ALPHA 50/50: ARE WE NEARLY DEAD YET? VOLUME ONE

# ARE WE NEAR

ABEGI ANEW GEI ASPLIT

### 50/50: LY DEAD YET?

NNING. NERATION. DECISION.







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EMMA CLARKE IS A FASHION MARKETING AND COMMUNICATIONS GRADUATE FROM THE UNIVERSITY OF CHESTER. SHE EXCELS IN CREATING EYE-CATCHING VISUALS AND LITERARY CONTENT THAT REQUIRES VISIONARY THINKING AND UNDERPINS STRONG EDUCATIONAL CONCEPTS. THE CONTENT SHE IS MOST IMPASSIONED FOR IS THE SUBJECT OF SUSTAINABILITY AND CLIMATE CHANGE.

THE INTENT OF HER WORK IS TO BRING THE SUBJECT OF SUSTAINABILITY AND CLIMATE CHANGE TO A WIDER AND SOMEWHAT YOUNGER AUDIENCE, BY COMMUNICATING IT IN A CONTEMPORARY, INFORMATION DENSE AND VISUALLY APPEALING WAY TO MAKE HER GENERATION MORE RECEPTIVE TOWARDS THE CONVERSATION.

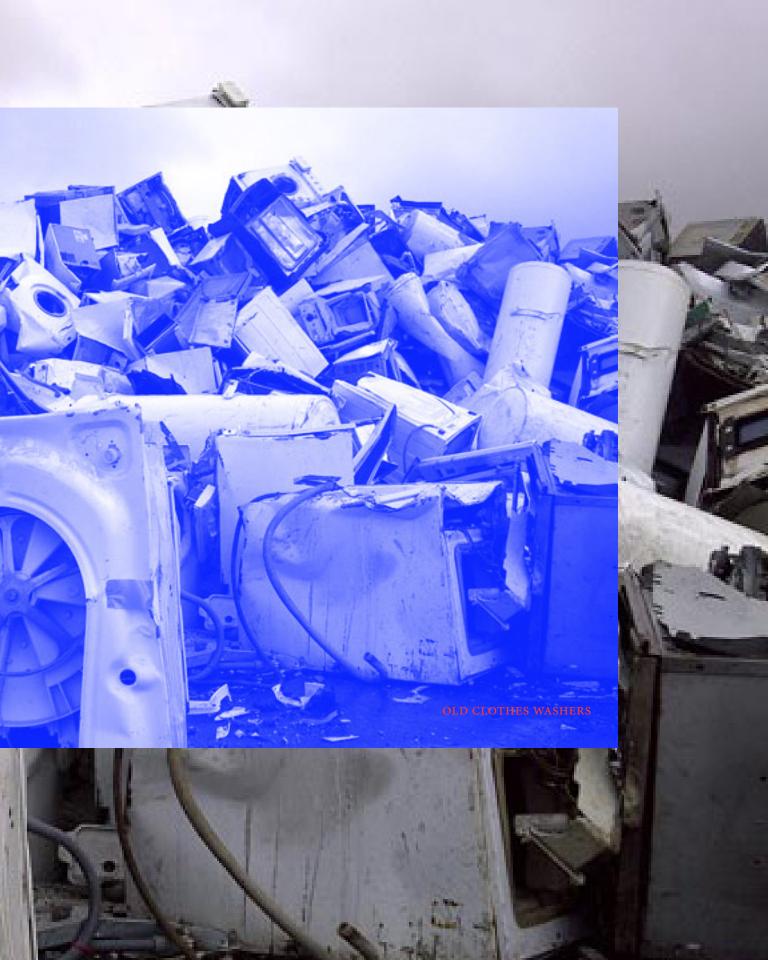
EMMA'S LONG TERM GOAL IS TO CLOSE THE DISCONNECT SOME YOUNG PEO-PLE MAY HAVE TOWARDS SUSTAINABILITY AS IT A VERY POLITICAL SUBJECT MATTER. PRESENTING ALL OF THE MOST IMPORTANT FACTS, FIGURES AND DEVELOPMENTS ON CLIMATE CHANGE IN VISUALLY APPEALING BRANDING AND A MARKETED PACKAGE WILL HOPEFULLY APPEAL TO A YOUNGER, MORE INNOVATIVE AND EXPRESSIVE AUDIENCE.

### CONCEPT STATEMENT:

ALPHA 50/50 VOLUME ONE, TWO AND THREE ARE COLLECTIONS OF EDUCATIONAL, THOUGHT PROVOKING AND FUTURE THINKING BOOKS BASED ON THE TOPIC OF CLIMATE CHANGE. THEY WILL LEAD YOU THROUGH THE REALITIES OF CLIMATE CHANGE, PRESENT TO YOU A VERY LIKELY DYSTOPIAN FUTURE AND DEPICTS, VIA VISUALS IN THE MEDIUM OF FASHION PHOTOGRAPHY AND STYLING, WHAT THE WORLD MAY LOOK LIKE IN JUST OVER A DECADES TIME IN 2030.

THE THREE VOLUMES WILL FOCUS ON THE TOPICS OF DEFORESTATION, CO2 POLLUTION AND PLASTIC POLLUTION. THE PURPOSE OF ALPHA 50/50 IS NOT FOR PERSUASION, IT IS A SPACE FOR EDUCATION.AS A COLLECTION, THE AIM IS TO PRESENT THE VITAL INFORMATION ON THE THREE TOPICS, TO INFLUENCE THE READER TO ACT NOW ON THE CURRENT ENVIRONMENTAL CLIMATE CRISIS.





# EROUGI APPLY, WILI ENOUGI

## MING IS MOT H, WE MUST LING IS MOT H, WE MUST

- Goethe.

### CLIMATE CHANGE: INTRODUCTION

GLOBALLY, WE ARE CURRENTLY IN A STATE OF EMERGENCY WHEN IT COMES TO THE HEALTH AND WELL-BEING OF OUR PLANET. WE ARE CURRENTLY FACING THE LARGEST EXERSTENTIAL THREAT TO HUMANITY SINCE THE LAST ICE AGE.

WE ARE ALL CONNECTED BY THE AIR WE BREATHE, THE WATER WE DRINK AND THE EARTH WE INHABIT. MANY BELIEVE THE PLANET BELONGS TO US, WE BELONG TO THE PLANET. WE ARE A GLOBAL COMMUNITY WHO SHARE A GLOBAL RESPONSIBILITY.

"NATURAL SELECTION HAS SHAPED ALL LIVING ORGANISMS TO EXPLOIT RESOURCES EFFECTIVELY. OUR HUMAN PROBLEM IS THAT,
THROUGH OUR CLEVERNESS, WE HAVE CREATED A NOVEL EVOLUTIONARY CIRCUMSTANCE—
WE NOW HAVE SUCH TECHNOLOGY THAT THE
VERY BEHAVIOURAL TENDENCIES WHICH WE
EVOLVED TO DO WELL ARE THOSE MOST LIKELY
TO RUIN US." HEINEN AND LOW (1992, P. 106).
THIS QUOTE BY HEINEN AND LOW CONCISELY
ENCAPSULATES THE DEVASTATING EFFECT THE
INCESSANTLY INCREASING PROBLEM CIVILISA-

TION HAS HAD ON THE PLANET IN THE PAST CENTURY. SUSTAINABILITY ISN'T JUST A MATTER FOR THE FASHION INDUSTRY – IT IS A SOCIAL, POLITICAL AND ECONOMIC ISSUE THAT NEEDS SUBSTANTIAL CHANGE, NOW, BEFORE CATASTROPHIC EVENTS START TO UNFOLD.

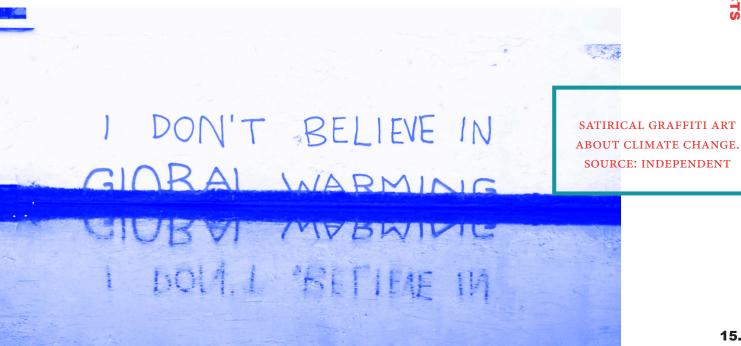
OVER THE YEARS, HUMANS CONSUMER HABITS AND HAVE EXASPERATED THE EARTHS RESOURCES, LEAVING US WITH A DEADLINE WE CAN'T IGNORE. A DEADLINE MANY SCIENTIST AND ENVIRONMENTALIST HAVE SAID THAT IF WE DON'T CHANGE OUR CONSUMER LIFESTYLE HABITS, WE ARE ON TRACK TO SET OFF A REVERSIBLE CHAIN REACTION IN OUR ENVIRONMENT THAT WILL FEED THE FIRE OF THE EARTHS SIXTH MASS EXTINCTION THAT WE ARE CURRENTLY EXPERIENCING.

