



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

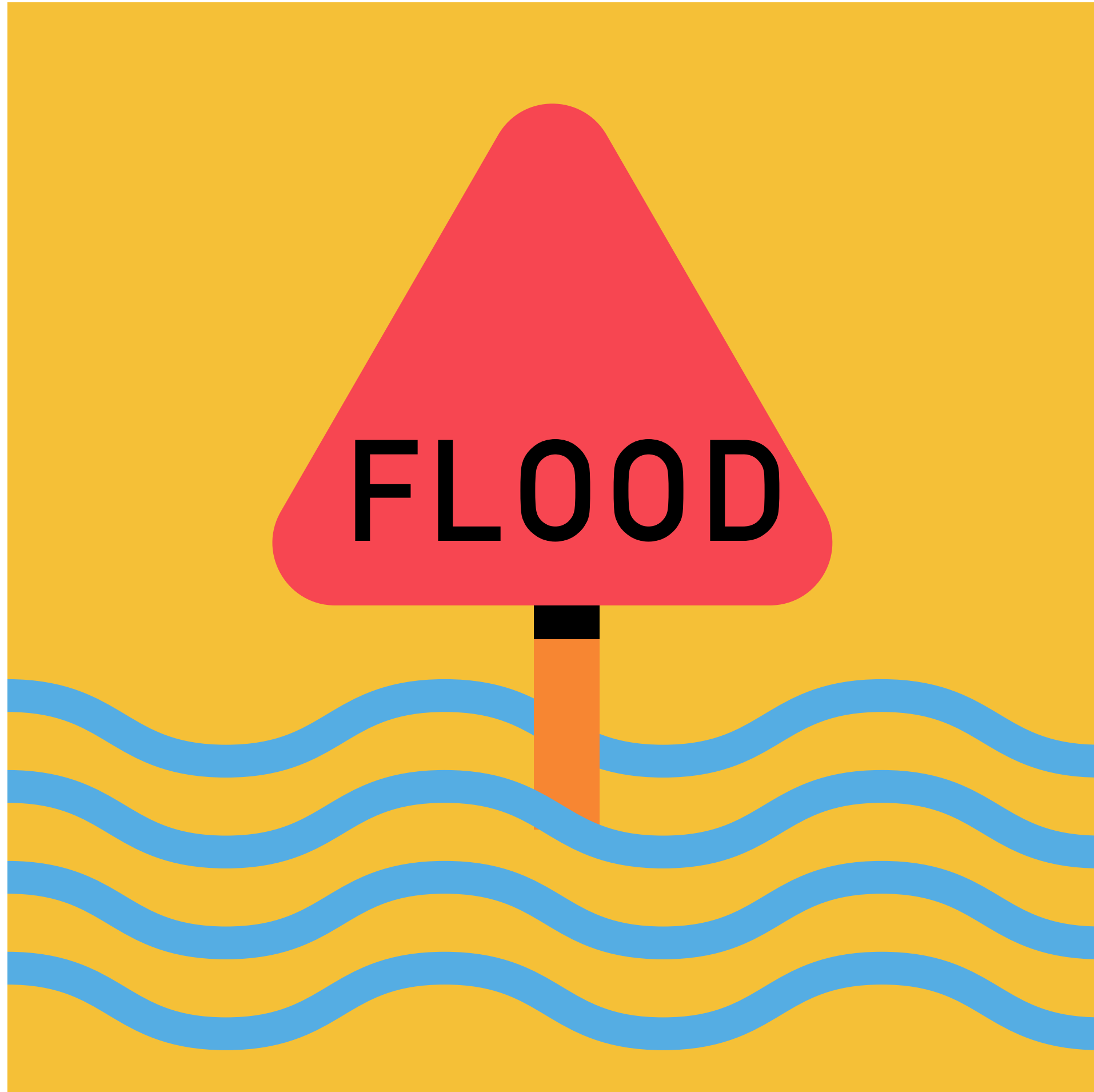
Create areas in the room for mitigation, adaptation and both. Have students move to an area where they feel their image belongs. If they have two images going to two areas, they will split up.

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..



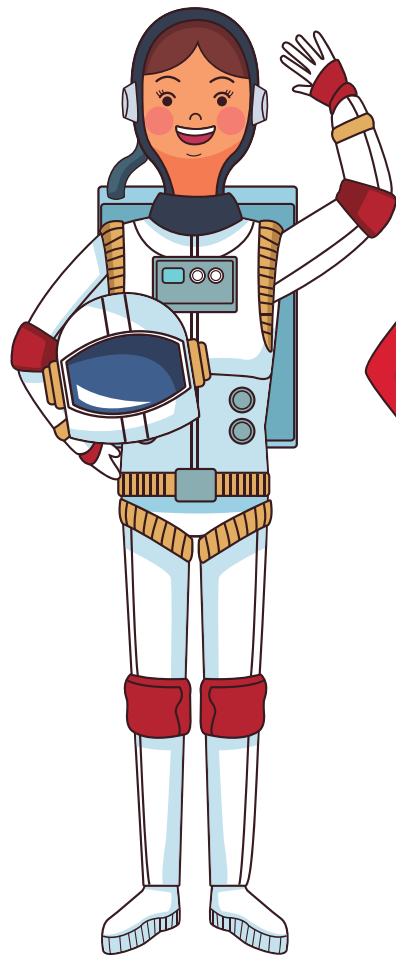
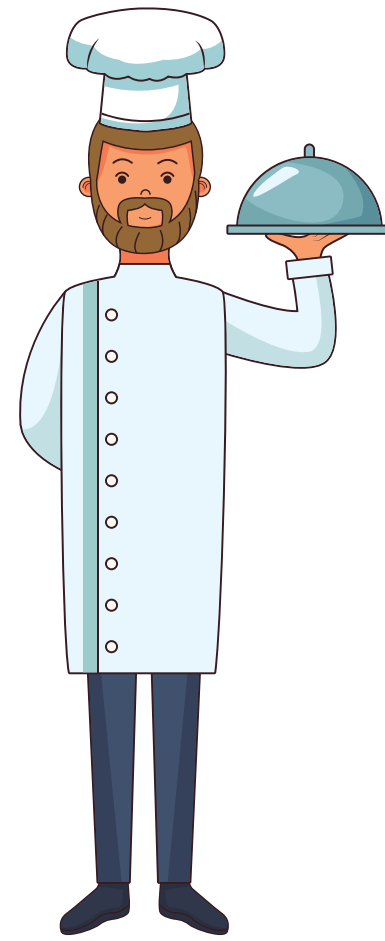
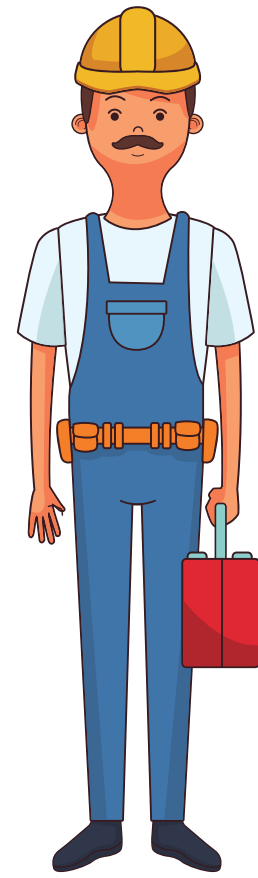
Making plans for, and implementing actions to protect people and communities from flood.



