

**“RIGHT NOW WE ARE  
FACING A MAN-MADE  
DISASTER ON A  
GLOBAL SCALE, OUR  
GREATEST THREAT IN  
THOUSANDS OF YEARS:  
CLIMATE CHANGE. IF WE  
DON'T TAKE ACTION,  
THE COLLAPSE OF OUR  
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EXTINCTION OF MUCH  
OF THE NATURAL WORLD  
IS ON THE HORIZON.”**

*-SIR DAVID ATTENBOROUGH*



# THE POLITICS OF CLIMATE CHANGE

We are all aware how important of an issue climate change has become. It matters to us, The Collective, as young adults. But this is an issue which impacts each and every one of us. There are thousands of climate activists and many everyday people who are doing their bit. Change is happening amongst the people, but is it truly happening with those in power?

Politicians - they are some of the most powerful voices in the democratic world, with the ability to affect domestic policy. Yet only a small minority seem to be pushing for the change the world needs. In UK parliamentary debates, the phrase 'climate change' has been said over 19,000 times. So why has so little been done?

There are 1,200 climate change policies worldwide affecting 164 countries, but this doesn't seem to be enough. Stronger policies need to be introduced and more effective climate change acts need to be signed. We made progress with the Paris Agreement in 2015, which stated that the increase in global temperature should be kept below 2 degrees in order to combat the threat of climate change, but more should be done to prevent this from happening.

There are a total of 5 institutions that are concerned with climate change. The World Meteorological Society, the Intergovernmental Panel on Climate Change, UNEP, the United Nations, and the United Nations Framework Convention on Climate Change (UNFCCC). Each of these organisations have been set up solely for the purpose of reducing the effects of climate change or working towards meeting environmental goals. The most recent and arguably most prominent of these is the UNFCCC. Set up in 1992, it was brought about by the

signing of an agreement by every single Member State of the United Nations. Yet, there is so much more yet to be done.

The UK has agreed to have net-zero carbon emissions by 2050, but even the 2030 target does not seem to realistically reflect that goal. In fact, the UK government has only achieved 1 out of 25 critical goals needed to get emissions back on track. Our government still appears to promote air travel, cars and home essentials such as heaters and cookers that are not eco-friendly, because concerns with today's economy takes precedence over tomorrow's crisis. They claim to be one of the countries leading the fight against climate change, and yet we see such little progress. There are options that the government could endorse instead, such as boat and train travel instead of air travel, which Greta Thunberg proved was a viable choice last year. Funding for greener infrastructure such as trams and eco-friendly busses could be increased, and domestic policies and laws which actually make a difference in waste reduction, recycling, water conservation and greenhouse gas emissions should be introduced. There are plenty of financial excuses to avoid this: It will cost more money for the government to make these changes; these changes will affect taxes; funding for national essentials such as the NHS will be diminished. However, according to Cambridge economics professor Sir Partha Dasgupta, the government could risk paying far more to reverse the damage of climate change, than it would to fund efforts into preventing further progression. According to Dasgupta, if we do not wish to face such a financial burden as a country, we must act now in order to limit the cost. Avoiding this issue will only worsen it.





There is also concern that an alteration in government policies could cause a huge change in peoples' day to day lives. In May 2019, the UK had its first week of electricity, which was not produced from coal, in 100 years. Nobody noticed. We still powered screens and kettles just the same. The only real change the British public will have to make is the switch from fuel to electric cars, and to more efficient fridges and heaters. If worldwide governments made these things more desirable and more easily accessible, we would be one step closer. If our government made a bigger commitment to clean energy sources, such as wind and solar power, we would be one step closer. If just as much was done for our environment as Brexit and the NHS, we could become carbon neutral in just 30 years time. This is not to say the world governments are doing nothing. The issue is that current actions on the whole are not quite enough. Britain has said it will introduce a ban on new petrol and diesel vehicles in 2040. Could it not be sooner? Most countries have some kind of goal or aim for their climate future, yet only 2 countries currently comply with the Paris Agreement. 43% of countries that are actually achieving their goals are amongst some of the least developed in the world. For example, Morocco, one of the countries who does comply with the Paris Agreement, has invested in more efficient water networks and flood defences. Shockingly, there are 25 countries that are below compatibility, more than half of which are among the most developed in the world, the UK included. This proves that we could do far more than we are currently, as our efforts are bested by countries with far less means and a much weaker economy than ours. At the Copenhagen Accord, Britain was asked for its targets for 2020. We said

that our emissions would be 20-30% below our 1990 statistics. On the condition that developing countries commit to comparable efforts, and developing countries contribute to the best of their capabilities. Why is it that now we are so far behind them?

The reason is simple, as they are growing, they do so with the goal of climate change in mind. We need to knock down and rebuild our approach to climate change as a highly developed country with an infrastructure that works. This would mean the government changing its focus from issues such as Brexit, to creating better public transport, using more sources of clean energy and re-growing areas of forest both nationally and overseas. Large scale change is taking place, but the way it is done, the rate at which it is done, and its effectiveness must be improved. It may be difficult to feel optimistic about this. One of the World Wildlife Fund's lead climate change scientists, Chris Weber, said "the difference between possibility and impossibility is political will". The shift our society so desperately needs, has to come from those in power, and as a democracy we have the power to bring this about.

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# LIFE IN PLASTICS

'Today we use plastic - a material designed to last forever - for products designed to last minutes.' - Upstream, founded by Dr. Bill Sheehan and Helen Spiegelman.