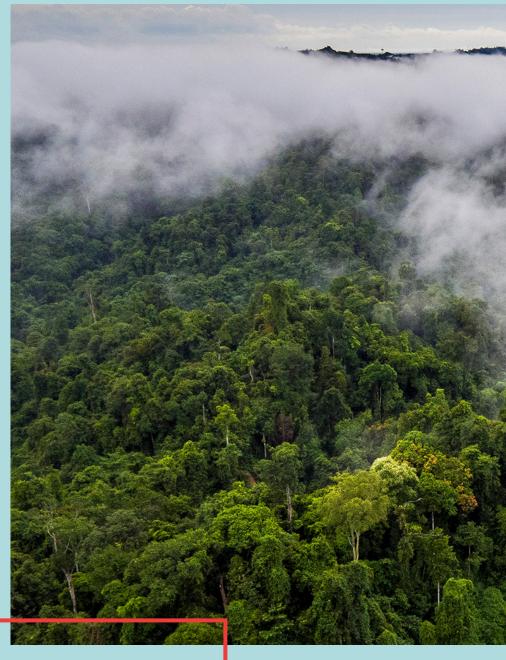
IT IS IMPORTANT TO NOTE THAT THIS IS NOT A BOOK ABOUT A PROJECTION INTO THE FUTURE, IT IS ABOUT WHAT IS HAPPENING TO OUR PLANET, RIGHT IN THIS VERY MOMENT.

MAKE A CHANGE, SO THE CLIMATE DOESNT HAVE TO.



CLIMATE CHANGE ART BY ARTIST AND ACTIVIST JOSH **MACPHEE** 





THE AMAZON PRE-DEFORESTATION.



AS A SPECIES, WE TAKE THE PLANET FOR GRANTED, MANY UNSUSTAINABLE PRACTICES WE HAVE ADOPTED ARE OIL PRODUCTION, DEFORESTATION, ANIMAL AGRICULTURE AND MANY MORE. AS AN EXAMPLE, PARASHER, D. (2016), EXPLAINS THAT BEFORE THE PRE-INDUSTRIAL ERA, THERE WAS 9.5 BILLION HECTARES OF FOREST COVER WORLDWIDE, BY 2016 THERE WAS ONLY A SCARCE AMOUNT OF LESS THAN FOUR BILLION HECTARES LEFT.

FORESTS COVER 30% OF THE WORLDS LAND AREA AND THEY ARE THE MOST FUNDAMENTAL PART OF THE ECO-SYSTEM FOR OUR PLANET TO FUNCTION. ALONGSIDE CREATING HABITATS FOR MANY NUMBER OF SPECIES, RAIN-FORESTS SUCH AS THE AMAZON ARE QUITE LITERALLY THE LUNGS OF THE EARTH, ABSORBING THE POISONOUS GAS CARBON DIOXIDE. BETWEEN 1990 AND 2016, 1.3 SQUARE MILLION KILOMETRES OF RAINFOREST HAVE BEEN CUT DOWN, AND IS CONTINUING TO BE CUT DOWN AT AN ALARMING RATE. THE THE EQUIVALENT OF 48 FOOT-BALL FIELDS ARE BEING FELLED EVERY SIXTY SECONDS ALL AROUND THE GLOBE.



THE LARGEST CONTRIBUTOR TO DEFORESTATION IS AGRICULTURE. APPROXIMATELY 70% OF DE-FORESTATION IS CAUSED BY FARMING FOR SOY, PALM OIL, COCOA BEAN, COFFEE BEAN AND NAT-URAL RUBBER. AGRICULTURAL FARMERS ADOPT A METHOD CALLED SLASH AND BURN, WHICH IS RESPONSIBLE FOR THE LOSS OF 50 ACRES OF LAND EVERY HOUR. AS THE MAJORITY OF THE RAINFOR-ESTS LAND IS PARTLY INFERTILE DUE TO A NATU-RAL LACK OF NUTRIENTS, THE ONLY SOLUTION FOR FARMERS IS TO CUT DOWN AND BURN THE FOREST AS THIS PROCESS, ALBEIT SHORT TERM, BIRTHS FERTILE SOIL AS INCARCERATED BIOMASS PROVIDES NUTRIENTS SUCH AS NITROGEN FOR THE FARMERS TO GROW WHAT THEY REQUIRE. ANIMAL AGRICULTURE IS ANOTHER TYPE OF FARMING THAT CREATES GIGANTIC LOSS TO OUR

SINCE 1960, 75% OF THE WORLDS TREES HAVE BEEN LOST TO DEFORESTATION FOR AGRICUL-

TURAL FARMING. ALONGSIDE THE DEVASTAT-ING EFFECTS ANIMAL FARMING BRINGS TO THE RAINFOREST, IT ALSO CREATES A BI-PRODUCT THAT ALSO DAMAGES THE EARTH.

ANIMALS SUCH AS COWS RELEASE A NATURAL BUT TOXIC GAS CALLED METHANE, WHICH IS SAID TO BE THE WORST GREENHOUSE GAS TO EFFECT CLIMATE CHANGE AS ON A PER MOLECULE BASIS, IS IS 21 TIMES MORE EFFECTIVE AT TRAPPING HEAT IN THE EARTHS LOWER ATMOSPHERE THAN CARBON DIOXIDE. AS ANIMALS SUCH AS COWS ARE BRED ON SUCH A MASS SCALE FOR THE MEAT AND DAIRY INDUSTRY'S, THE AMOUNT OF METHANE BEING RELEASED INTO THE ATMOSPHERE IS CAUSING LARGE SCALE IRREVERSIBLE DAMAGE.

FORESTS.



A DISPLAY OF THE SHEER SCALE OF DEFORESTATION, EVEN IN URBANISED AREAS.



SECONDARY TO ANIMAL AGRICULTURE, IS HUMAN DEVASTATION AS RESULT OF OVERPOPULATION. AS A RESULT OF THE INCREASE IN THE WORLD POPULATION, COMES WITH IT IS THE INCESSANT NEED TO IMMIGRATE VIA A METHOD CALLED URBAN SPRAWL.

"CITY POPULATIONS ARE EXPECTED TO GROW BY 5 BILLION PEOPLE AND EXPAND MY 1.2MILLION SQUARE KILOMETRES BY 2030. MUCH OF THIS EXPANSION IS DUE TO OCCUR IN THE TROPICS, WHICH CONTAIN THE BULK OF THE WORLD SPECIES. BY 2030, NEARLY 3% OF THE HOTSPOT AREAS WILL BE URBANISED, UP FROM 1% IN 2000. WHILE THE EXTENT SEEMS SMALL, PAVING OVER OUR MARSHES, FORESTS AND GRASSLANDS COULD GENERATE 1.35 BILLION TONNES OF CARBON EMISSIONS (5 BILLION TONNES OF CO2 FROM DIRECT LAND USE. (RERENCCE IN NOTES).

OTHER SMALLER YET STILL INCREDIBLY SUBSTANTIAL CAUSES FOR DEFORESTA-

TION ARE LOGGING FOR PAPER PROD-UCTS AND INDUSTRIAL TIMBER, MINING FOR GOLD AND MINING FOR OIL.

ALL OF THESE CAUSES FOR DEFORESTA-TION HAVE DIRECT CONSEQUENCES. A NATURAL CYCLE OF TREES IS CALLED TRANSPIRATION, WHICH IS WHEN LEAVES NATURALLY SECRETE WATER FROM THEIR STEMS WHICH EVAPO-RATES INTO THE ATMOSPHERE. THIS AIDS CLOUD FORMATION AND EVENTU-ALLY RAINFALL, EVIDENTLY, WHEN THE RAINFORESTS ARE BEING BUTCHERED, THIS PROCESS IS RESTRICTED, DECREAS-ING THE AMOUNT OF YEARLY RAINFALL THAT WILL OCCUR. AS A RESULT OF THIS, DROUGHTS ARE FAR MORE COMMON. A COMBINATION OF DROUGHTS AND A GLOBAL INCREASE IN THE EARTHS TEM-PERATURE, EVENTUALLY LEADS TO A RISE IN THE AMOUNT OF WILDFIRES THAT WILL OCCUR.













FROM THE MID-18TH CENTURY, NEW WAYS OF HARNESSING OUR PLANET'S RESOURCES WERE CONTINUALLY DISCOVERED, AND NEW TECHNOLOGY WAS INVENTED THAT CAUSED AN ECONOMIC BOOM, WHICH HAS ULTIMATELY LED US TO OUR MODERN WORLD AS IT LOOKS TODAY. THANKS TO THE INVENTION OF STEAM-POWERED LOCOMOTIVES AND BOATS — WHICH USED COAL TO PRODUCE STEAM — COMPANIES COULD NOW TRADE MANUFACTURED GOODS AROUND THE WORLD FASTER AND EASIER THAN EVER PREVIOUSLY IMAGINED. THE STEAM ENGINE WAS THEN IMPROVED UPON BY JAMES WATT BY ENSURING GREATER FUEL EFFICIENCY, WHICH WAS A GREAT DRIVING FORCE OF THE INDUSTRIAL REVOLUTION, FURTHER INCREASING THE DEMAND FOR COAL.

CARBON DIOXIDE IS MADE WHEN FOSSIL FUELS AND CARBON BASED ENERGY SOURCES ARE BURNED, IT IS THE LARGEST CONTRIBUTOR TO THE GREENHOUSE GAS PROBLEM. WE EXCESSIVELY TAKE ADVANTAGE OF THESE NATURAL RESOURCES THAT ARE EXTRACTED FROM DEEP UNDERNEATH THE EARTHS SURFACE IN ALMOST EVERY ASPECT OF OUR LIVES FROM THE FOOD WE EAT, THE TRANSPORT WE USE AND THE ENERGY WE USE. MANY MANMADE GREENHOUSE GASES ARE DIRECTLY LINKED TO THE RISE OF THE EARTHS TEMPERATURE, SUCH AS METHANE, NITROUS OXIDE, HYDROFLUOROCARBONS, PER FLUOROCARBONS AND SULPHUR HEXAFLUORIDE, BUT CARBON DIOXIDE IS THE GREENHOUSE GAS ACCOUNTING FOR TWO THIRDS OF THE PROBLEM.

