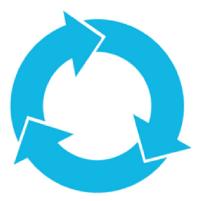
# Carbon dioxide (CO<sub>2</sub>)



What is...

## Circular Economy



## Carbon dioxide (CO<sub>2</sub>)



Carbon is a naturally occuring gas in our environment that is also created by burning fossil fuels (like oil, gas and coal), burning plants, building cities, and making new products. Carbon is the main greenhouse gas (GHG) that leads to climate change.



#### Circular Economy





The circular economy is an important way of solving big problems in the world, like climate change, losing plants and animals, making too much trash, and polluting the environment. It works by following three important ideas: first, to get rid of waste and pollution; second, to make sure the products we use and the materials we use to make them are used at their highest value again and again; and third, to help nature become healthy again.

To make this work, we need to switch to using renewable energy and materials. Switching to a circular economy means we can still have a strong economy without using up our earth's limited resources. This is a big change that helps us build strong communites, create new businesses and opportunities, and take care of nature.



## Composting





What is...

## Decarbonization





### Composting



Composting is a way of breaking down natural materials like food and plants with the help of tiny living things and oxygen. In a circular economy, we use composting to turn leftover food and other natural things into compost and keep it out of landfill.



#### **Decarbonization**



When countries, individuals, and organizations around the world aim to reduce carbon emissions created by electricity, industry, and transporation.



## Durability



What is...

# Embedded / Embodied Carbon



### **Durability**



Durability means how strong something is and how well it can keep working and stay useful when we use it properly. For some things, like computer programs, durability is about how many times we can update and improve them. With clothes, durability means they can stay worn and liked for a long time.



#### Embedded / Embodied Carbon



The emissions associated with creating a product and getting it to your doorstep.



## Extended Producer Responsibility



# Product Lifespan/Lifetime



#### Extended Producer Responsibility



Extended producer responsibility (EPR) is a policy that makes sure companies are responsible for the products they make after they are sold and used. Companies who make and sell the products are required to pay fees to make sure the products or packaging are properly handled once we are done with them.



#### Product Lifespan/Lifetime



How long a product can be used from the time it's made until it becomes too old or broken to be fixed or used again.





## Linear Economy





What does it mean to...

## **Maintain**





### **Linear Economy**



The traditional way of doing things where we take the earth's resources, make stuff with them, but don't use them fully and then throw them away when we're done. Take - make- waste. This way of doing things wastes valuable resources and creates a lot of waste and pollution, which harms the environment.

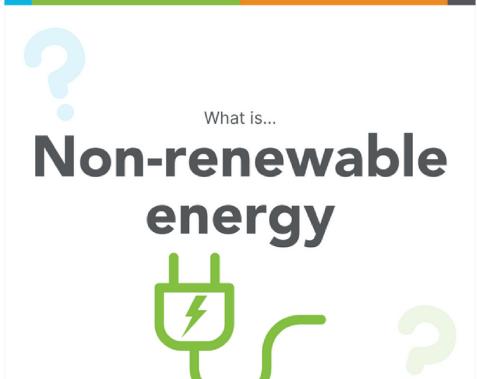


#### Maintain



To keep something in good shape and working well, so it doesn't break or lose value. This allows it to be used for a long time.







# Non-renewable resources





## Non-renewable energy



Energy that's created from burning or using resources that we don't have a lot of, such as coal, natural gas, oil, and nuclear energy.



## Non-renewable resources



Non-renewable resources are natural materials from the earth that we don't have a lot of and cannot replace quickly enough for our future needs. Some examples are: oil, fossil fuels, steel, and aluminum.



## Recycling



What is...

## Recyclability



### Recycling



To take something apart and change it back into its basic materials. Then, we use these materials to make either the same things or new things.

But when we recycle, we lose some of the energy and value that were put into making the original product. In a circular economy, recycling is the last option we choose when we can't do anything else with the product.



#### Recyclability



How easy and practical it is to recycle a material.



# Recycled material

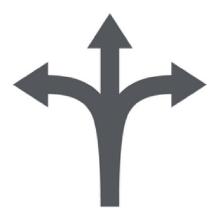






What does it mean to...

## Redistribute





## Recycled material



Recycled materials, also known as virgin materials, were used before in a product or package and then used again to make something new. It can be parts of products that were fixed or used again, or entire materials that were turned into brand new things. Example: plastic water bottles being recycled and used to make plastic food containers.



#### Redistribute



To redirect a product from where it was supposed to be sold or given to other people who can use it instead of letting it become waste.

For example, a supermarket can give extra good food to a food rescue group so they can share it with people who need it.





What does it mean to...

## Refurbish





# Regenerative production



#### Refurbish



To fix or improve a product so it looks and works like new again.



## Regenerative production



To make food and materials in ways that help nature. For example, it helps keep the soil healthy, helps plants and animals grow better, and makes the air and water cleaner.





What does it mean to...

## Remanufacture







# Renewable energy





#### Remanufacture



To make old products and parts just like new ones, or even better! Remanufactured products work as well as brand new and often come with a discounted price and good warranty.



## Renewable energy



Energy that comes from the earth that won't run out for a long time.

Some examples are wind, sunlight (solar), water (hydropower), heat from the earth (geothermal), and gas from breaking down natural stuff (biogas).





# Renewable resources







What does it mean to...

## Repair





## Renewable resources



Natural materials from the earth that can be made again quickly enough, so we don't run out of them.

Some examples are cotton, hemp, corn, wool, leather, things left over from farming, nitrogen, carbon dioxide, and sea salt. To use these materials in a circular economy, we need to make them using ways that help nature grow and become healthy again.



#### Repair



To fix a broken product so we can use it again.





# Repairability





## Reuse



### Repairability



How easy it is to fix a product or a part when it's broken.



#### Reuse



To use something over and over again by only making small changes to it, like cleaning after use.





# Reverse logistics







What is...

# Sharing





### **Reverse logistics**



A way that companies who make and sell products can keep their products and materials in use for a long time. After you buy and use the product, the company will take it back so it can be either fixed, cleaned, reused, made better, or recycled. Example: buying a cell phone and then bringing it back to the store later for recycling or refurbishment.



### **Sharing**



When different people use the same product many times. This means that people don't need to buy as much new stuff which reduces waste and precious environmental resources.





## Virgin materials





## **Zero Waste**



### Virgin materials



Natural materials from the earth that have not been used yet to make products. Some are things we can't make again easily, like iron ore from the ground. Others are renewable, like newly made cotton.



#### Zero waste



Saving the earth's resources by making things responsibly, reusing them, and making sure nothing harmful goes into the environment.



### Virgin materials



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#### Zero waste



Saving the earth's resources by making things responsibly, reusing them, and making sure nothing harmful goes into the environment.