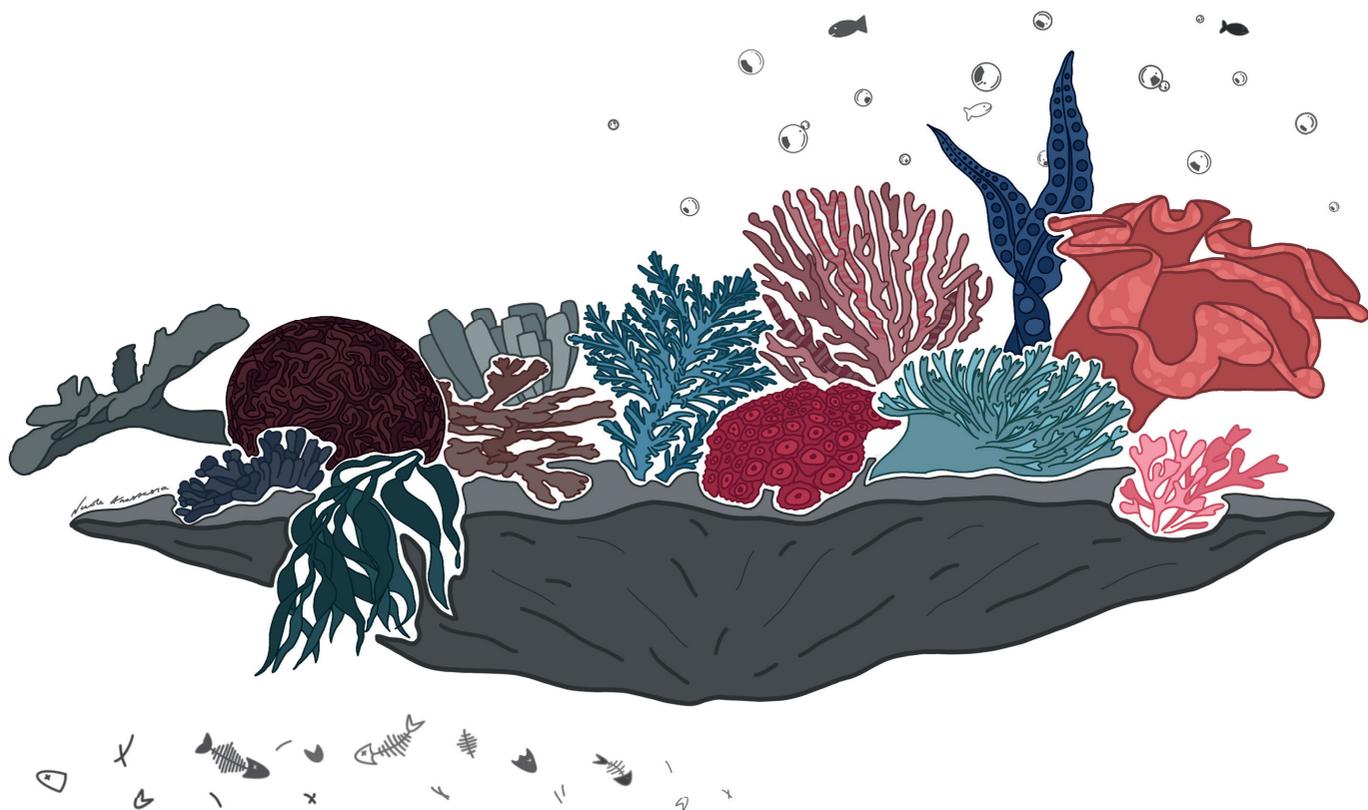
Plastic is a very versatile substance. It enables many aspects of our lives to function with ease, at low costs, and with little effort. However, the cost this has for our environment is huge.

Plastic takes lifetimes to biodegrade. This means that just one plastic drinks bottle, if not recycled, will take anywhere from 70 - 450 years to degrade. In some cases, this could even extend to millions of years. Shockingly, some plastic that was produced in 1852 (the time plastic manufacturing started) is still damaging our Earth today, over 150 years later.

Annie Leonard, GreenPeace, said "There is no such thing as 'away'. When we throw anything away, it must go somewhere." This is true for plastic waste. There are two main ending points to the journey our plastics take once we discard them: landfills and oceans. Up to 12.7 million tonnes of plastics enter our oceans each year, according to figures published by the American Association for the Advancement of Science. The Ocean Cleanup, a project dedicated to ridding the ocean of waste, estimates there are 3 trillion pieces of plastic waste in the ocean today. That's a whopping 44,800 pieces for each person in the UK. The sheer scale of this issue takes great toll.