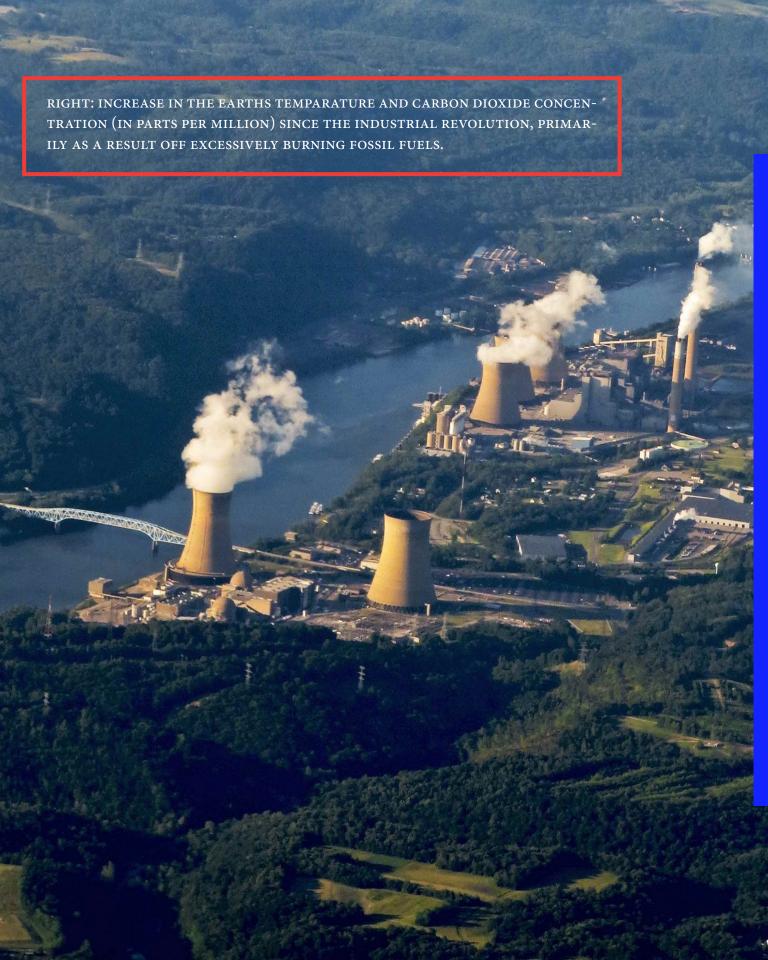
BETWEEN THE LATE 1700'S AND 1800 WAS THE PEAK OF THE INDUSTRIAL REVOLUTION. THE INDUSTRIAL REVOLUTION BIRTHED THE USE OF NEW TECHNOLOGIES, FACTORY MACHINES AND MASS PRODUCTION. THE TEXTILES INDUSTRY ALSO HUGELY BENEFITTED FROM THIS DEVELOPMENT. AS A RESULT OF THIS REVOLUTION, THE DEMAND FOR FOSSIL FUELS INCREASED, THEREFORE INCREASING THE AMOUNT OF CO2 BEING PUMPED INTO OUR ATMOSPHERE.

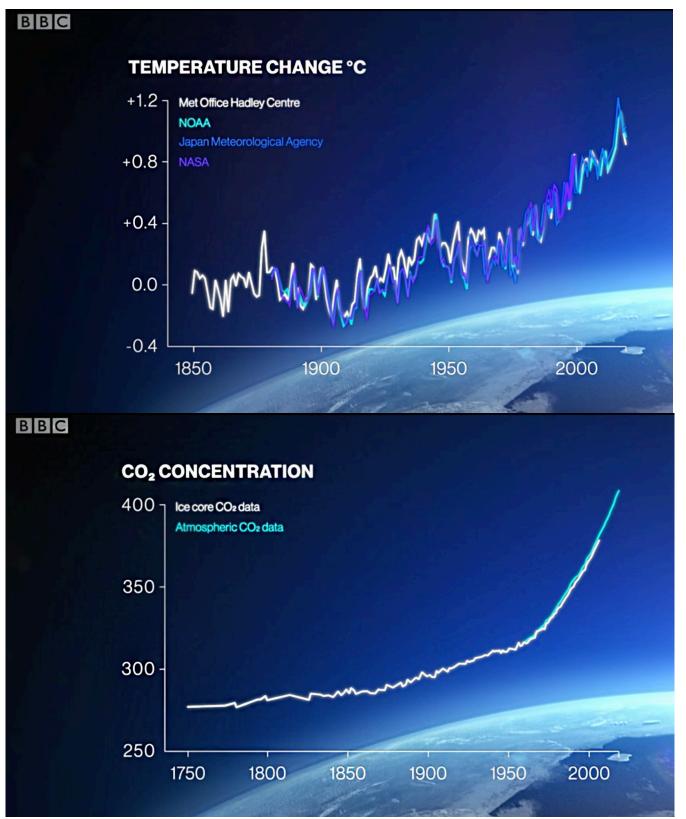
THE AMOUNT OF CARBON DIOXIDE IN THE AIR BEFORE THE INDUSTRIAL REVOLUTION WAS LESS THAN 300 PARTS PER MILLION, SINCE THE REVOLUTION, OUR ATMOSPHERE NOW CONTAINS 411.97 PARTS PER MILLION AS OF MARCH 2019 (NASA). BETWEEN THE INDUSTRIAL REVOLUTION IN 1800 AND 2012, THE GLOBAL EARTHS TEMPERATURE HAS RISEN BY 0.85 DEGREES. THIS MAY SEEM LIKE A SOMEWHAT SMALL AMOUNT OF CHANGE, BUT IN 1998 THE IPCC SET OUT THEIR FIRST GLOBAL GOAL TO REDUCE GREENHOUSE GAS EMISSIONS BUT BY 2005 A REPORT SHOWED THAT EMISSIONS WERE NOT 20% LOWER, BUT 35.3% HIGHER WHICH HAS CREATED A DRAMATIC INCREASE IN TEMPERATURE.





**EXTINCTION REBELLION PROTESTORS** 





RELEASING EXCESSIVE AMOUNTS OF CO2 HAS PROVEN POISONOUS TO OUR ATMOSPHERE AND GLOBAL ECONOMIC CLIMATE. THE UNITED NATIONS INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC) HAVE RELEASED REPORTS STATING THAT WE HAVE TO CAP THE GLOBAL TEMPERATURE AT A MAXIMUM OF 2 DEGREES CELSIUS ABOVE PRE-INDUSTRIAL LEVELS. THIS MEANS WE CANNOT INCREASE THE GLOBAL TEMPERATURE BY 1.5 DEGREES THAN WE ARE ALREADY AT, OR WE WILL FACE 'TIPPING POINTS', WHERE THE DAMAGES WE HAVE CAUSED TO THIS EARTH WILL BE EXTREME AND IRREVERSIBLE. SOME OF THESE EFFECTS ARE FREAK STORMS SUCH AS TSUNAMIS AND HURRICANES, WIDESPREAD DROUGHT AND INTENSE HEATWAVES.

ACCORDING TO THE IPCC, CREATING CAL-CULATIONS FROM THE RATE WE ARE CUR-RENTLY CONSUMING FOSSIL FUELS AND CRE-ATING OTHER GREENHOUSE GASSES, WE ARE ALREADY ON TRACK TO REACH THE CRUCIAL THRESHOLD OF 2 DECREES CELSIUS AS EARLY AS 2030, AS GLOBAL TEMPERATURES HAVE AL-READY INCREASED BY 1 DEGREE SINCE PRE-INDUSTRIAL TIMES.

TO NOT SURPASS THE TEMPERATE THRESHOLD OF 1.5 DEGREES ABOVE PRE-INDUSTRIAL TEM-

PERATURES, CARBON DIOXIDE GLOBAL EMIS-SIONS WOULD NEED TO FALL BY 45% FROM THE LEVEL IT WAS IN 2010, BY THE YEAR 2030. NOT ONE COUNTRY THAT SIGNED THE PARIS AGREEMENT IS ON TRACK TO MEET THEIR OUTLINED TARGET. AS A RESULT OF THIS, IF ALL OF THE COUNTRIES UNDER THE AGREE-MENT IMPLEMENTED THEIR PARIS TARGETS STARTING TODAY, THE BEST CASE SCENARIO IS THAT WE ARE LIKELY TO GET A MINIMUM OF 3.2 DEGREES OF WARMING ABOVE PRE-IN-DUSTRIAL LEVELS. WORST CASE SCENARIO, IF NOTHING IS GOING GOING FORWARD TO HELP REDUCE CARBON EMISSIONS OF A MASS SCALE, WE COULD SEE AN INCREASE OF NINE DEGREES CELSIUS BY THE END OF THE CENTURY.

HITTING A TEMPERATURE OF NINE DEGREES CELSIUS WOULD BE CATASTROPHIC.

THIS PROVES THAT THE WORLDS LEADERS AREN'T PANICKING ABOUT GLOBAL WARMING ENOUGH TO IMPOSE SUCH MEASURES TO MAKE SURE WE DON'T INCREASE THE EARTHS TEMPERATURE BY A MASSIVE AMOUNT.

