals, create less emissions, create more diversity, healthier soil and more food.



Composting is recycling food and plant scraps, to create soil that is great for plants. Food waste that goes into landfill causes methane greenhouse emissions. Composting doesn't.



Many people around the world are finding it difficult to access food. They suffer from food insecurity. Sharing resources, such as food, with those less fortunate helps many people deal with the effects of climate change.

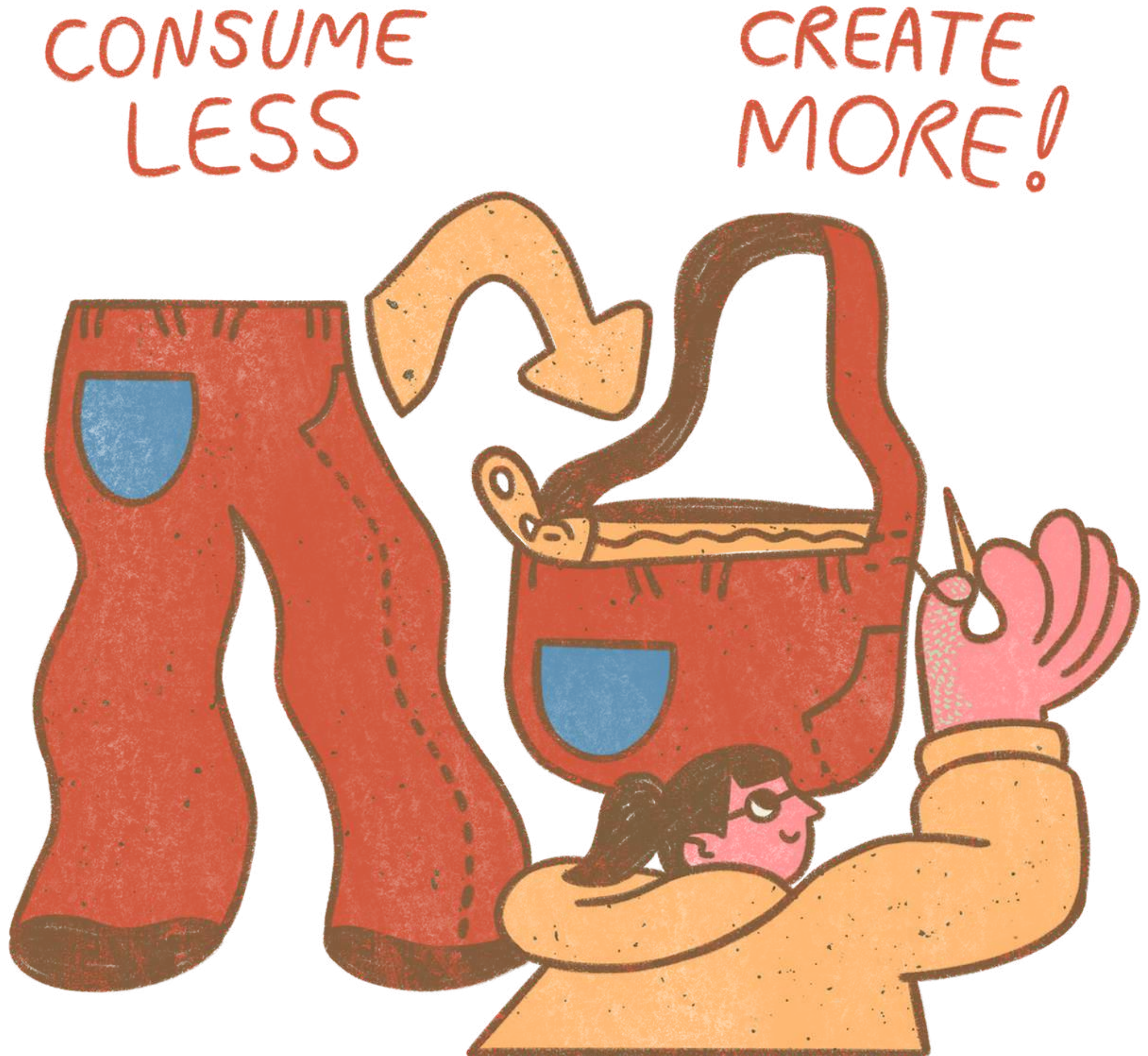


Reducing the use of appliances, such as washing machines and dryers, reduces energy use. Try wearing a few less clothes during the week, and only run the machines when fully loaded.



Recycling means less waste in landfill. It means less emissions are produced to obtain raw materials. It means something new can be created from something old.