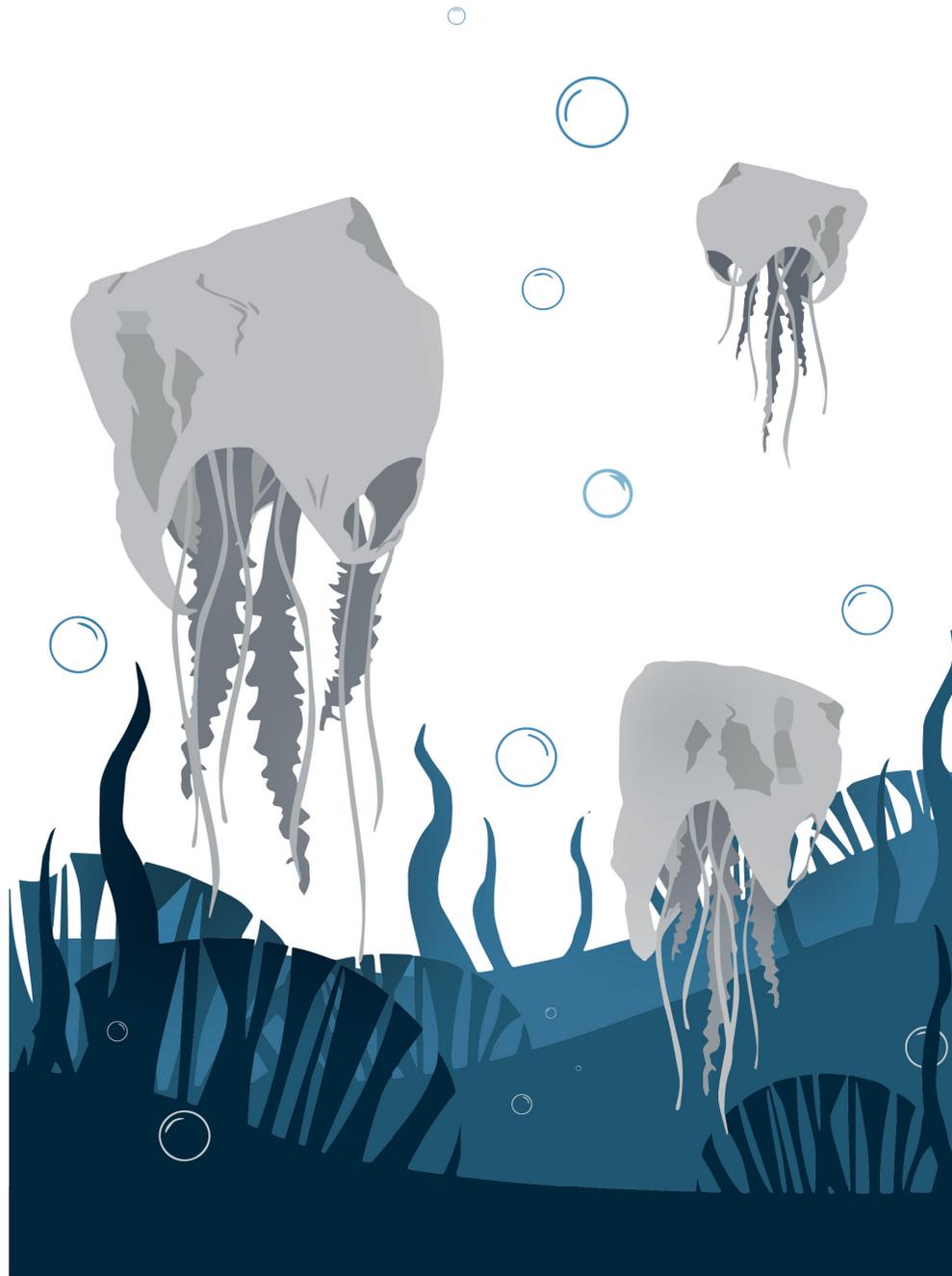
## 1. DEATH OF SEA LIFE

Scientists estimate that 60% of all seabird species have eaten plastic, a figure they predict will rise to 99% by 2050. As with sea turtles and other marine life, when seabirds ingest plastic, their digestive system cannot function, meaning they starve. As a result, up to a million seabirds die each year because of plastic waste alone. In order to stop these deaths from rising, plastic needs to stay out of our oceans.



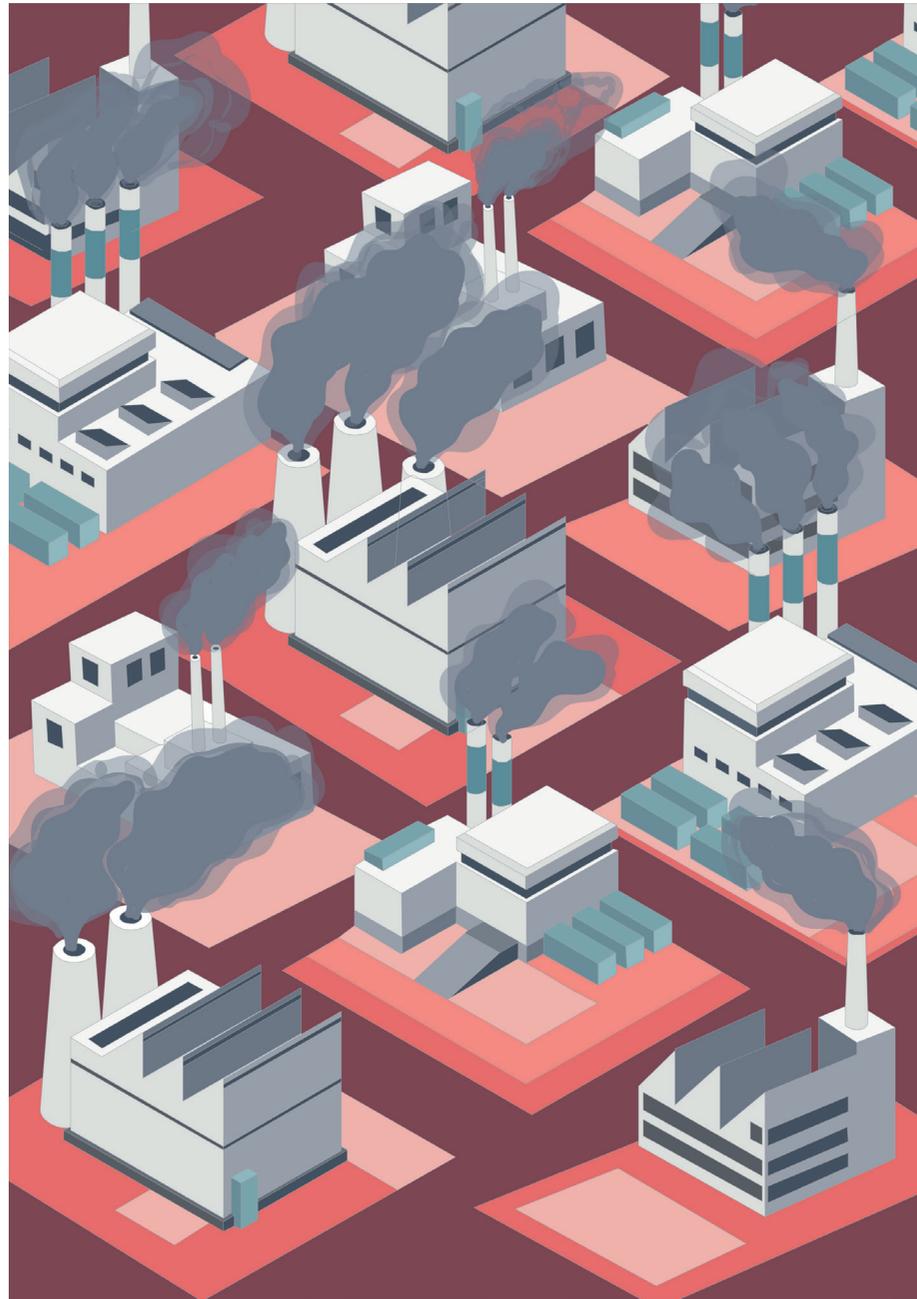
## 2. MICRO PLASTIC

It's not only sea animals that ingest plastic, we do too. This is because of a huge rise in micro plastics, which are broken down plastics that have entered the food chain. Micro plastics are fragments of plastic less than 5mm in length, but most are tiny particles. Despite being tiny in size, they are massive in number. It has been estimated that there is more micro-plastic in the ocean than there are stars in the Milky Way. The main concern of scientists worldwide is the rate of human consumption of micro-plastic. The first study on human ingestion of plastic pollution found people eat at least 50,000 plastic particles a year, though the health implications of this are still unclear. In 2017, a study out of kings college in London hypothesised that the cumulative effect could be toxic, especially on the gut and the immune system. An ecotoxicologist from Canada describes plastics as having 'multiple personalities' as they're made up from a number of different materials with different chemical additives, so some may be toxic while others may be vehicles for bacteria and parasites to enter the system.



## 3. BI-PRODUCTS OF PLASTIC INDUSTRIES

The Plastic industry is one of the most greenhouse gas intensive industries in the manufacturing sector. In 2019, an estimated 850 million metric tonnes of greenhouse gas entered the atmosphere, solely from the plastic industry - which is still the fastest growing. By 2050, the accumulation of these gases will account for up to 13% of the total remaining carbon budget - the amount of extra carbon the planet can tolerate before global warming goes over 1.5 degrees - the danger line. We must take action.