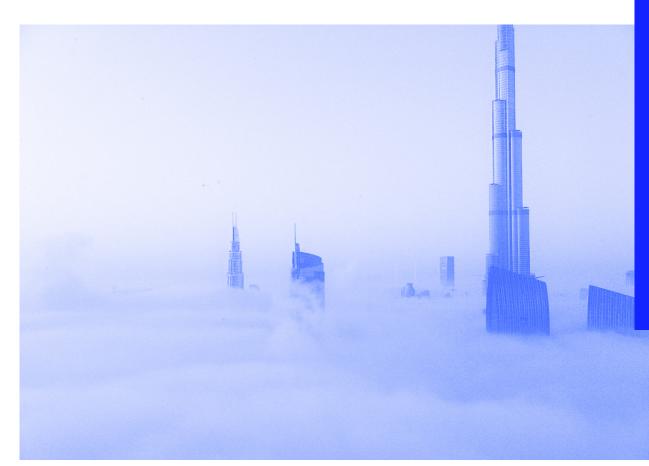


WHEN GREENHOUSE GASSES REACT WITH SUNLIGHT, A LAYER OF OZONE IS FORMED IN THE LOW-ER PART OF THE ATMOSPHERE, CALLED THE TROPOSPHERE. THIS COLLECTION OF SMOG PRE-VENTS THE EARTHS HEAT FROM ESCAPING INTO THE ATMOSPHERE, THEREFORE THE GLOBAL EARTHS TEMPERATURE RISES, CREATING GLOBAL WARMING.

THERE ARE TWO DIFFERENT TYPES OF SMOG THAT POLLUTE THE EARTHS ATMOSPHERE ALL YEAR ROUND. SUMMER SMOG IS CREATED WHEN THE TEMPERATURE OF THE EARTH IS TYPICALLY NAT-URALLY WARMER, WHICH ULTIMATELY MEANS THERE IS MORE OF A REACTION WITH THE GREENHOUSE GASES THAN THERE USUALLY WOULD BE IN COLDER MONTHS. IN CONTRAST TO SUMMER SMOG IS WINTER SMOG, DUE TO THE DROPPING TEMPERATURES, CIVILISATIONS NATURAL REACTION TO THIS IS HEAT UP HOMES USING BY BURNING A VAST INCREASED AMOUNT COMPARED TO SUMMER.

AIR QUALITY INDEX IS A WAY OF MEASURING THE AMOUNT OF TOXIC POLLUTANTS ARE IN THE AIR IN DIFFERENT COUNTRIES. THE MEASUREMENTS START AT 0-50 BEING CLEAN AND VERY GOOD AIR QUALITY AND THE TOP LEVEL IS 301-500, WHERE THE ORGANISATION WARNS OF "SERIOUS AGGRAVATION OF HEART OF LUNG DISEASE AND PREMATURE MORTALITY IN PERSONS WITH CARDIOPULMONARY DISEASE AND THE ELDERLY".

### SMOG OVER DUBAI.



IN 2013, SMOG, CAUSED BY CARBON DIOXIDE, WAS RESPONSIBLE FOR 1.37 MILLION DEATHS IN CHINA, DURING THEIR AIRPOCALYPSE AS THERE AQI REACHED 993 AND IT STILL CONTINUES TO GROW.

IN 2017, DELI'S AIR QUALITY INDEX MEASURE-MENT REACHED 999 WHICH WAS THE EQUIVA-LENT OF SMOKING TWO PACKS OF CIGARETTES A DAY. THE SITUATION HAS GOTTEN SO BAD WHERE ONE OUT OF EVERY 6 DEATHS ARE CAUSED BY AIR POLLUTION FROM EXCESSIVE CARBON DIOXIDE BEING RELEASED.

ALL OF THESE DRAMATIC INCREASES ARE IN-FLUENCED BY FACTORS SUCH AS EXCESSIVE BURNING OF DIESEL AND GAS, AGRICULTURAL FARMING AND INDUSTRIAL ACTIVITY.

ALONGSIDE ALL OF THE DETRIMENTAL EFFECTS THESE INDUSTRIES HAVE ON OUR PLANET, SMALL-PARTICULATE SMOG IS ALSO SLOWLY INCREASING HUMAN VULNERABILITY AND DECREASING OUR HEALTH. NAMELY, HEART DISEASE, STOKE, CANCER, RESPIRATORY DISEASE, PREGNANCY COMPLICATIONS AND MUCH MORE ARE JUST A FEW OF THE TERRIFYING AND PERMANENT EFFECTS CARBON DIOXIDE POISONING ARE HAVING ON US.



PROTESTOR SIGN.



CO2 CONCENTRATIONS HAVEN'T BEEN THIS HIGH IN MILLIONS OF YEARS. EVEN MORE ALARMING IS THE RATE OF INCREASE IN THE LAST FIVE DECADES AND THE FACT THAT CO2 STAYS IN THE ATMOSPHERE FOR HUNDREDS OR THOUSANDS OF YEARS. THIS MILESTONE IS A WAKE UP CALL THAT OUR ACTIONS IN RESPONSE TO CLIMATE CHANGE NEED TO MATCH THE PERSISTENT RISE IN CO2. CLIMATE CHANGE IS A THREAT TO LIFE ON EARTH AND WE CAN NO LONGER AFFORD TO BE SPECTATORS."











THROWAWAY LIVING 1950'S TIME MAGAZINE: PLASTIC POLLUTION



FEEDING BOWL for gets comes with a wrought-iron stand and disposable, waterproof bowls to eliminate washing-up chore. Stand and six dishes cost \$1.



DISPOSA-PAN climinates scouring of pots after cooking. It consists of steel frame and heavy foil pans to throw out. Frame with eight pans is \$2.98.

### Throwaway Living

#### DISPOSABLE ITEMS CUT DOWN HOUSEHOLD CHORES

The objects flying through the air in this picture would take 40 hours to clean—except that no housewife need bother. They are all meant to be thrown away after use. Many are new; others, such as paper plates and towels, have been around a long time but are now being made more attractive.

At the bottom of the picture, to the left of a New York City Department of Sanitation trash can, are some throwaway vases and flowers, popcorn that pops in its own pan. Moving clockwise around the photograph come assorted frozen food containers, a checkered paper napkin, a disposable diaper (seriously suggested as one reason for a rise in the U.S. birth rate) and, behind it, a baby's bib. At top are throwaway water wings, foil pans, paper tablecloth, guest towells and a sectional plate. At right is an all-purpose bucket and, scattered throughout the picture, paper cups for beer and highballs. In the basket are throwaway draperies, ash trays, garbage bags, hot pads, mats and a feeding dish for dogs. At the base of the basket are two items for hunters to throw away: disposable goose and duck decoys,

CONTINUED



BARBECUE GRILL is meal cooker with stand, asbestos shell and wire grill, charcoal to last one hour and excelsior topping for a quick light. It costs 79¢.

#### **PLASTIC POLLUTION**

THE MATERIAL PLASTIC HAS MANY GREAT USES AS IT IS LIGHTWEIGHT, CHEAP AND MALLEABLE PROPERTIES BUT ITS EFFECT DUE TO ITS LACK OF BIODEGRADABILITY IS DETRIMENTAL TO OUR PLANET, BIODIVERSITY AND ECOSYSTEMS AND NOW HUMANS HEALTH AND WELL-BEING.

PLASTICS CONCEPTION WAS IN THE MID 1800'S BY AN AMERICAN INVENTOR CALLED JOHN WES-LEY HYATT, WHO CREATED A FORM OF PLASTIC WHICH WAS MADE FROM MORE NATURAL MATE-RIALS SUCH AS COTTON OR WOOD CELLULOID, A RESIN THAT CAME FROM ASIAN CAMPHOR TREES AND ALCOHOL.

JOHN WESLEY HYATTS FIRST FORMS OF PLASTIC ACTUALLY HELPED REDUCE FORMS OF ANIMAL CRUELTY AND EXPLOITATION AS IT WAS ON OF THE FIRST ALTERNATIVES FOR SOME PRODUCTS MADE THROUGH THE IVY TRADE. COMBS AND PIANOS WERE TWO OF THE MANY PRODUCTS THAT WERE CREATED WITH ELEPHANT TUSKS BUT NOW HAVE BEEN REPLACED BY HARD PLASTIC. IT IS SOMEWHAT IRONIC THAT THE MATERIAL THAT HELPED ERADICATE ELEPHANT EXPLOITATION IS NOW ON OF THE LARGEST THREATS TO MARINE AND AND LAND WILDLIFE GLOBALLY.

CELLULOID BASED PLASTICS ARE STILL USED IN SOME MANUFACTURING TODAY BUT IT WAS SOON ECLIPSED BY MORE SYNTHETIC PLASTICS SUCH AS BAKELITE, CREATED BY LEO BAEKELAND IN 1907. BAKELITE WAS SUCCESSFUL AS IT WAS CREATED FROM ALL SYNTHETIC MATERIALS (MOST COMMONLY DERIVED FROM PETROLEUM) WHICH WAS APPEALING TO WIDER MARKETS AS ITS PROPERTIES REVOLUTIONISED CONSUMER GOODS AND ESPECIALLY EVOLVED THE AUTOMOTIVE AND ELECTRIC INDUSTRIES AS IT IS HEAT RESISTANT AND DOESN'T CONDUCT ELECTRICITY.

22

ON IT. NOW WERE DROWNING
IN IT

- NATIONAL GEOGRAPHIC.