Managed retreat is planned movement of roads and other important structures away from areas of flood / erosion, in order to prevent communities being cut off from important resources



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

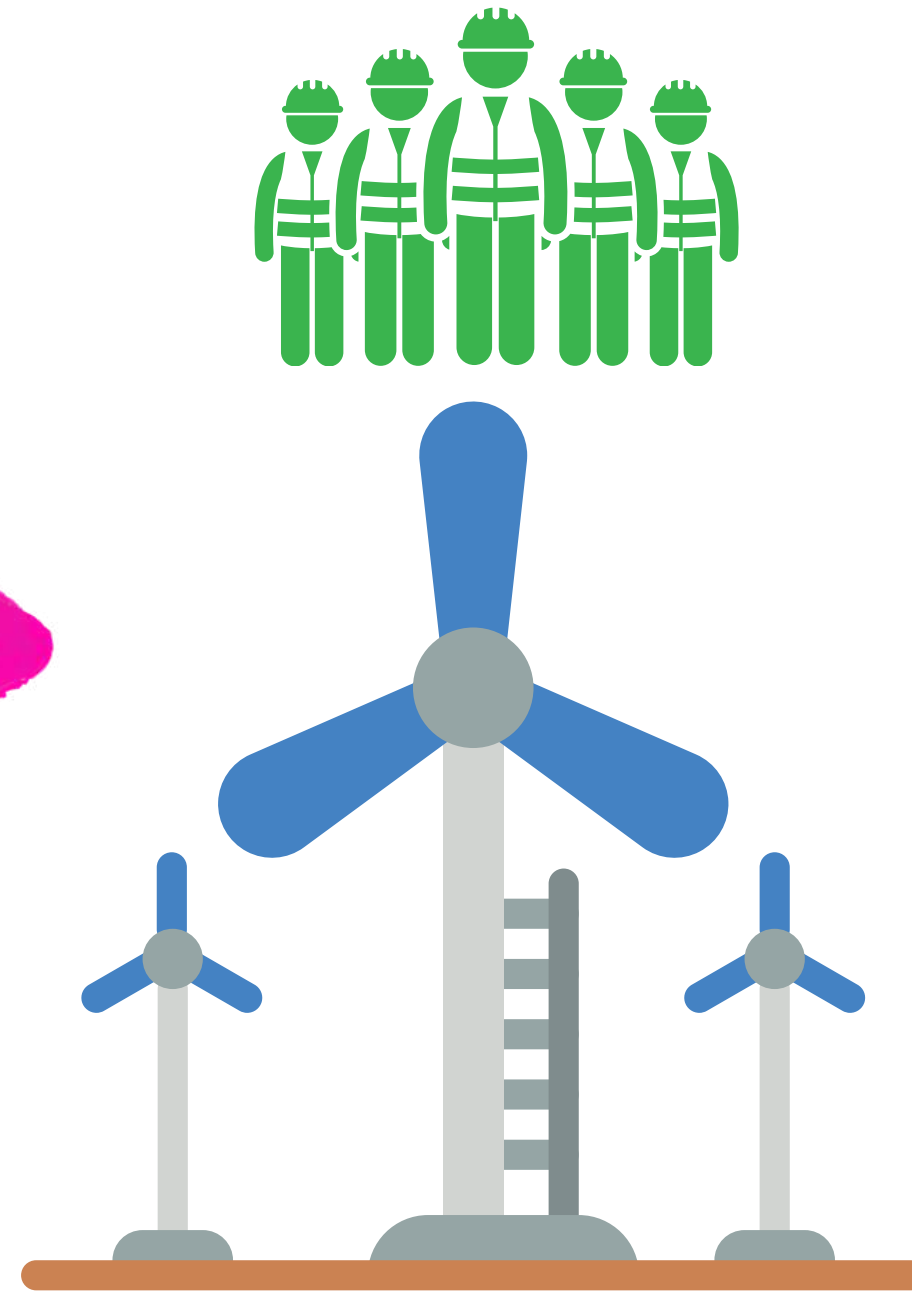
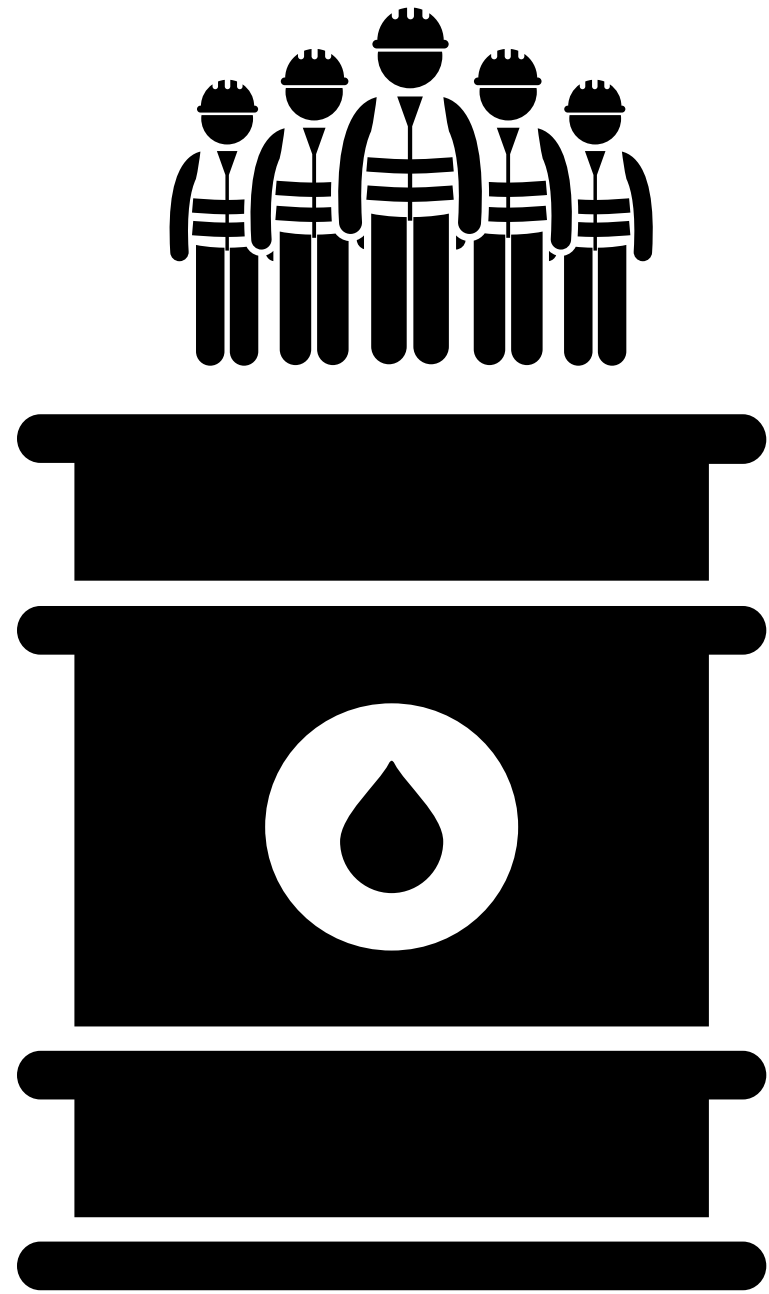


Providing pathways and opportunities for all people, regardless of background or gender or location or race etc .. to access well paid jobs allows people to deal with the effects of rising costs associated with climate change.



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.





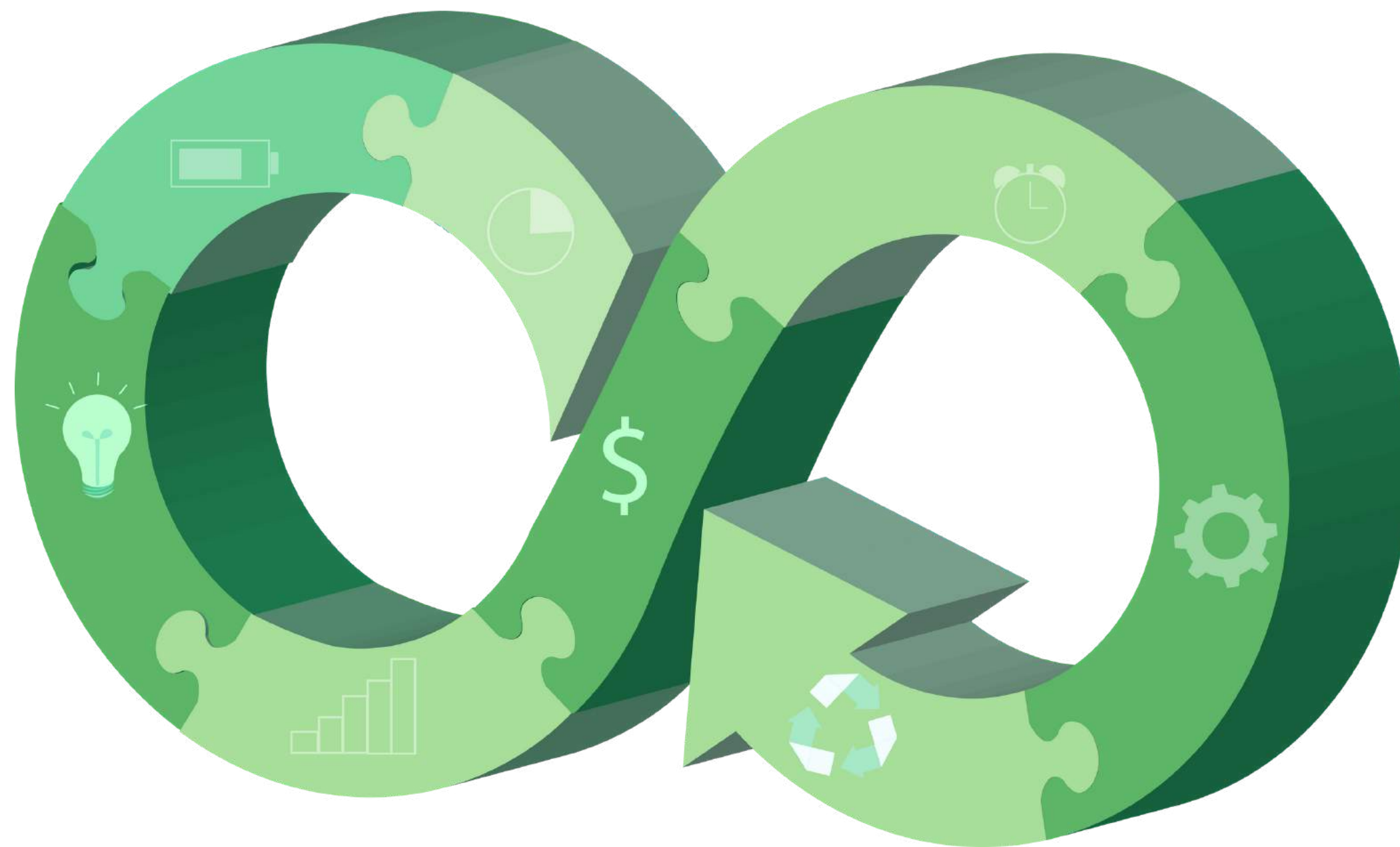
Protecting workers rights and livelihoods as we transition from a fossil fuel based industry to clean energy industry is essential. Workers need pathways for retraining and opportunities for employment, without victimization.