When exposed like this, it seems ridiculous to keep mass producing plastic, however, 300 million tonnes of new plastic are still created every year. To make matters worse, most of it is not recycled. In 2016, 480 billion plastic bottles were sold, yet only a measly 7% of that was recycled, leaving the rest to landfill and the oceans.

These issues highlight the severity of the fault in our consumer system. Yet, the mass production of single use plastic has become normalised in our 'throw-away' culture. This highlights the need for a cultural shift in our consumerism. Large companies, such as Coca-Cola and Nestlé are where major change needs to take place in order to see improvement. Though as consumers, ourselves we have the ability to work against this currently dysfunctional system.

The urgent change we need can be brought about by small and large acts. Whether it's a change in creating more sustainable buying habit, or signing petitions to promote change in businesses, change, on any scale, is valid - and most importantly necessary for every one of us.

# LOSS OF SPECIES

What is it that we value? This is a question that we, as individuals and as a society, should ask ourselves. Is it the freedom to take in fresh air in the morning? Our incredible NHS? The love of a family pet?

Is the survival of Earth's species something that comes to mind? If not, you aren't alone. Species are dying, and their extinction brings only detriment. But we see no effect of this on our day to day lives. This is an issue which seems as distant from us as the animals affected. But the rapid rate at which we are losing species is shocking. It is estimated to be between 1000 and 10,000 times higher than the natural extinction rate. Our planet's ecosystem is struggling.

We have been aware of the issues extinction brings since the 90s, yet too little has been done to stop it on a wide scale. We made more buildings, skyscrapers, new model cars, rockets, planes and smart phones, but we could not put a stop to animal extinction.

Many beautiful species are diminishing right before us. Take the Amur Leopard, for example. Few people have seen them in the wild, which comes as little surprise as there are so few of them. Amur Leopards have been critically endangered since 1996, and now there are only around 100 left in the wild. But why should this be a concern? They are valued mainly for their fur, but the value of their lives is often overlooked. Amur leopards are at risk mainly from poaching, and have their fur traded illegally.

An undercover investigation in 1999 recovered a female and male Amur Leopard skin, which were being sold for \$1000 in a village in Russia. Agricultural land and villages surround the forests where the leopards live, making these prime areas for hunting. These beautiful creatures are not only at direct risk, but they are starved as a result of humans over-hunting their prey, such as roe deer, sika deer and hare. Over the years, Amur Leopards have also suffered because their habitats have been gradually destroyed by unsustainable logging, forest fires, road construction, farming and industrial development. By doing these things, we create the illusion that we create a better, more developed world, but have previously failed to see the destruction caused. So why do we carry on with such harmful practices?



Leopards obviously are not the only species affected. Elephants have been facing a massive decline over the years. The African Elephant population has fallen drastically from an estimated 12 million a century ago, and in recent years, at least 20,000 elephants have been killed for their tusks in Africa every year. Their greatest is wildlife crime, primarily poaching for the illegal ivory trade, whilst the greatest threat to Asian elephants is habitat loss, largely due to the expansion of human settlements. This encroachment onto elephants' land leads to them destroying crops and property, as well as occasional human casualties, meaning innocent elephants are often killed in retaliation. Elephants are one of the top 5 species at risk, despite their numerous benefits to our ecosystems. They have many positive influences on our world, as they help to maintain balance in forest and savanna environments, meaning they are integral to the survival of many other species around them. With their incredible strength and capabilities, they make pathways in dense forests which allow passage for other animals. One elephant footprint can also enable a micro-ecosystem that, when filled with water, can provide a home for tadpoles and other organisms - a small example of the huge role they play as the backbone of their ecosystems. The loss of one species is never as simple as it seems. We must remember that we cannot survive without the other species that we share our planet with.

Human-caused extinction affects the biodiversity of our planet, and disrupts food chains, which will have an eventual knock on effect for certain populations of the world. There are those who destroy the habitats of animals to build ones for ourselves. Some will take animals' lives to supposedly luxuriate their own. This cannot be allowed to continue. So, what do we do now? Where do we go from here?

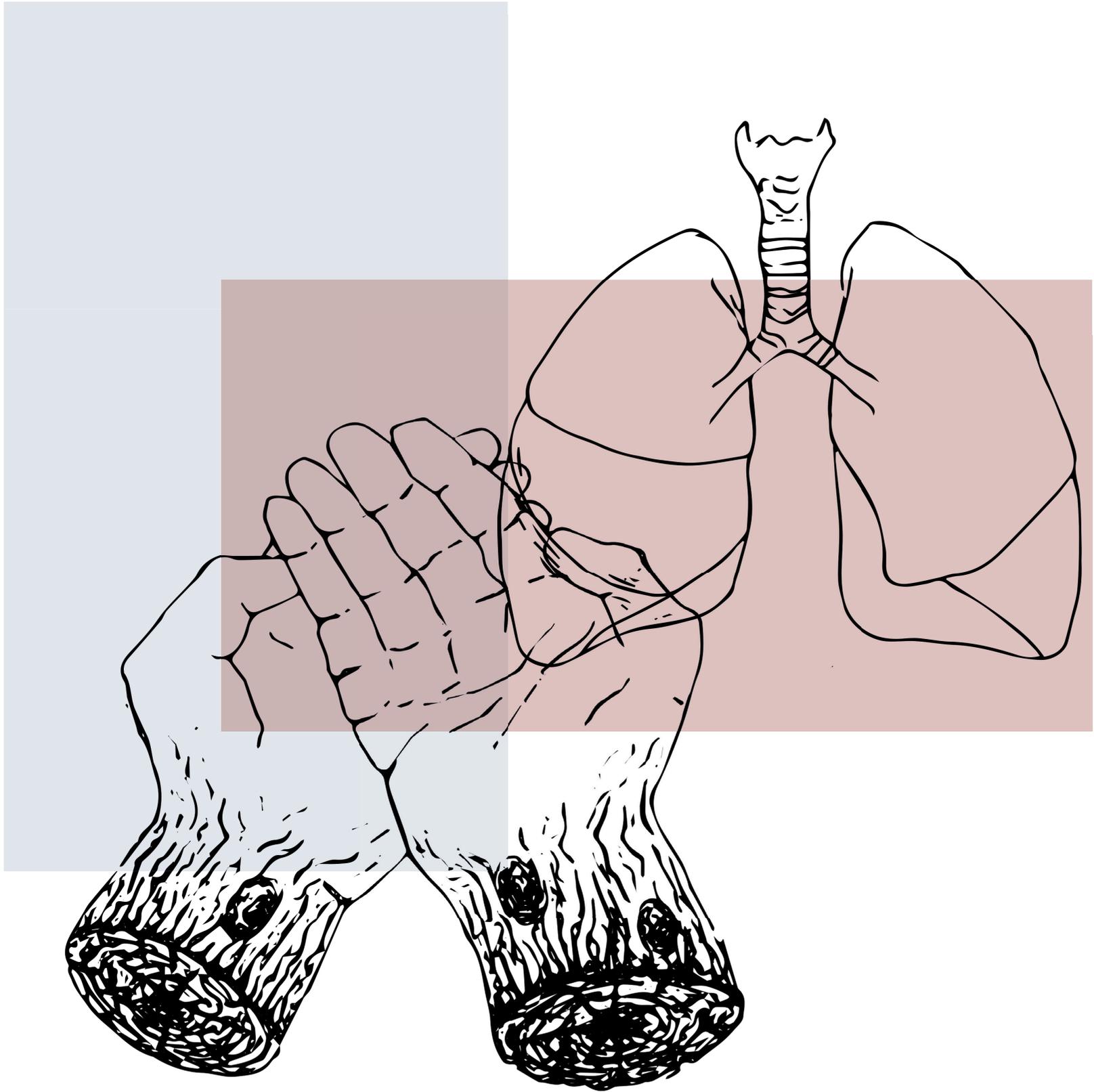
The animals named in this article were only two of the millions that are at risk! We are not heartless; and we have the power to do something about this tragedy. Now is the time to act. Donate. Adopt. Raise awareness. This is a plea to stop the dangerous path we are going down. Currently, other animals are dying, species are becoming extinct, one by one. What we must understand is, if we carry on, it will be us facing extinction one day. This is not just a crisis - it is an opportunity. Every new day is a chance for change. A chance to save the what we have left and nurture what could regrow. We must take a stand for all life, not just our own.