AS THE PRICE OF PETROLEUM DECLINED IN THE 20TH CENTURY, THE AMOUNT OF PLASTIC BEING CONSUMED ROSE INDEFINITELY AND THE INDUSTRY OF CHEAP, THROWAWAY PLASTICS WAS INVENTED. THE RISE OF DISPOSABLE PLASTICS WAS ALSO FULLED BY HOW CHEAP IT WAS, IT BECAME COMMONPLACE FOR HOUSEHOLDS IN THE 1950'S TO USE THROWAWAY PLASTICS FOR CONVENIENCE SO THAT IT WOULD "CUT ANY HOUSEWIVES CLEANING TIME IN HALF", ACCORDING TO TIME MAGAZINE.



PLASTIC WASTE MANEGEMENT

JUST AFTER ITS CONCEPTION IN 1910, SIXTY MILLION TONNES OF PLASTIC WAS PRODUCED GLOBALLY. ALTHOUGH THIS IS STILL A SIGNIFICANT AMOUNT OF PLASTIC, TO PUT THE GLOBAL PLASTIC CRISIS IN PERSPECTIVE, CHINA ALONE PRODUCED SIXTY MILLION TONNES OF PLASTIC IN 2010.

A STUDY BY THE UNIVERSITY OF CALIFORNIA SHOWED THAT OUT OF THE 7 BILLION TONNES OF PLASTIC THAT WAS MANUFACTURED IN 2015, ONLY 9% OF IT WAS RECYCLED VIA CONTROLLED WASTE MANAGEMENT SERVICES, 12% OF IT WAS INCINERATED AND 79% (302 MILLION TONNES) ENDED UP ON LANDFILLS AND IN OUR NATURAL ENVIRONMENT. GLOBALLY, LESS THAN A FIFTH OF OF PLASTIC GET RECYCLED AND UNSURPRISINGLY, IN AMERICA ITS LESS THAN 10%.

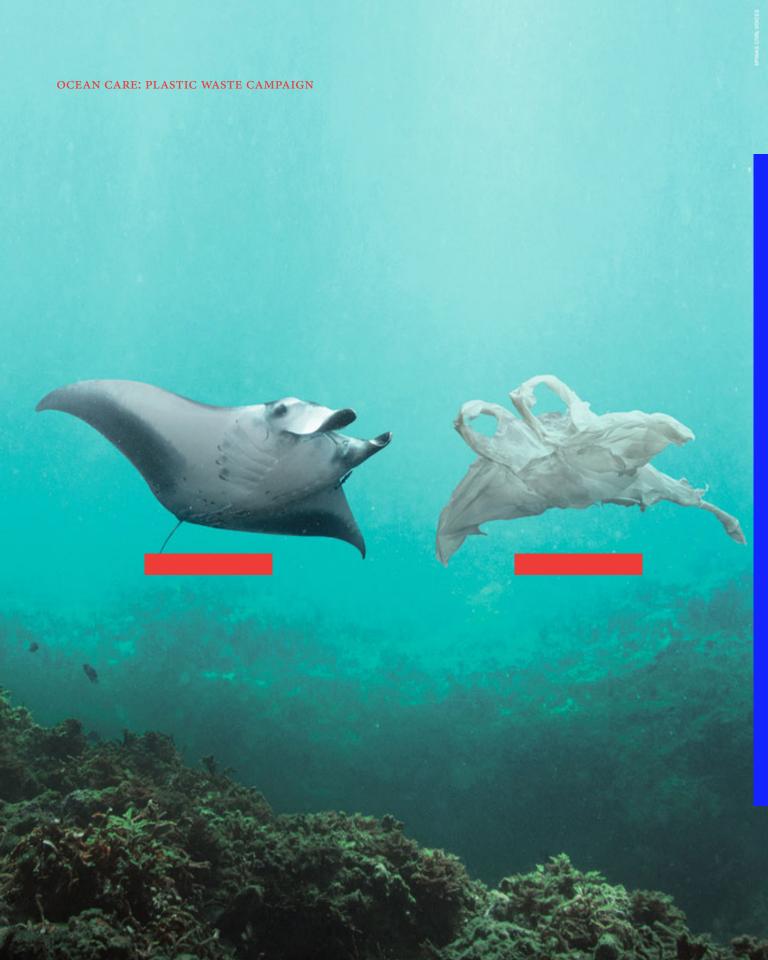
DUE TO THIS MASS PRODUCTION AND LACK OF HUMAN EFFORT TO REDUCE OUR CONSUMP-TION OF PLASTIC, WE ARE PROJECTED TO TRI- PLE PLASTIC PRODUCTION TO REACH 34 BILLION TONNES OF WASTE BY THE YEAR 2050, COMPARED TO 8.3 BILLION IN 2015 AND 2 MILLION IN 1950. ULTIMATELY THIS MEANS THERE IS LIKELY TO BE MORE PLASTIC IN THE OCEAN THAN THERE WILL BE FISH BY 2050, WHICH IS A MERE THIRTY YEARS AWAY.

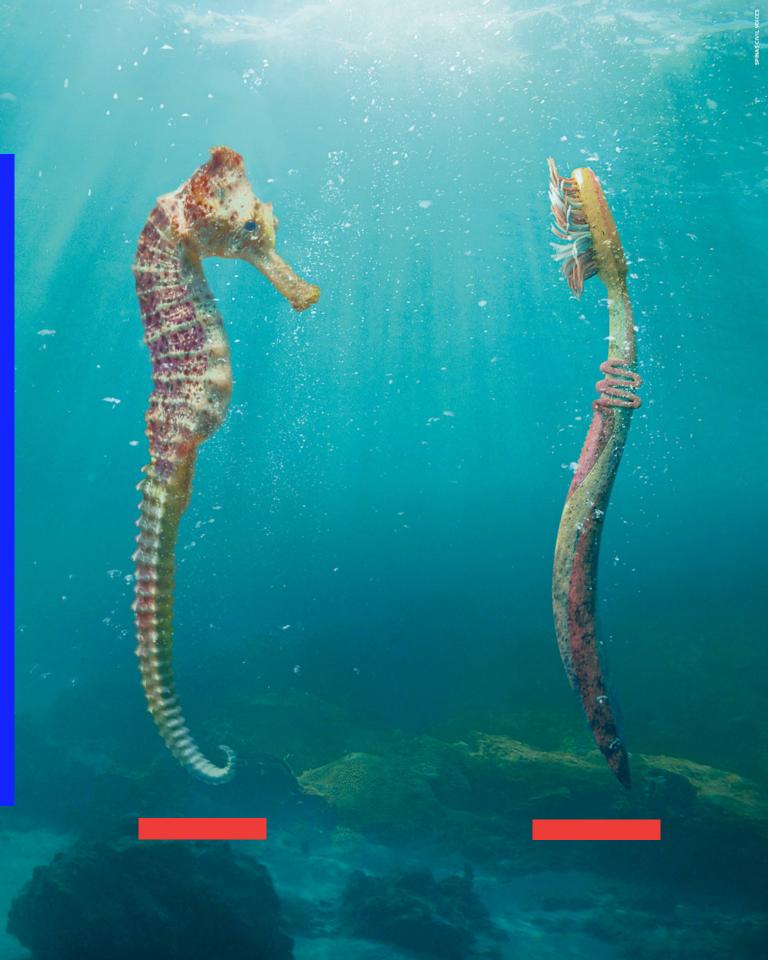
AS WELL AS THE CATASTROPHIC EFFECT THIS MAN MADE MATERIAL IS HAVING ON OUR ECO-SYSTEMS, THE SAME MATERIAL WE CREATED FOR HUMAN ADVANTAGE IS SIMPLY DRAGGING US DOWN.

PLASTIC ISN'T JUST IN OUR EYESIGHT, ITS NOW CREATING ITS WAY INTO OUR WATER SYSTEMS, OUR FOOD, AND INTO OUR INTERNAL ORGANS. WE'VE MASS PRODUCED IT TO SUCH AN EXTENT WE CAN'T ESCAPE FROM IT.

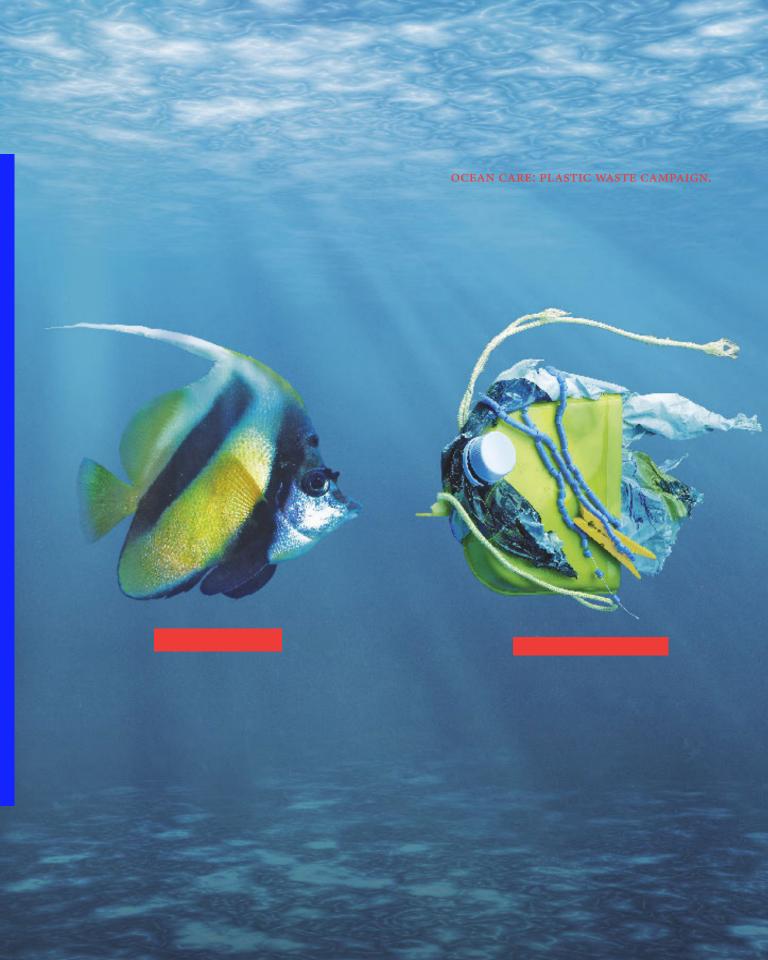
ONE OF HUMANITIES GREATEST INVENTIONS IS SLOWLY BECOMING OUR WORST...











