Futures Cards.

Transport and Mobility

Car Free Towns

Imagine if... towns and city centres were car free. In the UK, one-third of carbon emissions come from transport, with private cars contributing the most. What could we do with all the extra space?

This is already happening in many cities across Europe.

All Cars Electric

Imagine if... all cars were powered by electricity rather than petrol. There are already 260,000 electric cars in the UK, as well as 535,000 hybrid cars (electric & petrol).

Several car makers have committed to stop making petrol cars before 2030.

Autonomous Taxis

Imagine if… nobody owned a car. When you wanted to travel you used your phone to call a autonomous taxi to pick you up and take you to your destination. This would remove thousands of parked cars and make space for other activities in towns.

These cars are being tested on roads today.

A Bicycle Friendly Town

Imagine if… your town was designed for bicycle use more than cars. Imagine if bicycle lanes gave bicyclist priority over cars and made it safe for everyone to use their bikes.

Many towns are taking this very seriously, and succeeding (17% increase in cycling from 2019 to 2020).

Futures Cards.

Eating

Vertical Farming

Imagine if… rather than growing food on the ground it could be grown vertically. This way, much more food could be grown in urban areas and reduce food miles and water use.

Called vertical farming, this is already competing with traditional farms.

Becoming a Flexitarian

Imagine if… we chose to eat more plant-based meals and reduced fish and meat in our diets. This could have many benefits for health and animal welfare, not just reducing emissions. If every family ate one extra vegetarian meal each week this would result in the equivalent of 16 million less cars on the road.

Protein from Insects

Imagine if… insects provided our protein. Insects are a very high source of protein and can be grown in a small area, unlike cows, pigs and sheep. Many people already eat them, in fact 2000 species are eaten worldwide. Crickets produce 80% less methane than cows. So about your next burger is made from insects?

Reducing Food Waste

Imagine if… all the food we grew was eaten. Roughly one third of the world's food is never eaten, which means land and resources are used, and greenhouse gases produced unnecessarily.

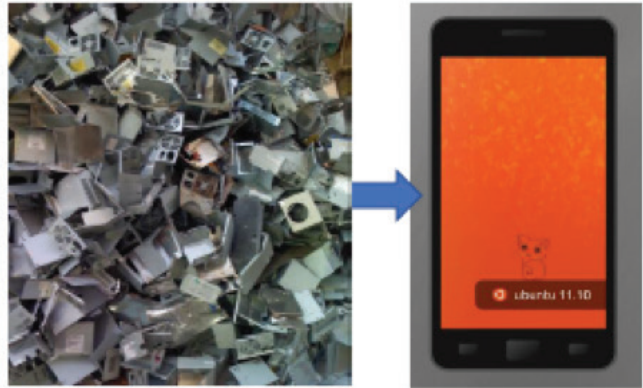A 50% reduction in food waste could reduce carbon emissions by 10 gigatons by 2050.

Futures Cards.

Shopping and Consuming

Nothing was Thrown Away

Imagine if… everything we bought from computers to carpets was made to be taken apart and remade. Then the computer of today could become the table or chair of tomorrow.

Called the Circular Economy, many firms are already planning how to do this.

Renting Clothes

Imagine if… the next time you needed clothes for a special occasion, rather than buying them you rented them. Rental services for clothes are appearing in many towns and cities. Currently, fashion accounts for 10% of global carbon emissions and nearly 20% of wastewater.

Mushroom Packaging and Coffee

Imagine if… packaging was made to be thrown away. Unlike plastic, packaging grown using mushrooms can be simply composted and is low in carbon emissions.

You can also use waste coffee grinds to grow mushrooms which are high in protein, further reducing waste.

Bacteria Eating Waste

Imagine if… our plastic waste was eaten by bacteria. Rather than using expensive, and polluting, machines to deal with our waste, scientists have discovered a type of bacteria that eats plastic. There is a lot more research to be done, and it will be at least 10 more years before you will be able to feed your plastic bottles to bacteria.

Futures Cards.

Energy

Algae Fuels

Imagine if… instead if digging oil from the ground we 'grew' oil instead. As algae grows it takes CO_2 from the atmosphere. The algae can then be used to create a biofuel to replace petrol in cars. When biofuels are burnt CO_2 is released – but much less than petrol. There is still a lot to learn but it could be a significant help.