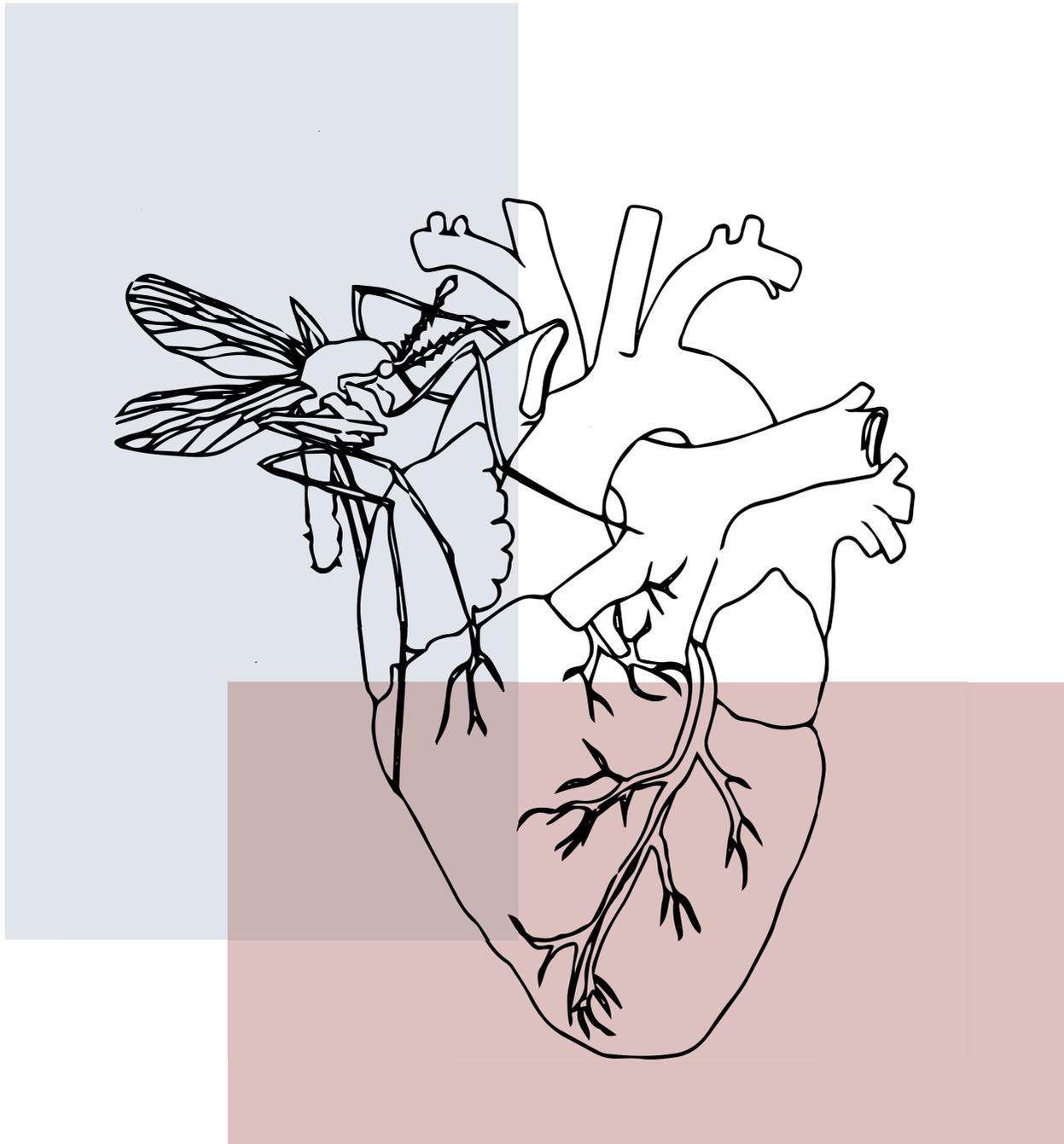
# THERE IS HOPE

We used to look forward to the summer, back when we experienced that lovely warmth. Now, only scorching heat buckles tarmac, and melts shoe soles as they trudge along. Once, summer was a time of joy. It was a time of relaxation. But the season has become littered with the graves of those who succumb to the new world we now inhabit. We tell of a time when sunshine didn't pierce through the thick atmosphere like incendiary bullets, setting forests ablaze by the acre. The sun gave life; didn't take it. Life in England had its flaws, but when our primary concern was the electric bill, rather than finding today's drinking water for our children, and where to find tomorrow's, we were safe.