#### **PLASTIC POLLUTION**

MICRO-PLASTICS ARE DESCRIBED AS PLASTIC PIECES THAT ARE LESS THAN A FIFTH OF AN INCH LARGE AND THEY DERIVE FROM LARGER PIECE OF PLASTICS BY CONSTANT EXPOSURE TO SUNLIGHT OR BEING BROKEN APART BY ANIMALS TRYING TO EAT THE MATERIALS. 700,000 MICRO-PLASTICS CAN BE RELEASED IN ONE SINGLE CLOTHES WASH.

MICRO-BEADS ARE ALSO MICRO PLASTICS THAT HAVE A HUGE IMPACT DESPITE THEIR SIZE, WHICH ARE COMMONLY FOUND IN COSMETICS SUCH AS EXFOLIANTS.

MICRO-BEADS HAVE BEEN FOUND IN THE DEEP-EST OF SEAFLOOR BEDS IN THE OCEAN AND ALSO IN THE ICECAPS FLOATING IN THE ARCTIC. IT HAS BEEN SUGGESTED THAT AS THE ICE MELTS DUE TO GLOBAL WARMING, OVER THE NEXT DECADE, THE ICE COULD RELEASE MORE THAN A TRILLION PARTS OF PLASTIC INTO OUR OCEANS AND THEY ARE PROBABLY MORE HARMFUL TO HUMAN LIFE AND OUR ECOSYSTEMS THAN LARGER PLASTICS AS THEY ARE EASIER TO GET INTO OUR WATER AND FOOD SYSTEMS.

AS WE CONTINUALLY CONTAMINATE OUR WA-

TER-SYSTEMS AND EVIDENTLY POISON OUR MARINE LIFE, WE ARE CONCURRENTLY PAYING THE PRICE. A PLYMOUTH UNIVERSITY REPORT FOUND THAT PLASTIC PARTICLES WERE FOUND IN A THIRD OF THE UK'S CAUGHT FISH INCLUDING COD, MACKEREL AND HADDOCK, THREE OF THE MOST COMMONLY ATE FISH IN THE UK. SOME MARINE LIFE SPECIES SUCH AS KRILL HAVE NOW STARTED TO ADAPT TO THE HABIT OF DIGESTING THE MICRO PLASTICS AND SPITTING THEM OUT AS NANO-PLASTICS.



ITS NOT THE MICROPLASTICS WE SHOULD BE WORRIED ABOUT, ITS THE NANO-PLASTICS THAT DEGRADE FROM MICROPLASTICS. (Parkler, L. 2019)



A ARTISTIC REPRESENTATION OF EXCESSIVE CONSUMERISM

SCHOOL STRIKE FOR CLIMATE CHANGE PROTESTORS



#### ITS INSIDE OF US.

WE ARE EATING, DRINKING AND BREATHING PLASTIC. PLASTIC FIBRES ARE INSIDIOUSLY IN-VADING OUR SYSTEMS THROUGH OUR FOOD AND WATER AND NANO-PLASTICS HAVE ALSO BEEN REPORTED TO BE SUSPENDED IN THE AIR. A RE-PORT COMPLETED BY ORB MEDIA, A NON-PROFIT GLOBAL DEVELOPMENT JOURNALISM ORGAN-ISATION, FOUND THAT 83% OF WATER SAMPLES FROM SIX NATIONS WERE CONTAMINATED WITH MICRO-PLASTICS. THE HIGHEST RATE WAS IN THE UNITED STATES, SCORING A ASTRONOMICAL 94% OF CONTAMINATION AND SHOCKINGLY EUROPE-AN NATIONS, INCLUDING THE UNITED KINGDOM RANKED THE LOWEST LEVEL OF CONTAMINA-TION, BUT THIS SCORE WAS A STILL A MASSIVE 72%.

THE SCARIEST THING ABOUT THESE FIGURES IS THAT NANO-PLASTICS ARE SIMPLY TOO SMALL TO BE MEASURED AND WE HAVE NOT YET DEVELOPED A WAY TO CATCH THE SMALLEST OF THE PLASTIC FIBRES. THIS MEANS THE CONTAMINATION RATE COULD BE A LOT HIGHER THAN WE THINK AND THESE NANO-FIBRES ARE SAID TO BE SO SMALL THAT THEY COULD PENETRATE ORGANS AND HUMAN TISSUE...

PLASTIC IS A MATERIAL THAT CAN TAKE UP TO 450 YEARS TO DECOMPOSE, OR SOME VARIATIONS



#### PLASTIC CAN TAKE UP TO 450 YEARS TO DECOMPOSE.



OF PLASTIC WON'T DECOMPOSE ALL ALL. IT IS ALL WELL AND GOOD TO RECYCLE AND CLEAN UP BUT WE NEED TO STOP THE WASTE FROM GETTING INTO OUR ENVIRONMENTS IN THE FIRST PLACE BY TAKING CONTROL OF OUR INDUSTRIAL ADVANCES AND CREATING A CIRCULAR ECONOMY. PLASTIC IS MORE THAN AN AESTHETIC PROBLEM, POLLUTING OUR WATER SYSTEMS AND HARMING OUR WILDLIFE GLOBALLY, IT PLAYS A DIRECT PART IN GLOBAL WARMING, SIMILARLY TO DEFORESTATION AND CO2 POLLUTION.

ALONG SIDE THE UNSUSTAINABLE PRACTICES IT TAKES TO CREATE PLASTIC IN THE FIRST PLACE, THE END OF ITS LIFE CYCLE, IF IT IS EVER TO REACH THE POINT OF DEGRADING, IT JUST AS IMPACTFUL ON THE ENVIRONMENT. AS PLASTIC DECOMPOSES, IT RELEASES TWO POWERFUL GREENHOUSE GASSES THAT ALSO PLAY A PART IN THE DEPLETION OF THE OUR LOWER ATMOSPHERE, THE TROPOSPHERE. METHANE AND ETHYLENE ARE JUST TWO OF THE CHEMICALS THAT ARE RELEASED, METHANE BEING THE NUMBER ONE WORST GREENHOUSE GAS FOR OUR ATMOSPHERE.

COSE WILL GREENHOUS ARE FORGET 

1ESS TO DO EFFECT, 





#### ONE STEP FORWARD TWO STEPS BACK: SCIENCE IS UNDER ATTACK.



#### THE DONALD TRUMP EFFECT

CHANGE AS A HOAX.

ON THE PLANET, SECOND TO CHINA.

ALTHOUGH NOT UNDER TRUMP ADMINIS-TRATION AT THE TIME, IN 1997 AMERICA WAS ONE OF THE FEW DEVELOPED COUN-

DESPITE AMERICA BEING THE SECOND TRIES THAT DIDN'T SIGN THE KYOTO PRO-LARGEST PRODUCER OF FOSSIL FUELS, TOCOL. A COMMITMENT PUT IN PLACE THEIR INFAMOUS LEADER, DONALD FOR DEVELOPED COUNTRIES TO REDUCE TRUMP, CONTINUALLY REFERS TO CLIMATE THEIR EMISSION OF GREENHOUSE GAS-SES. ON THE 1ST OF JUNE, 2017, A MERE DEVELOPING COUNTRIES SUCH AS MALAY- SIX MONTHS AFTER HIS INAUGURATION, SIA WILL FEEL THE WRATH OF CLIMATE AMERICAS PRESIDENT, DONALD TRUMP, CHANGE FIRST, DESPITE THEIR CONTRI- ANNOUNCED THE U.S WOULD ALSO CEASE BUTION BEING THE SMALLEST AND LEAST ALL PARTICIPATION WITH THE PARIS IMPACTFUL THAN DEVELOPED COUNTRIES AGREEMENT. TRUMP ARGUED THAT THE SUCH AS AMERICA. INDUSTRIALISED AND PARIS AGREEMENT DISADVANTAGED THE DEVELOPED COUNTRIES ARE THE MOST TO US TO THE BENEFIT OF OTHER COUNTRIES. BLAME FOR THE BULK OF THE AMOUNT OF HE SAID, THE US WILL CEASE IMPLEMEN-GREENHOUSE GASSES THAT ARE RELEASED TATION OF THE NATIONALLY DETERMINED INTO THE ATMOSPHERE. AMERICA IS ONE CONTRIBUTION AND GREEN CLIMATE OF THE BIGGEST POLLUTING COUNTRIES FUND, "WHICH IS COSTING THE US A VAST FORTUNE".



## LIE LIE LAND



bambi

44

THE SUSTAINABLE DEVELOPMENT GOALS ARE THE BLUEPRINT TO ACHIEVE A BETTER AND MORE SUSTAINABLE FUTURE FOR ALL. THEY ADDRESS THE GLOBAL CHALLENGES WE FACE, INCLUDING THOSE RELATED TO POVERTY, INEQUALITY, CLIMATE, ENVIRONMENTAL DEGRADATION, PROSPERITY, AND PEACE AND JUSTICE. THE GOALS INTERCONNECT AND IN ORDER TO LEAVE NO ONE BEHIND, IT IS IMPORTANT THAT WE ACHIEVE EACH GOAL AND TARGET BY 2030.



UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS.

THE PARIS AGREEMENT IS AN EXTENSION OF THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS THAT WERE SET IN 2015 FOR A BETTER FUTURE.

IT IS AN AGREEMENT UNDER THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, THAT LAYS OUT A LONG TERM GOAL TO HALT THE INCREASE IN THE EARTHS AVERAGE TEMPERATURE AT A MAXIMUM OF 2°C ABOVE PRE-INDUSTRIAL LEVELS. TO DO THIS, WE WILL NEED TO LIMIT THE INCREASE BY 1.5 DEGREES ABOVE PRE-INDUSTRIAL LEVELS BUT ALL OF THE FACTS AND FIGURES ALL POINT TO THE FACT THAT WE ARE WELL ON TRACK TO REACHING THAT TEMPERATURE AS EARLY AS 2030 AS THE GLOBAL TEMPERATURE HAS ALREADY INCREASED BY 1 DEGREE CELSIUS SINCE PRE-INDUSTRIAL TIMES. BURNING FOSSIL FUELS, DEFORESTATION AND LIVING IN A WORLD THAT DEPENDS ON PLASTIC ARE JUST THREE OF THE LARGEST CONTRIBUTORS TO THIS RISING TEMPERA

THE PARIS AGREEMENT.

TRUMPS REASONING FOR THIS WITHDRAWAL CAME AS A SHOCK TO MANY, INCLUDING SCIEN-TISTS AND ENVIRONMENTAL ACTIVISTS ALIKE, AS ALONG SIDE THIS SHOCKING ANNOUNCE-MENT, HE ALSO IS ALSO TRYING TO REVIVE AMERICAS COAL INDUSTRY, TO "HELP REVIVE JOBS AND TO ACHIEVE LONG TERM ECONOMI-CAL GROWTH" BUT IT APPEARS THAT HIS MO-TIVATIONS FOR DOING THIS IS LARGELY FOR PROFIT WHICH IS DISREGARDING CLIMATE CHANGE ENTIRELY. THIS IS A TARGET THAT HE WILL HOPEFULLY FIND DIFFICULT AS THE AEP (AMERICAS ELECTRICAL POWER) INSTITUTION HAVE DECLARED THEY ARE TRYING TO SWITCH TO MORE NATURAL GAS FOR POWER ALONG SIDE WIND AND SOLAR POWER. COAL PLANTS MAKE UP 47% AEP'S POWER GENERATION, WHICH THEY PLAN TO SHRINK TO 33% BY 2030.

IT DIDN'T STOP AT THE PARIS AGREEMENT, IN 2017 TRUMP'S ADMINISTRATION ALSO ANNOUNCED THE ELIMINATION OF AMERICAS CLEAN POWER PLAN, A POLICY PUT IN PLACE BY OBAMA'S ADMINISTRATION TO REDUCE CARBON DIOXIDE EMISSIONS FROM ELECTRICAL POWER GENERATION BY 32 PERCENT BY 2030, RELATIVE TO 2005 LEVELS. THE PLAN WAS ALSO FOCUSSING ON REDUCING EMISSIONS FROM COALBURNING POWER PLANTS, AS WELL AS INCREASING THE USE OF RENEWABLE ENERGY, AND ENERGY CONSERVATION.

AMERICA IS A PRIME EXAMPLE OF THE KIND OF BEHAVIOUR THAT IS GOING TO LEAD US ALL INTO A CATASTROPHIC DISASTER, MUCH EARLIER THAN MANY ANTICIPATE.



NOT ALL HOPE IS LOST IN AMERICA, THERE ARE STILL PEOPLE FIGHTING FOR AMERICA TO CONTRIBUTE TO THE MOVEMENT SUCH AS AMERICAN CON-GRESSWOMAN ALEXANDRIA OCASIO COR-TEZ WHO IS FIGHTING ON THE SIDE OF THE DEMOCRATS AND PROPOSING THE 'GREEN NEW DEAL'. IT IS A POLICY THAT PLANS TO ERADICATE ALL OF AMERICAS GREENHOUSE GASSES BY 2030 BY INSTI-GATING A DECLINE IN THE COAL AND OIL INDUSTRIES AND INTRODUCING NEW SUSTAINABLE AND ENERGY EFFICIENT AL-TERNATIVES THAT ALSO ENCOURAGES A STRONGER SOCIETY SUCH AS CREATING NEW JOBS, BETTER EDUCATION, AFFORD-ABLE HOUSING AND MUCH MORE.

IT WAS UNFORTUNATELY UNSUCCESS-FUL AND VOTED DOWN 57-0 BY ELITIST REPUBLICANS DUE TO THE DAMAGE IT WOULD SUPPOSIVELY CAUSE TO AMERICAS ECONOMY. DESPITE THIS SETBACK, SHE HAS NOT BEEN DISHEARTENED AS BECOME A PUBLIC FIGURE AS THE VOICE OF POWER TACKING CLIMATE CHANGE IN AMERICAN POLITICS.

ALEXENDRIA OCASIO-CORTEZ

"UNFORTUNATELY, THE TRUMP ADMINISTRATION HAS BECOME A ROGUE OUTLIER IN ITS SHORTSIGHTED ATTEMPT TO PROPUP THE DIRTY FOSSIL FUEL INDUSTRIES OF THE PAST. THE ADMINISTRATION IS IN DIRECT CONFLICT WITH THE AMERICAN BUSINESSES, STATES, CITIES AND CITIZENS LEADING THE TRANSFORMATION" B,MILLER. CNN (2018)





STEPPING FORWARDS: THE GENERATION THAT'S FIGHTING BACK



GRETA THUNBERG, A SIXTEEN YEAR OLD FROM SWEDEN HAS DONE MORE FOR CLIMATE CHANGE IN ONE YEAR THAN ANY POLITICIAN OR PERSONS OF HIGH SIGNIFICANCE HAS EVER DONE IN HISTORY, BEGINNING HER JOURNEY PROTESTING ON THE DOORSTEP OF THE SWED-ISH GOVERNMENTS, SHE HAS BEEN A TRAILBLAZER IN THIS MASS POLITICAL MOVEMENT TOWARDS CURBING CLIMATE CHANGE AND HAS INFLUENCED MILLIONS OF YOUNG PEOPLE ALL OVER THE WORLD TO JOIN HER IN SKIPPING SCHOOL AND MARCH FOR THEIR FUTURE.

AS SHE EXPLAINED IN THE UNITED NATIONS FRAMEWORK CONVENTION ON **CLIMATE** CHANGE 2018, "OUR CIVILISA-TION IS BEING SACRIFICED FOR THE OPPORTUNITY OF A VERY SMALL NUMBER OF PEOPLE, TO CONTINUE MAKING ENOR-MOUS AMOUNTS OF MONEY". THIS CONCISELY ENCAPSULATES THE DEVASTATING BEHAVIOUR WORLD LEADERS LIKE DONALD TRUMP ARE DEMONSTRATING, FUELLING THE DRAMATIC DE-CLINE IN THE HEALTH OF THE EARTH.

SHE STARTED THE CONVERSATION AND CONTINUES TO LEAD THE WAY FOR YOUNG PEOPLE TO STAND UP AND FIGHT FOR JUSTICE.

## Y(0)(J) \\(\)(0)(J) \\\\ CR 18 18 1 \\/\/\ IS ON FIRE

## UR HOUSE



### // GRETAS FULL SPEECH @ THE 2019 WORLD ECONOMIC FORUM:

OUR HOUSE IS ON FIRE. I AM HERE TO SAY, OUR HOUSE IS ON FIRE.

ACCORDING TO THE IPCC (INTERGOVERN-MENTAL PANEL ON CLIMATE CHANGE), WE ARE LESS THAN 12 YEARS AWAY FROM NOT BEING ABLE TO UNDO OUR MISTAKES. IN THAT TIME, UNPRECEDENTED CHANGES IN ALL ASPECTS OF SOCIETY NEED TO HAVE TAKEN PLACE, INCLUDING A REDUCTION OF OUR CO2 EMISSIONS BY AT LEAST 50%.

AND PLEASE NOTE THAT THOSE NUMBERS DO NOT INCLUDE THE ASPECT OF EQUITY, WHICH IS ABSOLUTELY NECESSARY TO MAKE THE PARIS AGREEMENT WORK ON A GLOBAL SCALE. NOR DOES IT INCLUDE TIPPING POINTS OR FEEDBACK LOOPS LIKE THE EXTREMELY POWERFUL METHANE GAS RELEASED FROM THE THAWING ARCTIC PERMAFROST.

AT PLACES LIKE DAVOS, PEOPLE LIKE TO TELL SUCCESS STORIES. BUT THEIR FINANCIAL SUCCESS HAS COME WITH AN UNTHINKABLE PRICE TAG. AND ON CLIMATE CHANGE, WE HAVE TO ACKNOWLEDGE WE HAVE FAILED. ALL POLITICAL MOVEMENTS IN THEIR PRESENT FORM HAVE DONE SO, AND THE MEDIA HAS FAILED TO CREATE BROAD PUBLIC AWARENESS.

BUT HOMO SAPIENS HAVE NOT YET FAILED.
YES, WE ARE FAILING, BUT THERE IS STILL
TIME TO TURN EVERYTHING AROUND. WE
CAN STILL FIX THIS. WE STILL HAVE EVERYTHING IN OUR OWN HANDS. BUT UNLESS WE
RECOGNISE THE OVERALL FAILURES OF OUR
CURRENT SYSTEMS, WE MOST PROBABLY

DON'T STAND A CHANCE.