Revegetation around areas likely to be eroded, or flooded, helps stabilise the grounds, protect the environment, and increase plant life.



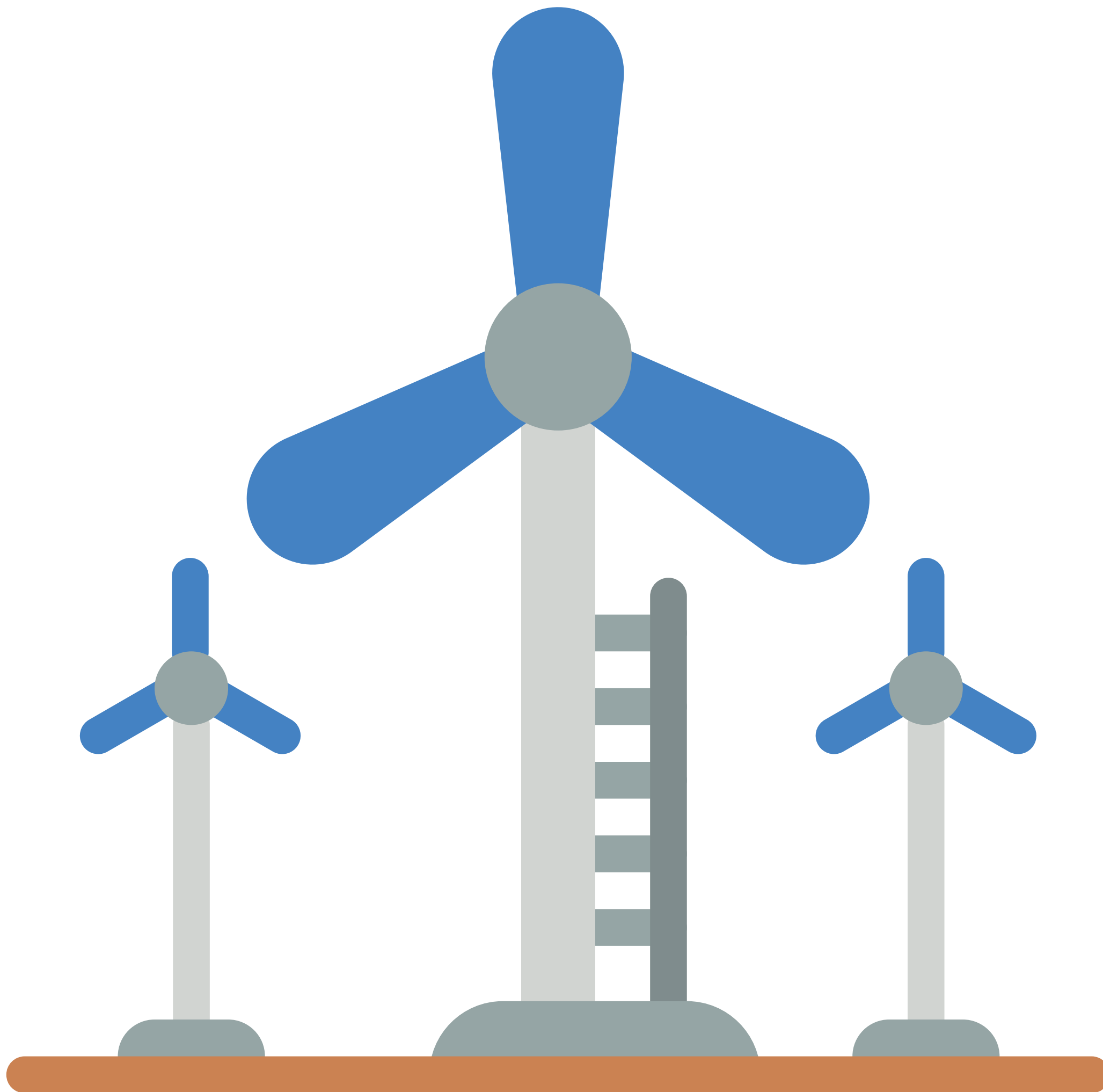
A plant based diet reduces our consumption of animal products, reduces land and water use, and CO2 emissions, as well as providing health benefits. It can also be accessed by more people.



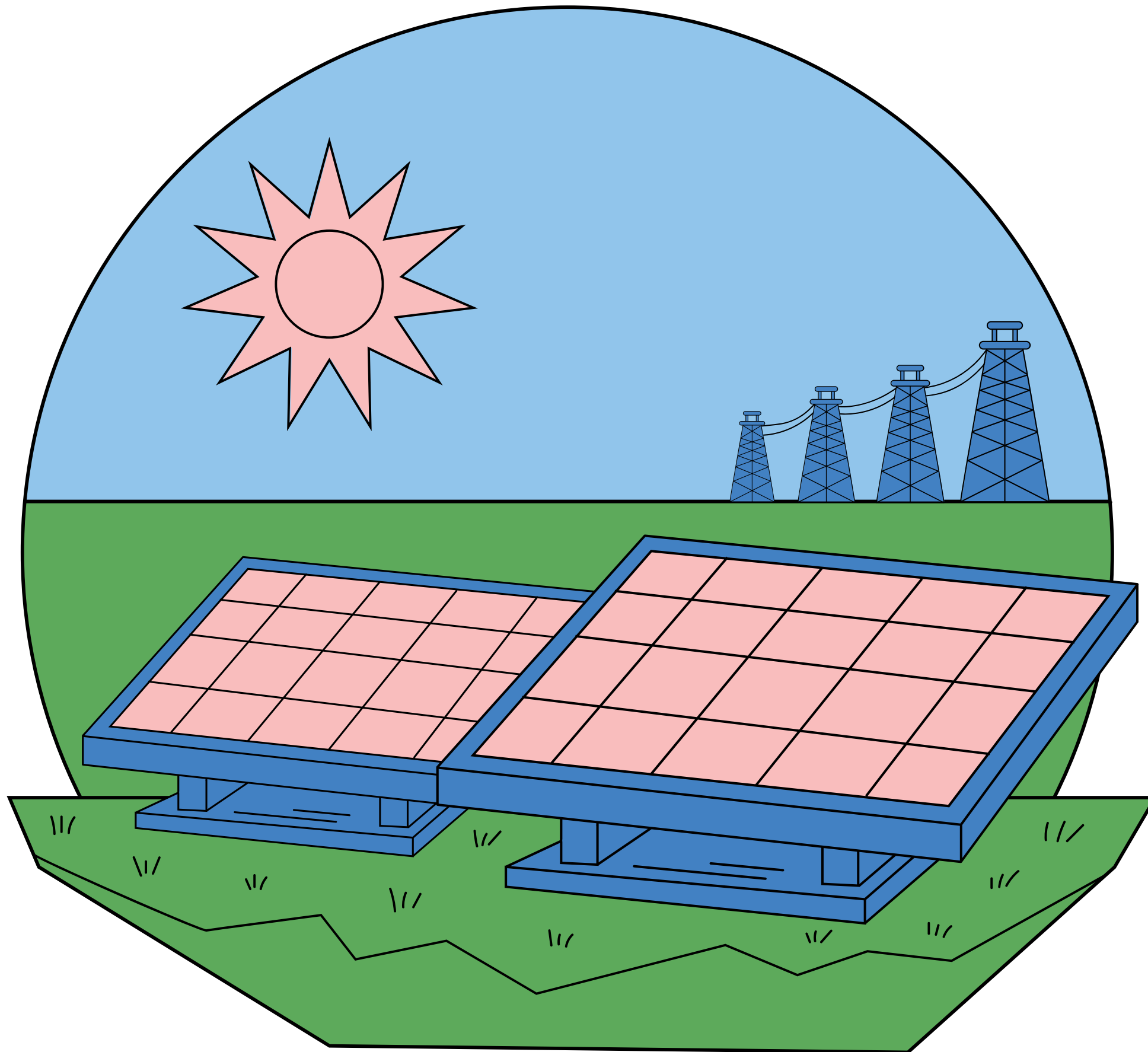
This symbol represents a circular economy. This means that companies have designed products so the 'end of life' material is useful and recyclable. These companies are being responsible for their waste. This means companies are reusing and recycling on an industrial level, saving huge amounts of emissions, and costs!