Wind Power

Imagine if… we all owned a wind turbine. Public support for wind power is high, but some people do not want wind turbines near to their home. Wind already supplies 25% of UK electricity, could we all help to buy more wind turbines? And even place them at sea rather than next to houses?
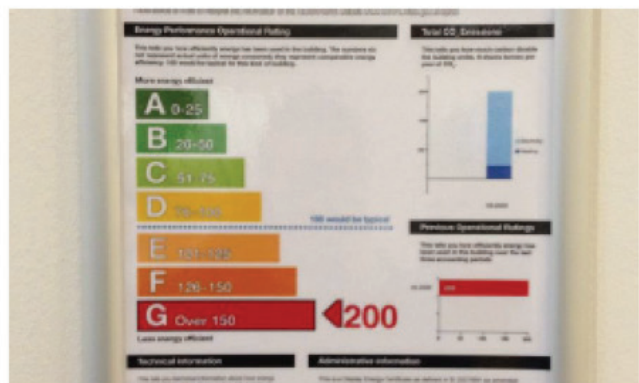

Carbon Credits

Imagine if… if everyone had their own carbon allowance. Carbon credits mean everyone has the right to use a fixed amount of carbon each. For example, if you want to take a car journey you will need to use some of you carbon credits – more if it is a petrol car. They already used by the EU to encourage businesses to reduce carbon.

Energy Efficiency

Imagine if… we could do the same things with less energy. Designing products to use far less energy will help us keep using the devices we love but with far less energy. All modern appliances include an energy efficiency rating – look out for A+ rated products.

Futures Cards.

Buildings

Cooling by Termites

Imagine if… we learnt lessons from nature. Termites cleverly keep their mound at a constant temperature with no external power source. Architects have copied this to design buildings which cool air as it enters buildings and keeps the people in side cool.

Air Source Heat Pumps

Imagine if… we can use the air surrounding our houses to heat them. Air source heat pumps extract heat from outside air to heat your home and hot water, even when the temperature is -15°C. Heat pumps could reduce CO_2 emissions by 80% if renewable energy is used.

Bricks from Fresh Air

Imagine if… building bricks are grown. Cement is the source of 8% of global carbon emissions. The company bioMASON have been inspired by coral to grow bricks. They use bacteria to grow cement, which when mixed with sand in a mould creates a new brick.

Insulation

Imagine if… all the heat we produced stayed inside our homes rather than leaking outside. Insulating floors, walls and lofts, together with better windows, could reduce heat loss by 50%. And if this happens, we will need less energy to keep our homes warm.
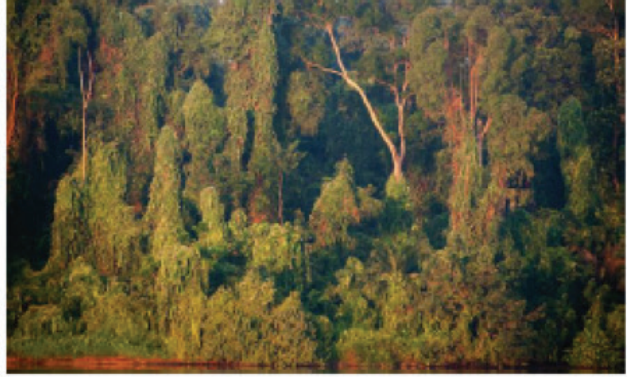
Futures Cards.

Wild Cards

Restore Tropical Forests

Imagine if… we double the area of tropical forests on the planet. They used to cover 12% of the land area but now cover only 5%. By restoring more tropical forests we are restoring their function as carbon sinks, and supporting biodiversity, the wate cycle, conserving soil, producing food, medicine, and providing places for adventure.

Greening Cities

Imagine if… rather than concrete we created urban forests and meadows. Greening our towns and cities can help to keep us cool, improve habitats for humans and animals, and plants also reduce harmful air pollution. Imagine walking to school everyday through a woodland rather than a pavement.

Climate Silence

Imagine if… everyone talked about the climate crisis. Despite knowing how serious the climate crisis is, we do not talk enough about it. One reason is that too much negative news is not attractive. Can we produce positive stories about how tackling the climate crisis will lead to better lives for everyone?

Better Cooking Stoves

Imagine if… around 3 billion people cook on open fires or basic stoves using wood, charcoal and animal dung. These cooking practices release 2-5% of all greenhouse gas emissions. Providing these people with advanced biomass stoves can cut emissions by 95%, making them better for the planet and healthier for their users.

Futures Cards.

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Web resources for teachers to explore more

More ideas from - **https://drawdown.org/solutions**.

Zero Carbon Britain reports (Making It Happen – see postcards from the future) - **https://cat.org.uk/info-resources/zero-carbon-britain/research-reports/zero-carbon-britain-making-it-happen/**