Reusing materials for other things means less waste in landfill, and less emissions to obtain 'new' raw materials. It helps us be creative and more respectful of our resources.



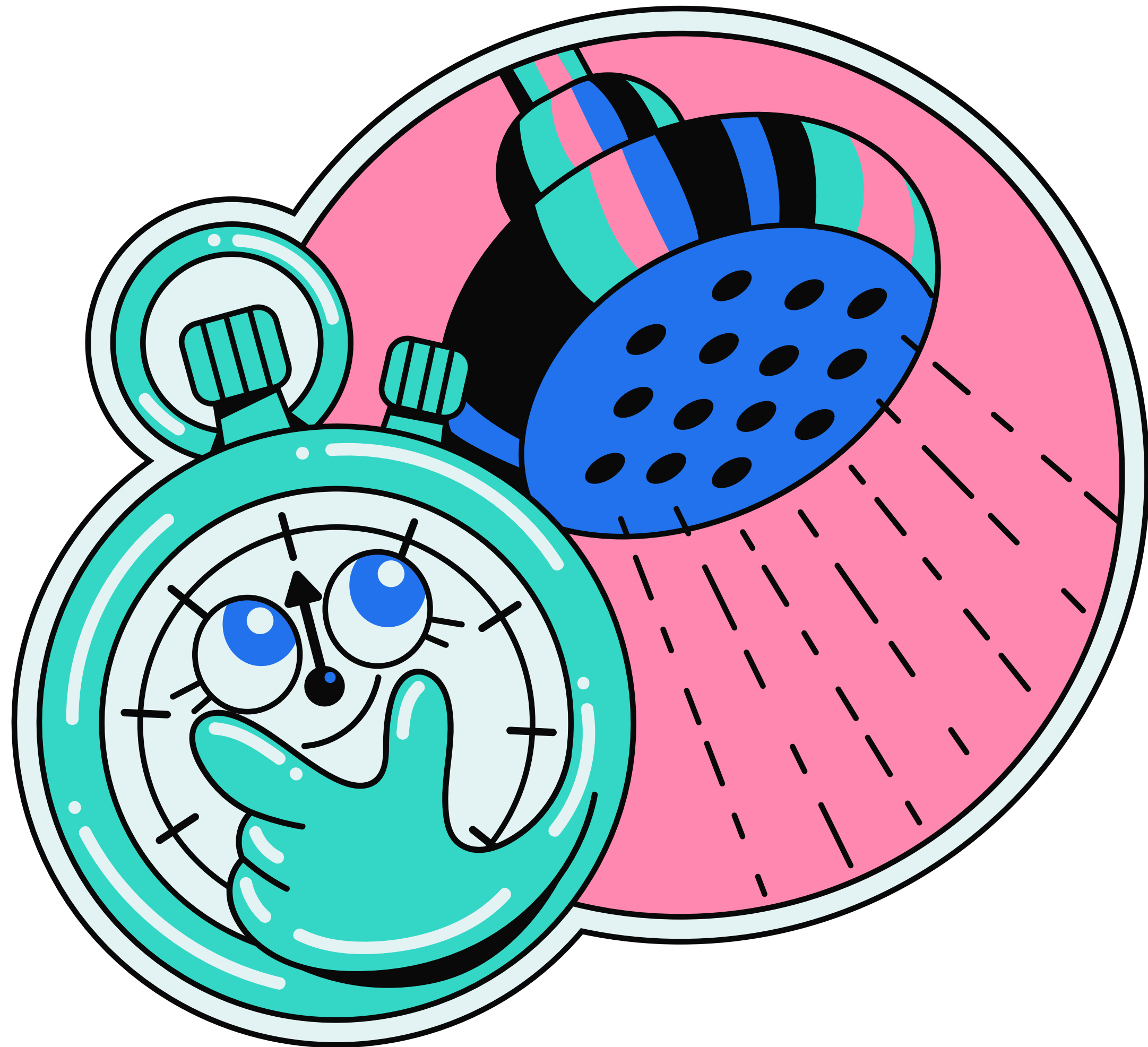


Plastics come from the fossil fuels of oil and gas. Reducing our use of plastics helps reduce our use of fossil fuels, and helps reduce greenhouse emissions. Reducing our use of plastic bags helps protect our wildlife too!



Being outside, and active, helps you use less electricity, and helps you develop physical fitness and resilience. It also enables you to deal stress and other mental health concerns that can be associated with climate anxiety.





Taking shorter showers
saves energy, and helps
us become more
respectful of our
resources, especially
water.