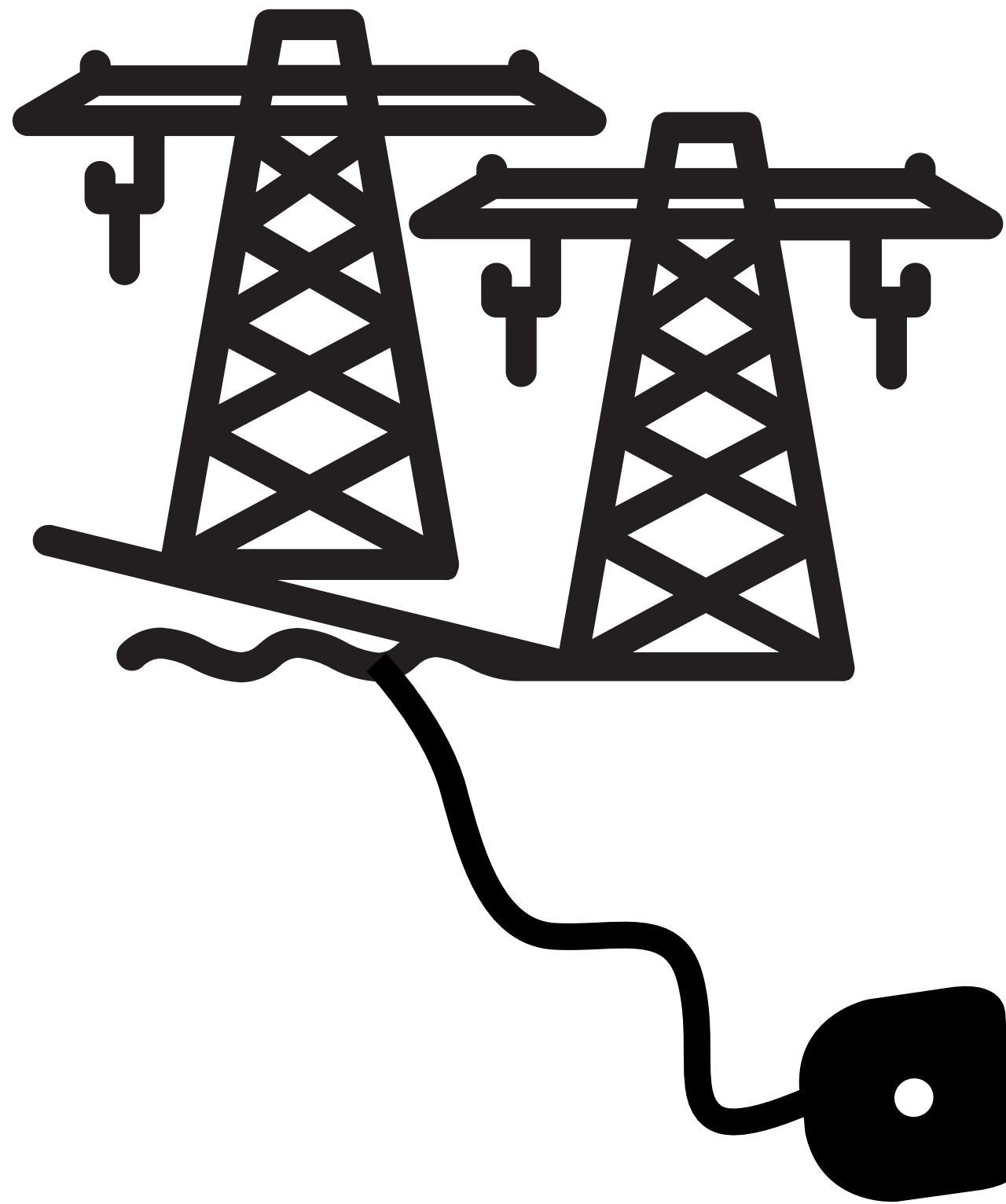
Deforestation for farming, city and town development has reduced the amount of trees in our environment. Trees are the earth's lungs. They breathe in carbon, and breath out oxygen. They can reduce the amount of greenhouse gasses. Therefore, planting more trees can help us deal with the impact of climate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



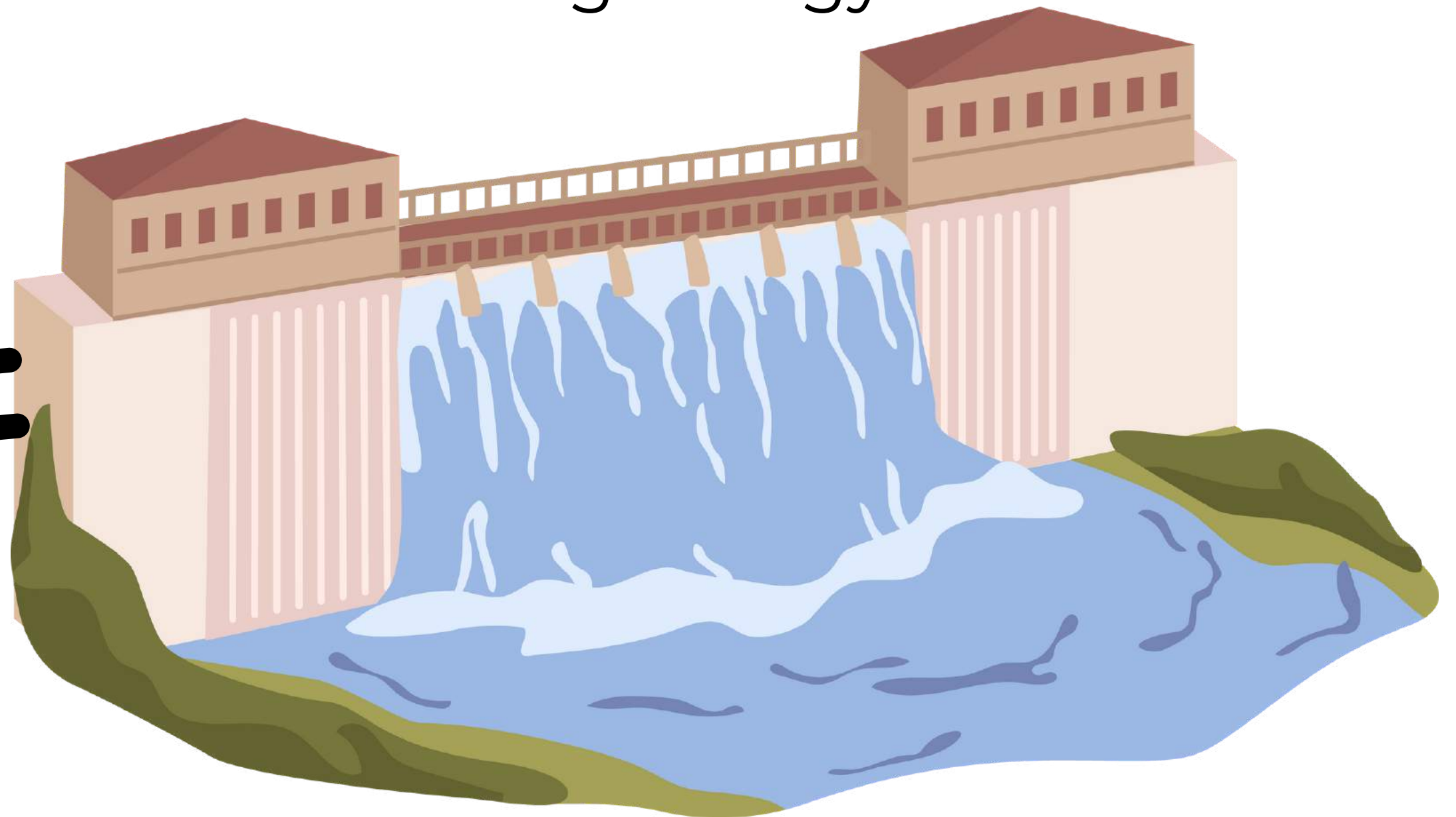
Wind is a renewable energy source. It does not create greenhouse gas emissions when creating energy.