I have a child - just one daughter, who will never have a younger brother, or the chance to play with a sister. Raising a child takes resources, which are luxuries we can no longer afford. As such, each family is allowed only one child by law, making each and every one of them all the more precious - especially mine. Young and fragile, the extremity of this desperate survival is all that she knows. I yearn with a strained heart for her to experience the childhood of which she has been robbed. I long for her to experience what were once the pleasures of youth; for her to frolic in gardens, at liberty to discover the joys of the outside world, but this is a mere afterthought, of a life which was all too perfect, and all too fragile. My conscience halts me every time I consider opening the door, for I know of the dangers that lie outside. It happens maybe every week or so. We stand outside of makeshift schools, if we are lucky enough to have them, making small

talk with another parent, awaiting the return of their treasured child, who eagerly appears as soon as the door opens, and runs, to be hand in hand with their guardian again. The next day, the parent does not arrive, and we make idle suggestions and false excuses for this, to distract from what we know happens. A week goes by, and our friend has never returned. We say nothing. It is clear that they have no longer a child to collect. Malaria. Zika virus. Dengue fever. Threats that were once bound within distant, foreign lands now loom over our vulnerable souls day and night, taking our loved ones as they see fit. Our society has begun to break, and centuries of progress are becoming undone. We can no longer fight.





I have vague memories of my grandparents. My maternal grandfather lived in a home by the beach - a humble abode, simple and elegant - which, like the homes of many others, now sits below acidic seas. We would visit him when I was young. His hands, wrinkled like the bark of a wise, old tree, once held my face as if it was the most precious diamond on Earth. A gleeful smile lit up as bright as the stars as I toddled towards him, and a deep, hearty laugh would emerge. I miss that sound. To my infant self, he was the purest image of kindness. I still reminisce of my grandfather's jovial nuances, but a prickly bitterness that now rises in my chest whenever I think of that time. Could they have known? Were they aware that the planet was collapsing around them? Did they know, the ones before me, that we would suffer when they were gone? Efforts for our future were made, but not enough. I remember, before the damage had progressed to breaking point, there were two obvious sides of the argument: those with their fists in the air who rose up and said, "Move" and those with their feet glued to the ground who replied, "No." But there was a third group, who weren't in the argument at all. There were those who did neither, the ones who did nothing. It was the passive response of the majority which meant too little was done, far too late.

But that no longer matters. That generation is long gone, having died blissfully ignorant of the meteorological menaces we face today. They cannot help us beyond the grave. We remaining few can only help ourselves.

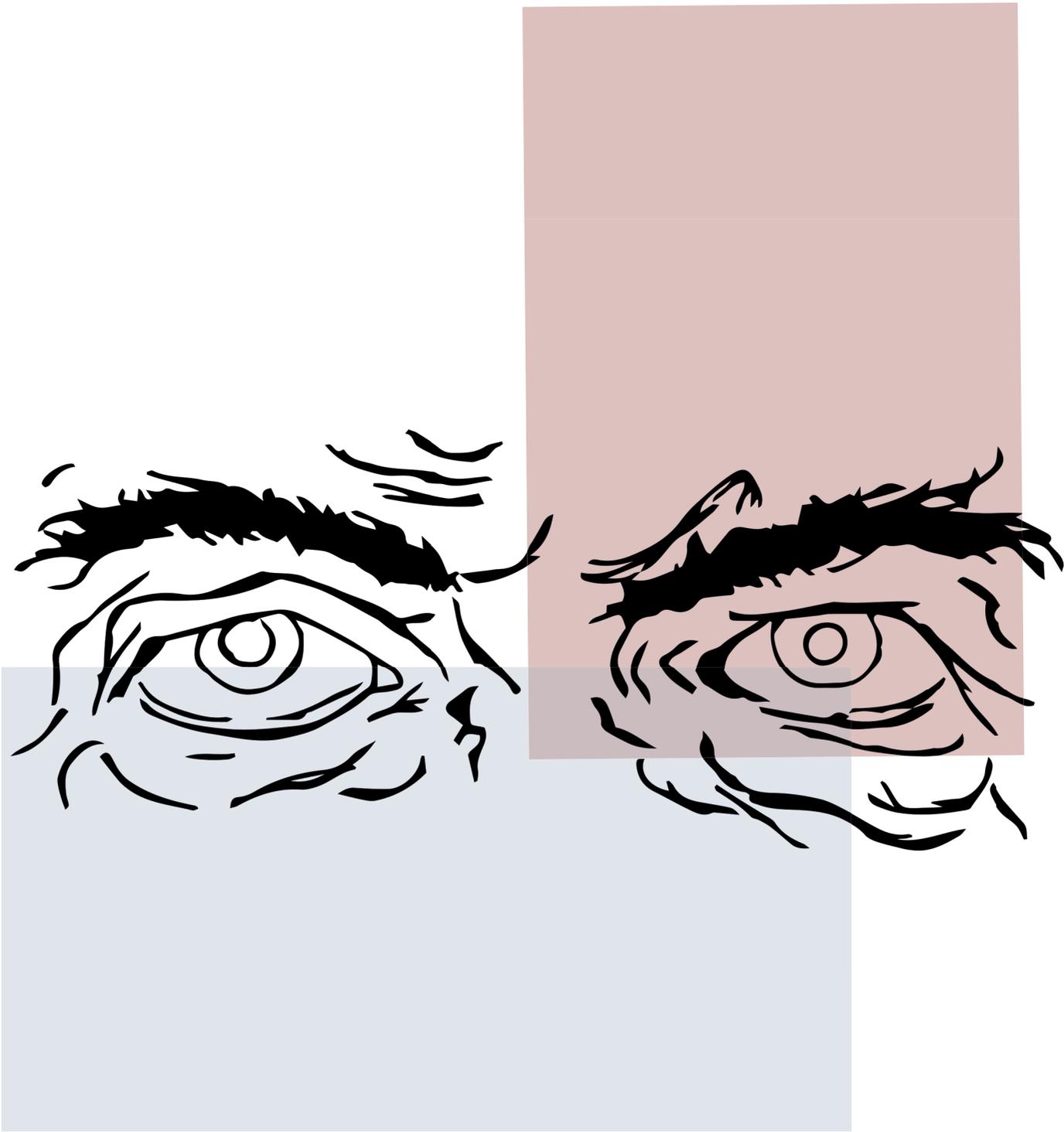
# So we do as we must:

We live rationed lives, in limited space. Those who lived on land swallowed by the ocean, consumed by the climate, or rendered inhospitable by pollution had no choice but to flock in masses to the remaining safe places. We accommodate the climate refugees as best we can, and recruit many to work, but the conditions here are tough. The authorities have slowly but surely enforced the abandonment of unsustainable energy production. The fit and able volunteer free time, working towards the establishment of new energy sources; wind turbines, water dams, solar panels, whatever we can manage. The average global temperature has already risen to a debilitating degree, and we cannot allow it to rise any further. We make do with much less meat and fish, and the small supplies we do have are reserved for those whose health is at risk without it. The impact of meat industries on the environment is far less severe than it once was. Each and every one of us has a hand in

creating a better future. Everybody recycles. Everybody uses only what can be sustained. We waste nothing. It feels trivial sometimes, these efforts which so dictate the way we navigate our lives. It sometimes feels like it is all being done in vain - that we make no difference anyway. It's as if the fear in our minds is making fools of us, playing puppets with us to laugh at how desperately we want to live, and the extents we can be driven to for this.