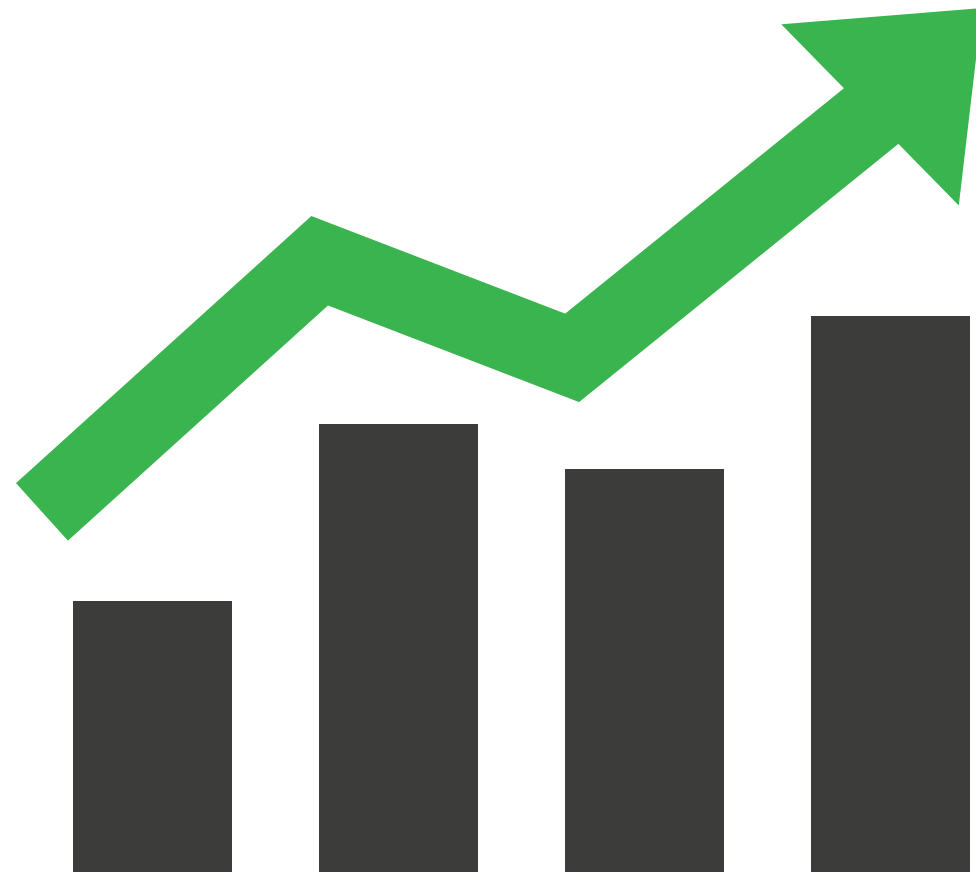


Solar power is a renewable energy source. It does not create greenhouse gas emissions when creating energy.



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





Increasing funding to renewable energy sources and development, as well as to processes to increase energy efficiency, can help us reduce the impact of climate change.

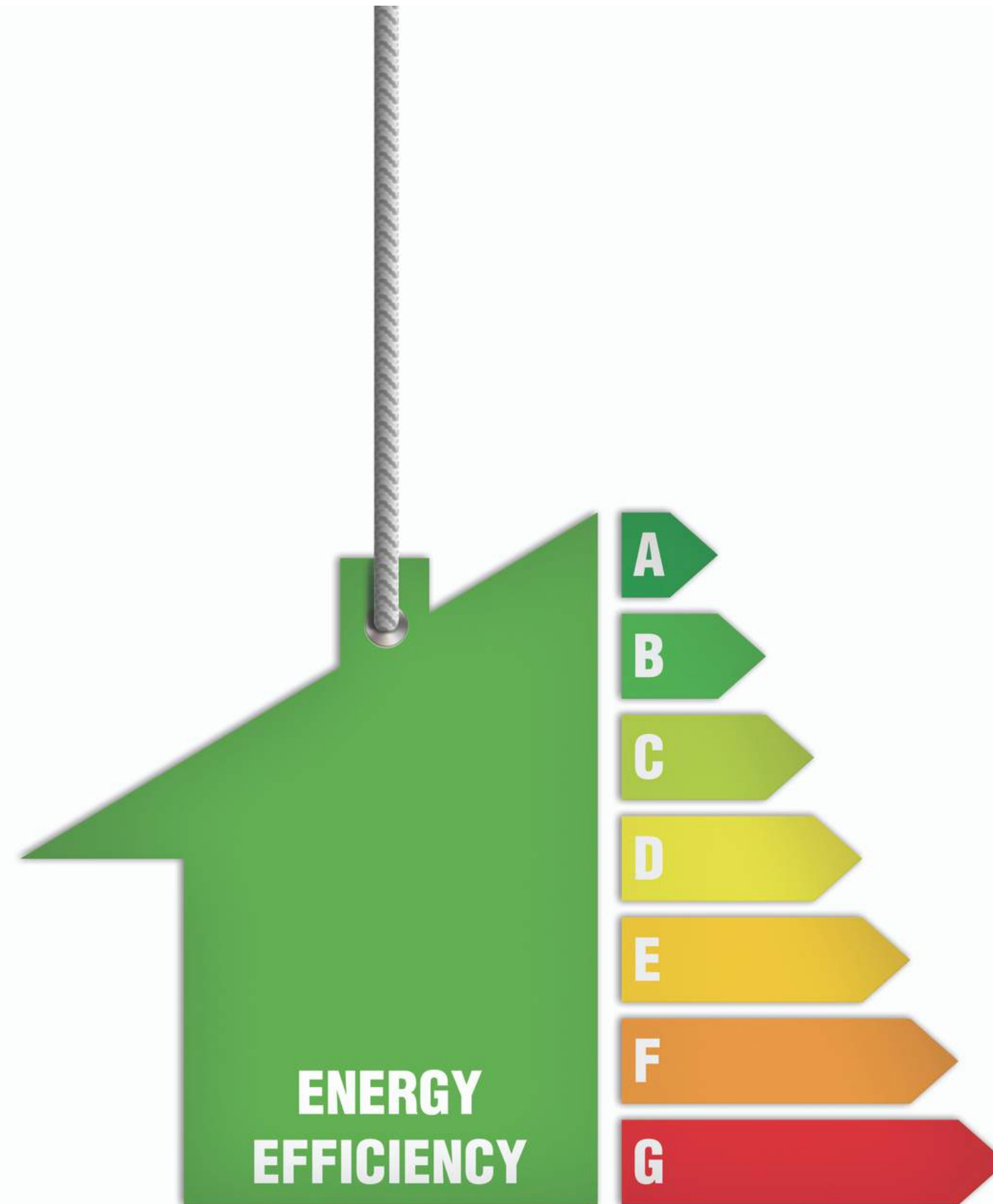




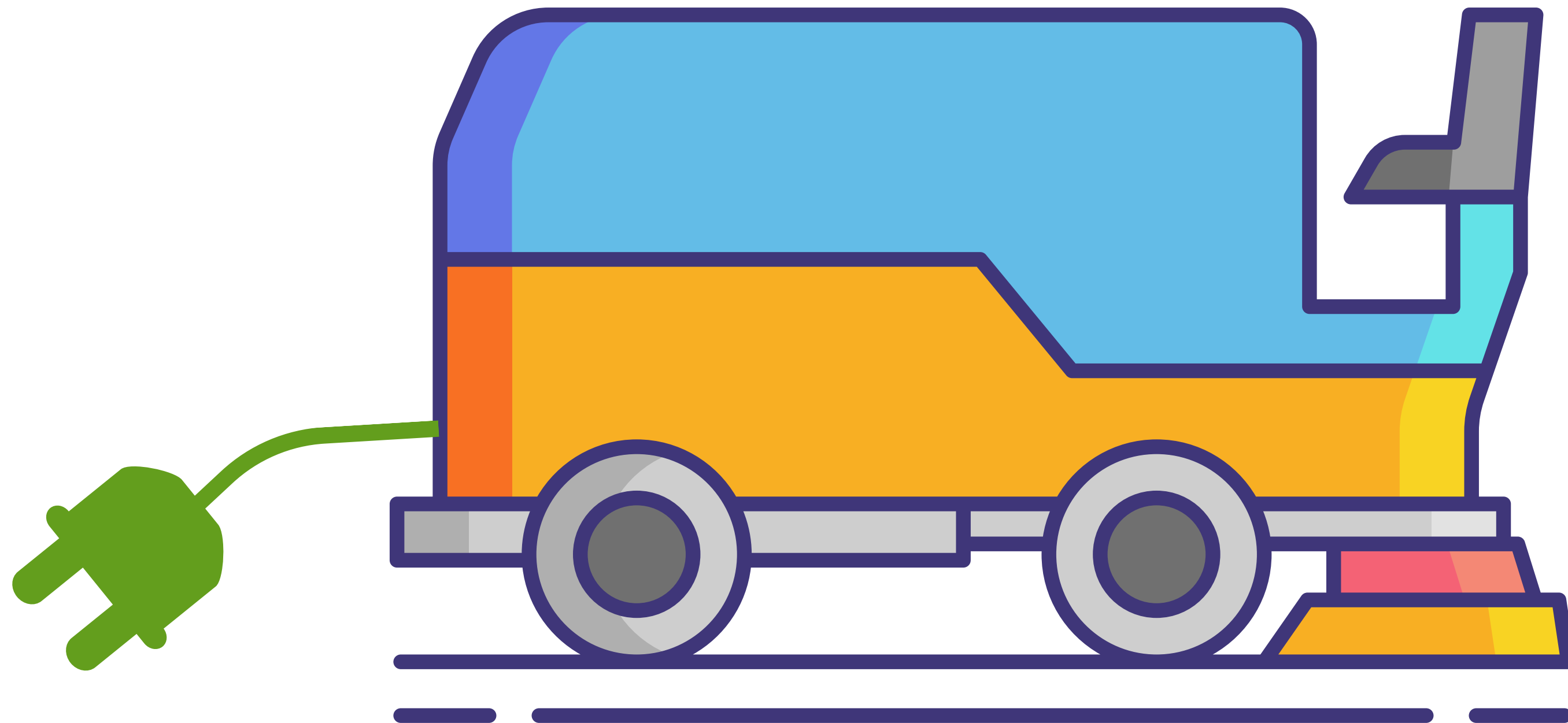
Discussions about climate solutions must include people who are most effected, but contribute least to climate change. Those in marginalized groups need to be able to contribute to policies and solutions, and be represented in decision making.

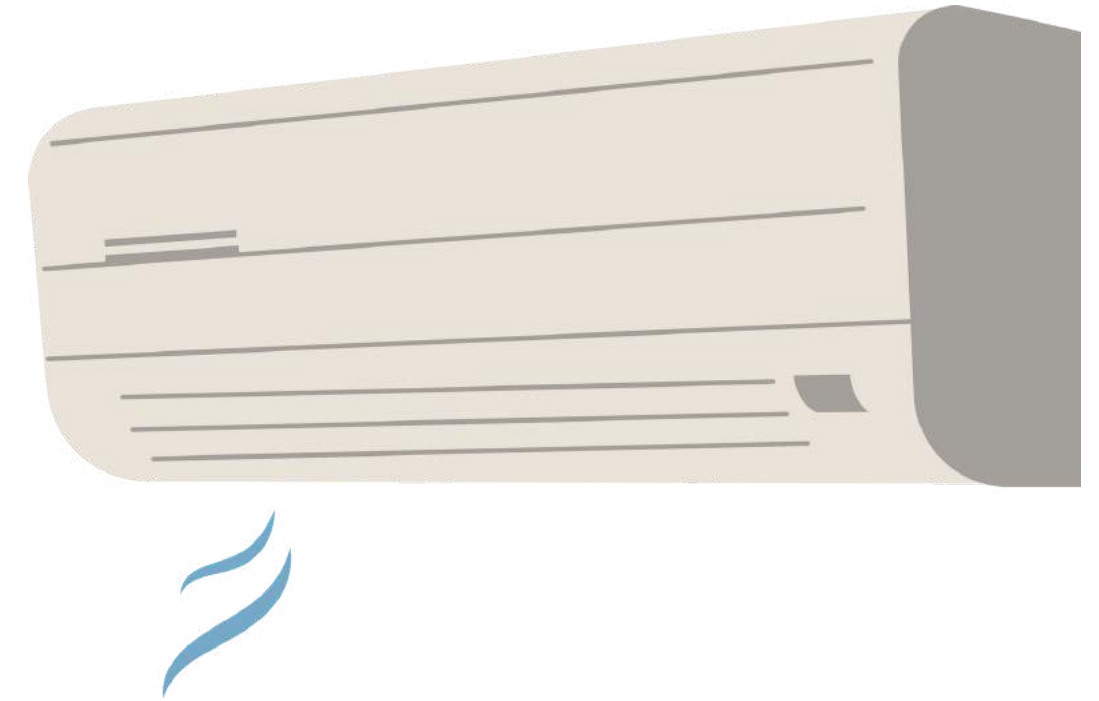
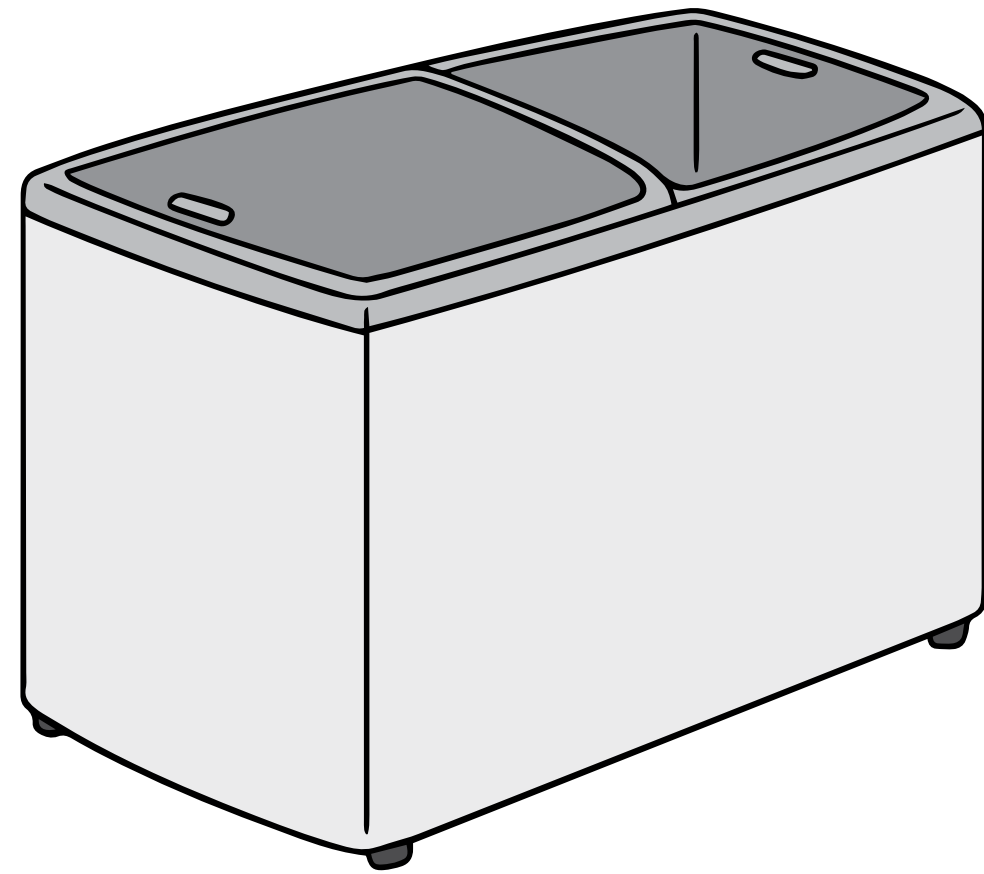


Choosing energy efficient appliances and machinery reduces emissions, and saves energy.