But listen, when I feel this way, I take one look at my daughter. I look into her eyes which glisten more pure than anything this world has seen in a long time. Our planet could still be a beautiful place for her. There could still be a life of wonder out there, shrouded by the thickness of the atmosphere. I catch a glimpse of it every time I see her smile, or hear her laugh. In these moments it could not be more clear that there is hope in her. This is why we fight.

# There is still h o p e for her.



# THE BEGINNING OF A JOURNEY

Despite all this, it is important to us that we shine a light on some of the positive steps taken towards improving our climate. Some key areas which have seen advancement are:

## CLEAN ENERGY:

In this modern age of technology and advancement, our society is very reliant on energy. Energy which requires the burning of fossil fuels, such as oil, coal and gas which release harmful carbon dioxide, and other greenhouse gases, into the atmosphere. However, a recent advancement has had a greatly positive impact on our environment. In 2019 Britain achieved a 'historic milestone' in our clean energy system, with significantly more energy being generated from zero carbon sources, such as wind and hydro power, rather than fossil fuels. This has made the UK's target to achieve net zero emissions by 2050 more achievable, addressing the rising challenge of global warming. Already electricity from our latest inter-connector with Norway is 100% zero carbon. This connects the National Grid to Norway's biggest hydro-dam, known as Europe's 'green battery', as all electricity generated is from zero carbon sources. This massive step in clean energy advancement is to be greatly celebrated as our country's efforts towards a cleaner way of living are flourishing.

## MASS SCALE DEFORESTATION:

In a society that constantly producing and expanding, we use a lot of the Earth's resources. As a result, a massive 200,000 acres of forest are cleared each day, which is on average 55,600 trees being destroyed every minute. This devastation kills animals, plants, increases CO2 levels, all contributing to global warming. However thanks to the efforts of organisations and charities such as The Tree Council (the UK's leading charity for reforestation and conservation) and many other charities across the globe, approximately 1.6 billion trees are planted every year, which according to scientists is one of the most impactful and affordable ways to tackle climate change. Additionally, 0.9 billion hectares of land are not being used by humans. This means that there is currently an area of the size of the US available for tree restoration. Once grown, these new forests could store 205 billion tonnes of carbon, reducing the impact of the 300 billion tonnes of carbon that has been released into the atmosphere since the Industrial Revolution. This is ultimately a great step towards reducing our carbon footprint, and reducing the impact of climate change.



# ON A LOCAL SCALE:

Greater Manchester is taking action against climate change with the 5-Year Environment Plan, launched in March 2019. The plan sets out the long-term environmental goal, to be carbon neutral by 2038, and the actions we all need to take in the next 5 years to help achieve this. On the GMCA website it gives details about their plans for waste responsibility and recycling, clean air, and for a plastic-free Manchester, and most importantly how we can all get involved.

# PROGRESSION HAS BEGUN,

but it is of vital importance that we take active roles in facilitating the great change needed. We are not individuals fighting an issue far bigger than ourselves. We are one community, united against climate change, and together we can make the difference that will ensure our futures.

# DEFORESTATION

Deforestation is a leading factor in climate change. Forests cover more than 30% of the Earth's land, and are key provider of food, medicine, fuel and oxygen: all of which are essential to our lives. They play a key role in sustaining our planet's biodiversity, with the incredible scope of plant species held within forest land, and the creatures whose lives depend on these.

But, as is warned by the media, with increasing alarm, our forests are disappearing. More than 2.3 million square kilometres of forest land have been lost since the beginning of the 21st century alone. Most of this is due to agriculture, often to convert space for cattle ranching, or for plantations. The four main commodities responsible for deforestation are beef, soy, wood products and (the worst of these) palm oil. In order to produce palm oil, huge areas of land are stripped to meet the high demand for the cheap and versatile product, which is found in more than half of all our supermarket foods. Everything from peanut butter to Maltesers, Ritz crackers and Nutella, all use this product which is easy for industry, but takes a toll on the planet.



Another cause of deforestation is forest fires, either natural or caused by humans, the results of which can be catastrophic. As of early July 2019, Australia endured their most dangerous and largest fire yet. The unprecedented blazes brought disaster for many aspects of Australian life; more than 500 million individual animals died, with 90% of the now endangered koala population wiped out, an estimated 30 different species of animals were lost, along with 36 species of plants. These fires have taken homes, human lives, and destroyed more than 12 million acres of land, as well as bringing health issues for many, because in January 2020, Canberra, Australia had the worst air quality in the world, making something as simple as even breathing dangerous.

Similar destruction can be seen in The Amazon Rain forest, which is world's largest, at 5.5 million square kilometres, and is facing incredible threat. Around 20% of the Amazon has already been taken, and an area the size of 2 football pitches continues to be lost every minute. However, deforestation of the Amazon can be very lucrative - many industries are built around it. Without it, jobs would be lost, the Brazilian economy would be impacted, and many of the companies involved would be forced into less profitable changes they are reluctant to make. Because of this, little is done to stem encroachment onto protected land, and although there are some, too few limits are placed on continued deforestation and further destruction. WWF (worldwide fund for nature) believe more than 27% of the Amazon will be without trees by 2030, at the current rate of deforestation, which is devastating news for the 34 million people who live in the Amazon and rely on its resources, and for the animals who call it home who,

amazingly, total an estimated 10% of the entire earth's species. Not only does deforestation take food, shelter, and resources from animals and humans alike, it has great impact on our oceans. A 2018 FAO (food and agriculture organisation) report highlights 3 quarters of Earth's fresh water as coming from forested watersheds, which improve water quality and enhance water storage, naturally regulate streamflows and provide an array of other benefits. Deforestation means that none of this can occur, which poses a major threat to coral reefs. The world's coral reefs are destroyed largely due to toxic runoff (water drained from the Earth's surface) which is no longer naturally cleaned enough by trees as it should be. The runoff also clouds the water, blocking light from the reefs, causing them to die away.



# THERE IS STILL HOPE FOR OUR FORESTS.

All of this may seem quite distant from us, but deforestation has direct detriment to our lives as well - it affects the air we breathe. Deforestation is the 2nd leading cause of climate change, succeeded only by the burning of fossil fuels. Trees absorb carbon dioxide for photosynthesis, which in turn produces oxygen, and on a global scale helps to maintain our atmosphere. As climate change progresses, trees and plants play an important role in the removal of carbon dioxide. Without them, there is a huge knock on effect: our air is polluted, our temperatures will rise, ice caps will melt and coasts will flood, and our seasons will change at a more drastic rate than even before.

Organisations such as Amazon Watch, Conservation International, and Rainforest Alliance all work against deforestation. Life is resilient, and together, with the right information and a few positive steps, we can heal some of the damage caused.

# ETHICAL EATING

At the start of 2020, the world has already suffered heavy losses. Headlines have been a swarm of political jargon, bushfires and a general sense of nihilism has swept across the globe. What's the use of starting new in a society that cannot learn from its actions? This sentiment can't be expressed enough when it comes to the topic of environmental science. For decades, scientists and activists have strived for widespread change, calling for reduction of CO2 emissions, farming regulations and attention to solutions for land pollution. It's almost 90 years since British scientist Guy Callender formed what would be known as the "Greenhouse gases" model, and still we face the gravest threat of climate catastrophe yet. Fortunately, for as much nihilism as there is in the world, there are also ways that the that we, the average citizen, can help. Diet change offers an affordable, ethical, and reasonable action against climate change.

Whilst it's easy to shrug off the idea of becoming vegetarian, or even vegan, as a trendy fad taken up by moral puritans, there's a whole world of difference in farming livestock and plants. By now, it's likely that you would have heard of how methane in the cattle industry contributes to the build up of greenhouse gasses. By means of mass deforestation, cattle ranches and farmland are irreparably damaging our ecosystems. On an ethical note, the morals of killing and using animals for food are subjective, with cultures that choose to abstain from it, while others hold it dear to their heritage or lifestyle. It can't be ignored however, how the consumerist ways of the modern western world have taken over our food industries in order to mass produce on a level that is harmful to us as much as animals.

Aside from the consumption of animal products, the location from which your food is sourced can have great impact. The transportation of food from source, to supermarket, to dinner plate, produces vast amounts of Co2 - over 53 pounds per mile, via airplane. Though it would be near impossible to entirely cut out from other countries, there are still small changes that you can make to lower your food's carbon footprint. Try to buy in-season fruit and veg, or pay your local farmers' markets a visit, they're likely to produce less Co2 and plastic waste, not to forget that you'd be putting money back into your local community.

Another important factor to be addressed when discussing ethical eating is food waste. In the UK, around 7 million tonnes of food is thrown out each year - from households alone. This is a waste of money and resources which really we aren't in a position to spare. There are a few ways to avoid this, however: finish your leftovers; avoid buying perishables in bulk (even if they're on offer); donate food you won't eat to a food bank; and always dispose of food waste into the food waste bin or compost!

It's important to remember that small changes do make a difference: demand for meat-free food in the UK increased nearly 10 times over in 2017. This demand means food companies are more inclined to produce and distribute plant-based products instead of meat, meaning the rate of animal slaughter drops. We are making a difference, and any change - from local shopping to a full vegan overhaul - is key in improving our future.



# WALK MORE.

Reduce your carbon footprint and walk more short journeys. Not only will you reduce greenhouse gas emissions, and traffic congestion, there are numerous physical benefits too.

Alternatively, cut your CO<sub>2</sub> levels by 85% and opt for the bus over a car.

A car produces 89 pounds of CO<sub>2</sub> per 100 passenger miles, whereas a bus produces only 14.



# WASTE NOT.

Opt for products with less packaging. While some packaging necessary, the consistent excess we see now is responsible for a multitude of our pollutive issues.

You can reduce this with a simple switch on some daily essentials. Shops such as Lush provide environmentally friendly products in minimal to no packaging, while food markets and local stores such as the Village Greens in Prestwich provide quality sourced food - all without the excess packaging.



# OLD IS NEW.

Say no to throw away culture by purchasing reusable items. These include: reusable water bottles, cotton tote bags and metal straws.

Alternatively Instead of buying new opt for recycled. Did you know you can buy recycled pens and toilet roll?

Another option is buying second-hand clothing. Not only does it benefit the environment by reducing waste and the costs of manufacturing, but it's also a lot cheaper than buying new. Reusing clothes can even be free if you borrow clothes from a friend instead.

**Q:** WHAT IS A CARBON FOOTPRINT?

**A:** It's the amount of greenhouse gases released into the atmosphere by a particular human activity. This can be used in reference to a person, an event or action, an organisation or even an entire country.

**Q:** WHAT DO WE MEAN BY GLOBAL WARMING?

**A:** The long term rise in average temperatures of the Earth's atmosphere, widely believed to be result of human activity. This results in an altered climate, such as hotter, dryer summers and less snow in December.

**Q:** HOW MUCH PLASTIC ENDS UP IN THE OCEAN?

**A:** Up to an estimated 12.7 million tonnes, per year. We don't need to tell you, that's a lot.

**Q:** WHO CARES IF THE ICE-CAPS MELT?

**A:** According to NASA, around two trillion tonnes of ice has melted between 2003-8. This is important as it causes ocean levels to rise, taking our coastal land, while destroying the habitat of many polar animals. If allowed to progress, it could even desalinate the oceans, killing an unintelligible amount of sea life.

**Q:** WHAT ACTUALLY ARE GREENHOUSE GASES?

**A:** Greenhouse gases are ones in the Earth's atmosphere which act as a layer of insulation, causing temperature rises. The worst of these is carbon dioxide, making up 82% of greenhouse gases, and is released through burning fuels in factories and cars, as well as burning forests. Other greenhouse gases include methane, which accounts for around 10% of greenhouse gas emissions and is the most caused by the cattle industry

**Q:** CAN PROTESTING REALLY MAKE A DIFFERENCE?

**A:** Yes. Protesting can raise awareness for an issue which is all too often ignored. However we, as The Collective, do not endorse any type of disruptive protest within the college. We believe change can be brought about through far more productive means, such as campaigns, petitions and online awareness to name just a few.

**Q:** SO HOW LONG DO WE HAVE TO ACT?

**A:** We are thought to have only around 12 years left to act on climate change, before it takes an irrevocable turn. This is only if we carry on at the rate we are now, but steps can be taken against this - all isn't lost yet.



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