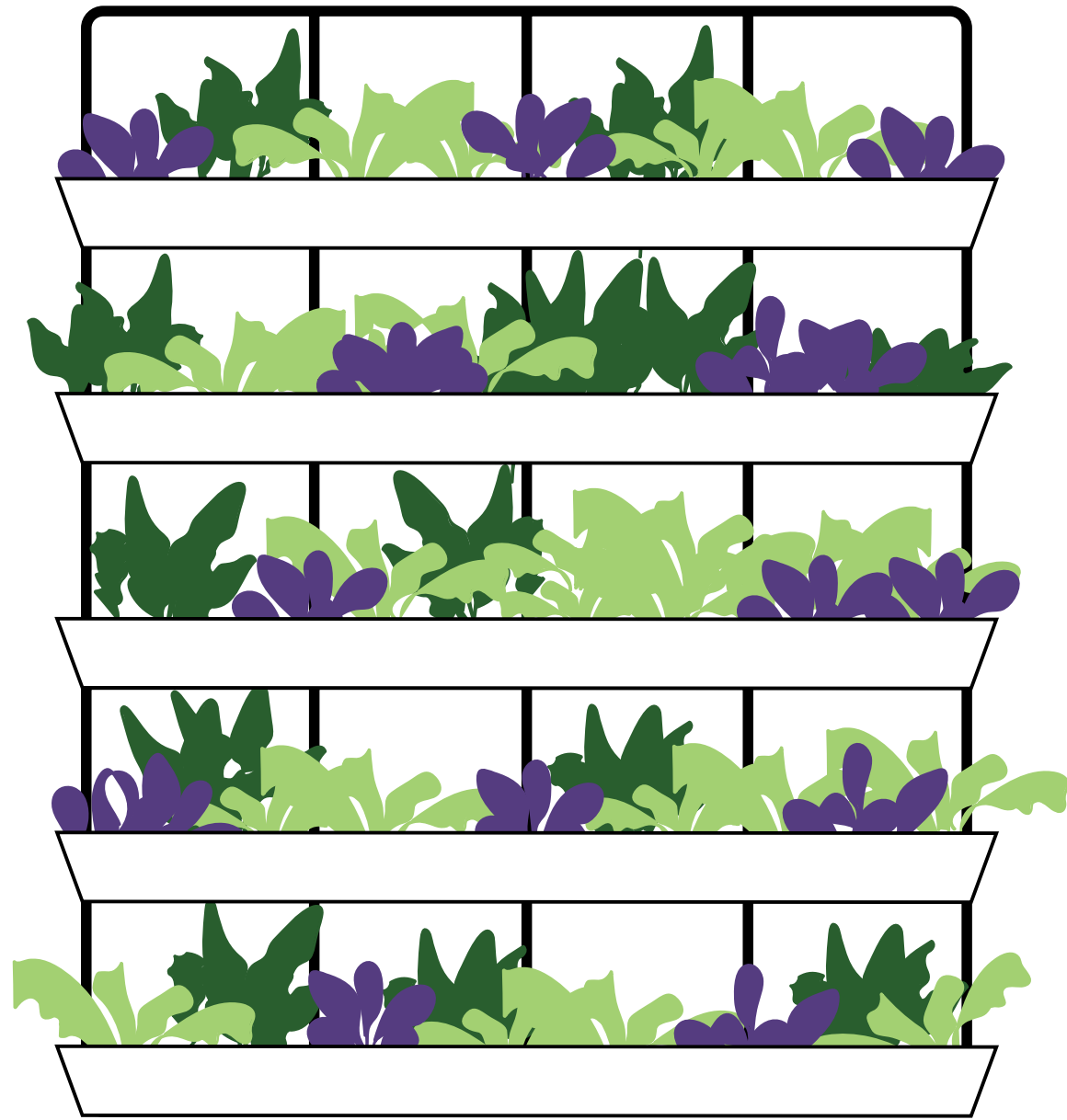


When possible, using electricity made from renewable sources, to power vehicles and machinery helps reduce greenhouse emissions





Fridges, freezers and air conditioners leak refrigerant gases. These are potent greenhouse gasses. Switching to using refrigerant's that are not greenhouse gasses, and ensuring systems don't leak reduces emissions.



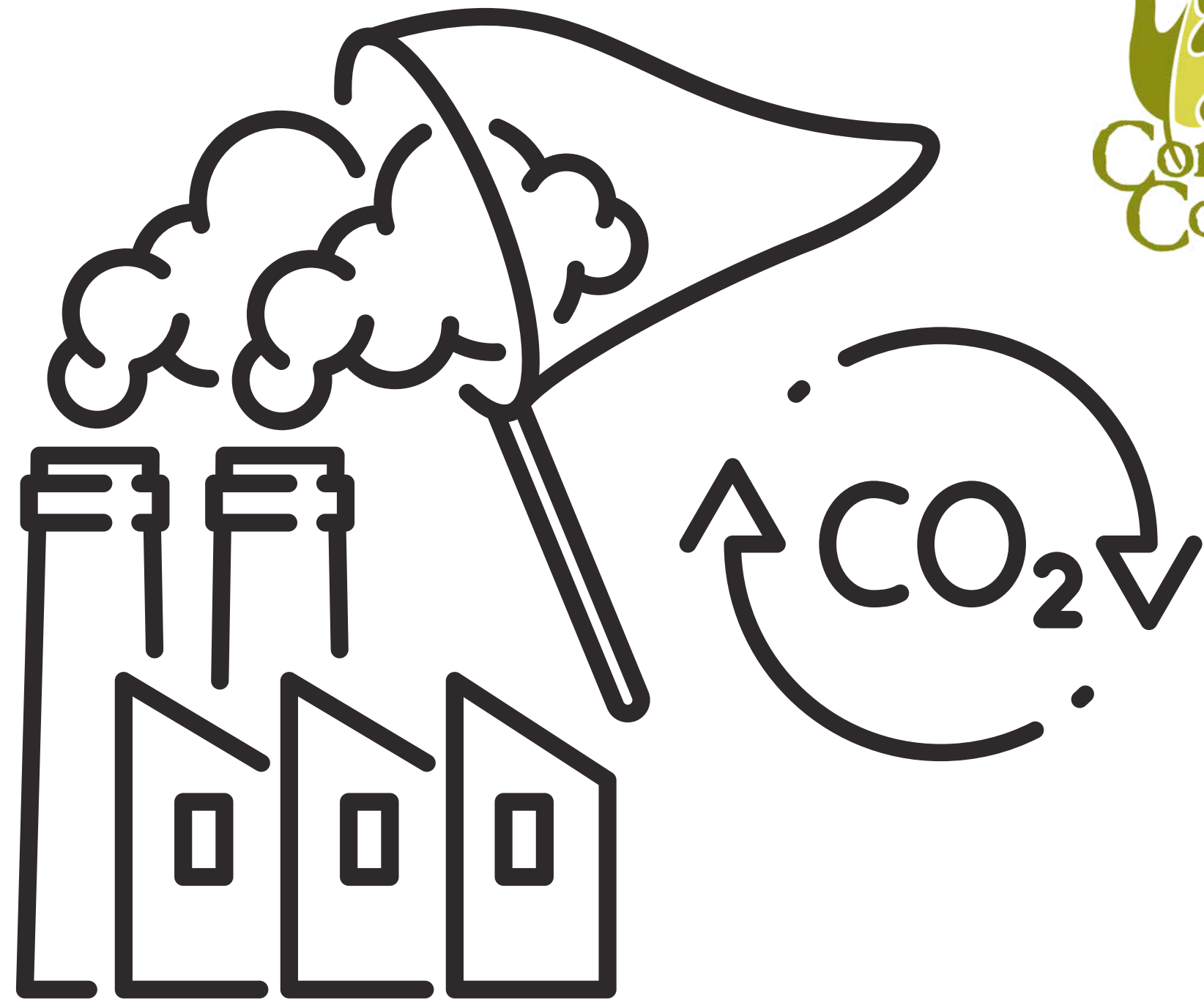
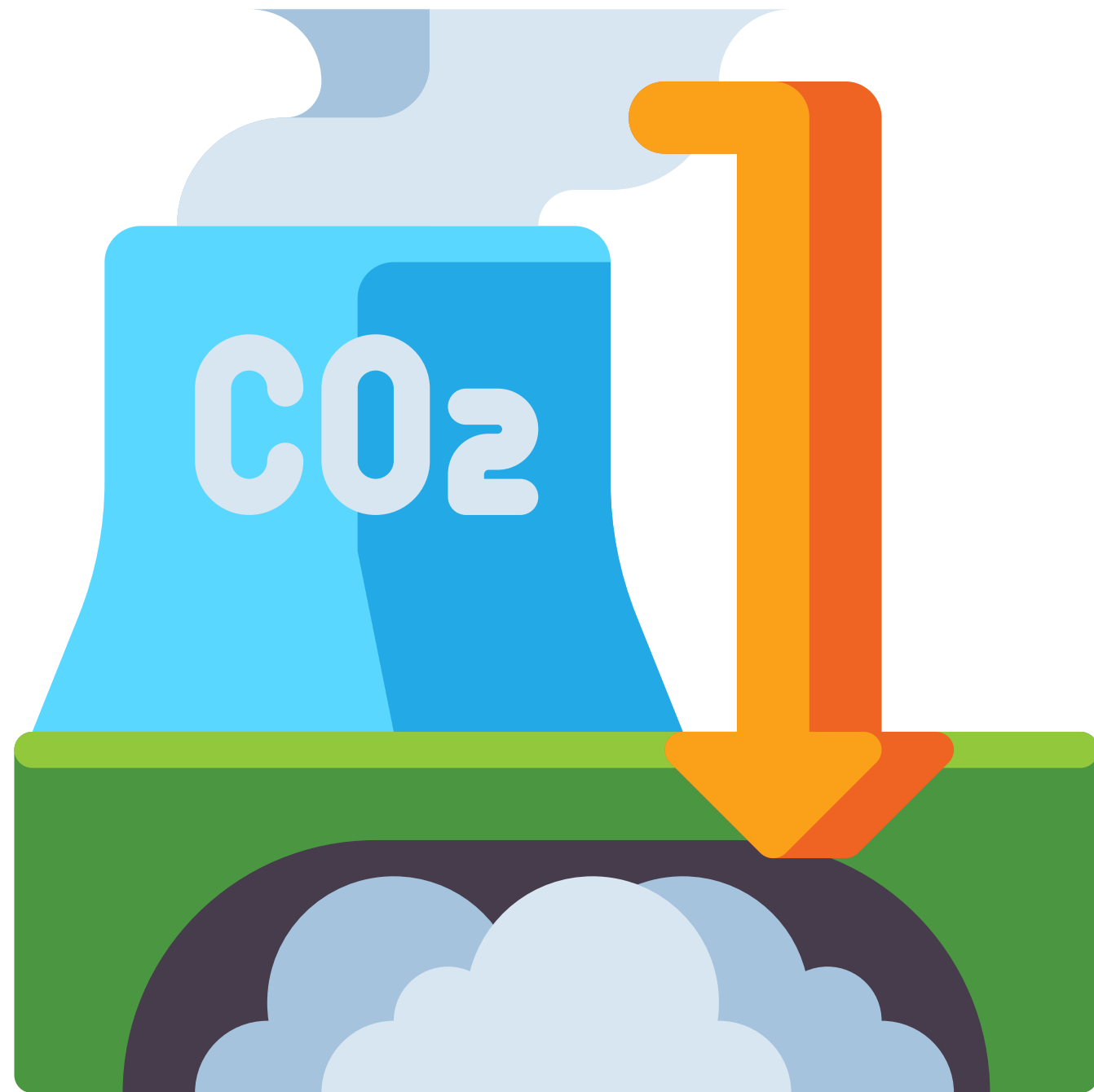
Changing the way we farm is necessary to use less land, use less chemicals, create less emissions, create more diversity, healthier soil and more food.



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.



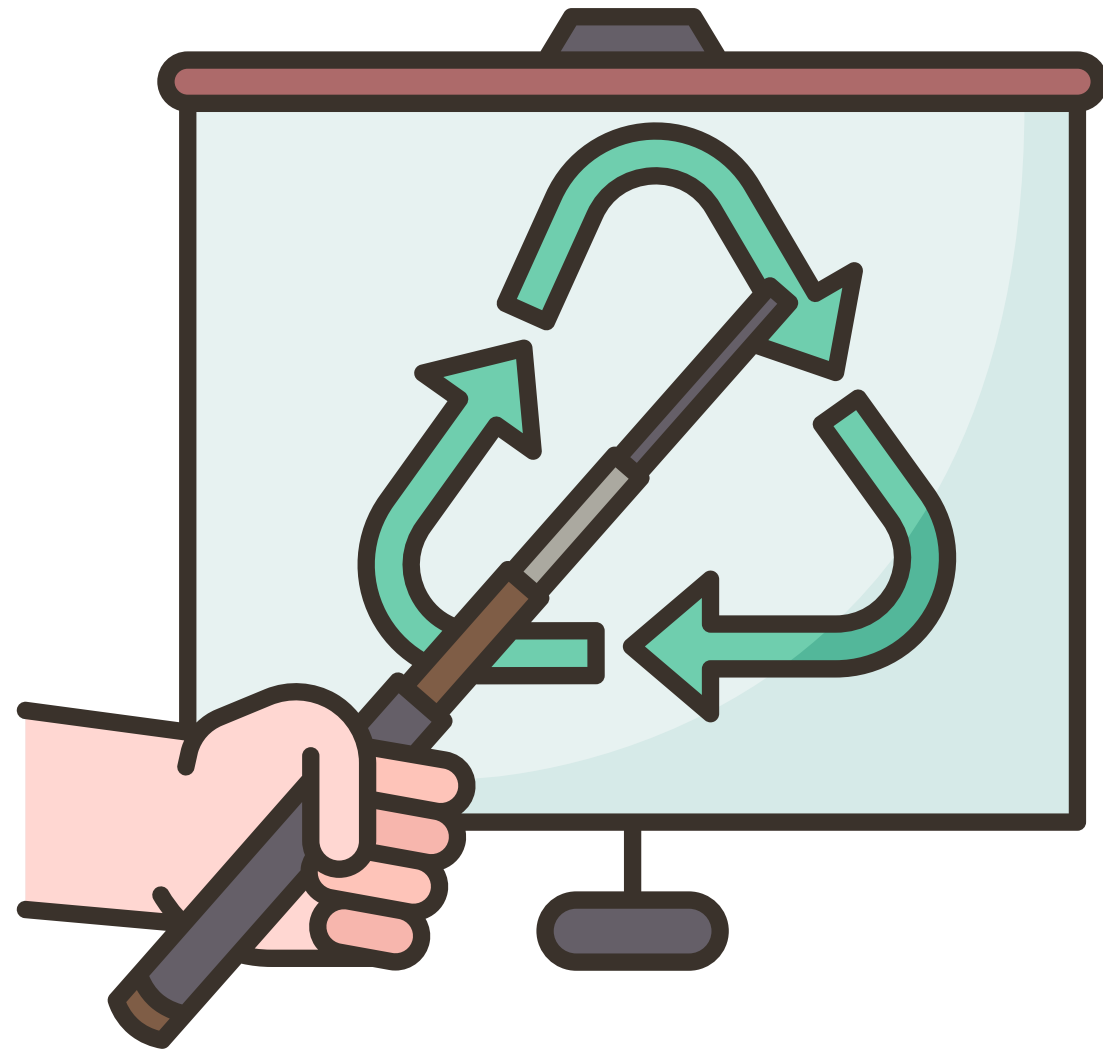
Many people around the world are finding it difficult to access food. They suffer from food insecurity. Sharing resources, such as food, with those less fortunate helps many people deal with the effects of climate change.



Carbon can be captured from the atmosphere and used as a resource.



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.



Education about reducing, reusing, recycling resources, refitting and redesigning building, reconnecting with nature, and rethinking our consumption helps reduce greenhouse emissions



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.

CONSUME
LESS

CREATE
MORE!