WE ARE FACING A DISASTER OF UNSPOKEN SUFFERINGS FOR ENORMOUS AMOUNTS OF PEOPLE. AND NOW IS NOT THE TIME FOR SPEAKING POLITELY OR FOCUSING ON WHAT WE CAN OR CANNOT SAY. NOW IS THE TIME TO SPEAK CLEARLY.

SOLVING THE CLIMATE CRISIS IS THE GREAT-EST AND MOST COMPLEX CHALLENGE THAT HOMO SAPIENS HAVE EVER FACED. THE MAIN SOLUTION, HOWEVER, IS SO SIMPLE THAT EVEN A SMALL CHILD CAN UNDERSTAND IT. WE HAVE TO STOP OUR EMISSIONS OF GREEN-HOUSE GASES.

EITHER WE DO THAT OR WE DON'T.

YOU SAY NOTHING IN LIFE IS BLACK OR WHITE. BUT THAT IS A LIE. A VERY DANGER-OUS LIE. EITHER WE PREVENT 1.5C OF WARMING OR WE DON'T. EITHER WE AVOID SETTING OFF THAT IRREVERSIBLE CHAIN REACTION BEYOND HUMAN CONTROL OR WE DON'T.

EITHER WE CHOOSE TO GO ON AS A CIVILISATION OR WE DON'T. THAT IS AS BLACK OR WHITE AS IT GETS. THERE ARE NO GREY AREAS WHEN IT COMES TO SURVIVAL.

WE ALL HAVE A CHOICE. WE CAN CREATE TRANSFORMATIONAL ACTION THAT WILL SAFEGUARD THE LIVING CONDITIONS FOR FUTURE GENERATIONS. OR WE CAN CONTINUE WITH OUR BUSINESS AS USUAL AND FAIL. THAT IS UP TO YOU AND ME.

SOME SAY WE SHOULD NOT ENGAGE IN ACTIVISM. INSTEAD WE SHOULD LEAVE EVERYTHING TO OUR POLITICIANS AND JUST VOTE FOR A CHANGE INSTEAD. BUT WHAT DO WE DO WHEN THERE IS NO POLITICAL WILL? WHAT DO WE DO WHEN THE POLITICS NEEDED ARE NOWHERE IN SIGHT? (CONTINUED)

...HERE IN DAVOS – JUST LIKE EVERYWHERE ELSE – EVERYONE IS TALKING ABOUT MONEY. IT SEEMS MONEY AND GROWTH ARE OUR ONLY MAIN CONCERNS.

AND SINCE THE CLIMATE CRISIS HAS NEVER ONCE BEEN TREATED AS A CRISIS, PEOPLE ARE SIMPLY NOT AWARE OF THE FULL CONSEQUENCES ON OUR EVERYDAY LIFE. PEOPLE ARE NOT AWARE THAT THERE IS SUCH A THING AS A CARBON BUDGET, AND JUST HOW INCREDIBLY SMALL THAT REMAINING CARBON BUDGET IS. THAT NEEDS TO CHANGE TODAY.

NO OTHER CURRENT CHALLENGE CAN MATCH THE IMPORTANCE OF ESTABLISHING A WIDE, PUBLIC AWARENESS AND UNDERSTANDING OF OUR RAPIDLY DISAPPEARING CARBON BUDGET, THAT SHOULD AND MUST BECOME OUR NEW GLOBAL CURRENCY AND THE VERY HEART OF OUR FUTURE AND PRESENT ECONOMICS.

WE ARE AT A TIME IN HISTORY WHERE EVERYONE WITH ANY INSIGHT OF THE CLIMATE CRISIS THAT THREATENS OUR CIVILISATION – AND THE ENTIRE BIOSPHERE – MUST SPEAK OUT IN CLEAR LANGUAGE, NO MATTER HOW UNCOMFORTABLE AND UNPROFITABLE THAT MAY BE.

WE MUST CHANGE ALMOST EVERYTHING IN OUR CURRENT SOCIETIES. THE BIGGER YOUR CARBON FOOTPRINT, THE BIGGER YOUR MORAL DUTY. THE BIGGER YOUR PLATFORM, THE BIGGER YOUR RESPONSIBILITY.

ADULTS KEEP SAYING: "WE OWE IT TO THE YOUNG PEOPLE TO GIVE THEM HOPE." BUT I DON'T WANT YOUR HOPE. I DON'T WANT YOU TO BE HOPEFUL. I WANT YOU TO PANIC. I WANT YOU TO FEEL THE FEAR I FEEL EVERY DAY. AND THEN I WANT YOU TO ACT.

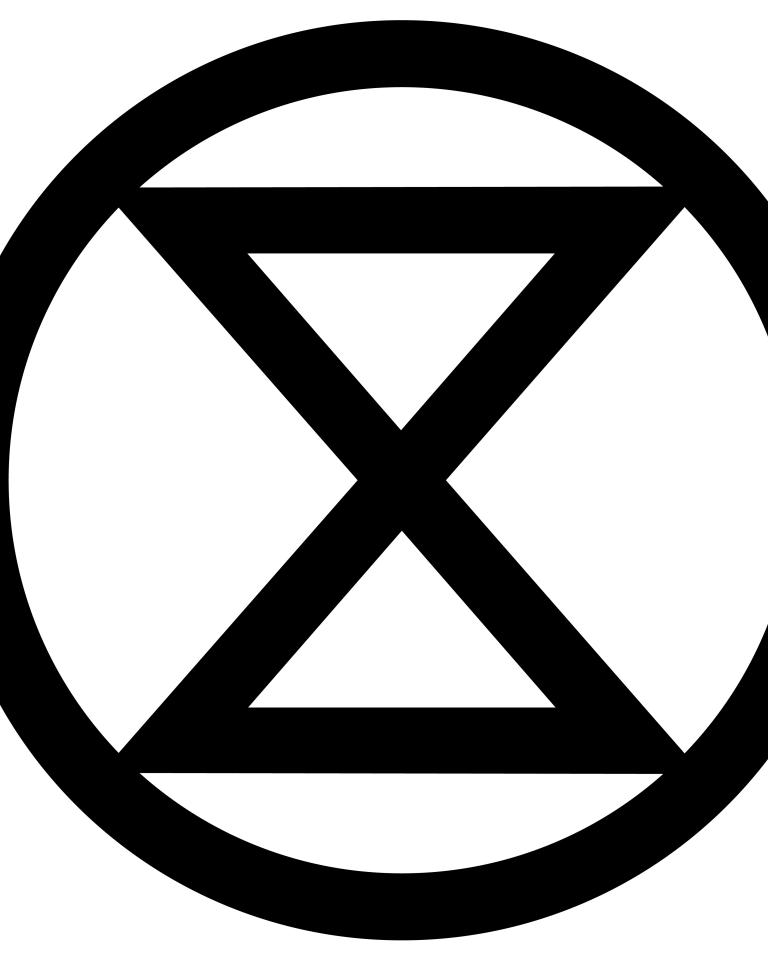
I WANT YOU TO ACT AS YOU WOULD IN A CRISIS. I WANT YOU TO ACT AS IF OUR HOUSE IS ON FIRE. BECAUSE IT IS.



# THE GREAT TO OUR PLAI BELIEF THA ELSE WILLS

# EST THREAT NET IS THE T SOMEONE AWE ITT

CAN FASHION STILL HAVEA POLITICAL AMBITION?



## THE GRETA EFFECT

LIKE MANY POLITICAL MOVEMENTS, THERE ARE MOVERS AND SHAKERS ON THE GROUND, STANDING UP TO THE PEOPLE WITH THE MOST POWER AND INEVITABLY FORCING CHANGE ON IMPORTANT TOPICS. INFLUENCED BY THE SHOCKING FACTS AND FIGURES ABOUT THE STATE OF THE EMERGENCY THE PLANET IS IN, YOUNG PEOPLE ALL OVER THE GLOBE ARE UNITING AND DOING WHATEVER IS PHYSICALLY POSSIBLE TO GET THEIR VOICES HEARD. LITERALLY.

INTRODUCING EXTINCTION REBELLION: "EX-TINCTION REBELLION IS A SOCIO-POLITICAL MOVEMENT WHICH USES NONVIOLENT RESIS-TANCE TO AVERT CLIMATE BREAKDOWN, HALT BIODIVERSITY LOSS, AND MINIMISE THE RISK OF HUMAN EXTINCTION AND ECOLOGICAL COLLAPSE". AS OF THE 3RD OF MAY 2019, 1078 PEOPLE HAD BEEN ARRESTED IN THE CLIMATE CHANGE PROTESTS, BUT THIS IS A FIGURE THE ORGANISATION IS NOT AFRAID OR ASHAMED OF, AS THEY HAVE A LIVE UPDATE DISPLAYING THE TOTAL NUMBER OF ARRESTS SINCE THE MOVE-MENT STARTED IN 2018. SOME OF THE ACTIVI-TIES THE DEMONSTRATORS HAVE BEEN DOING IS GLUING THEMSELVES TO THE UNDERGROUND TUBE SYSTEM AND OUTSIDE OF THE LONDON STOCK EXCHANGE TO CREATE THE STATEMENT THAT THEY WON'T MOVE UNTIL CHANGE IS MADE.

DESPITE BEING A SOMEWHAT CONTROVERSIAL MOVEMENT DUE TO THEIR DRAMATIC AND DIS-RUPTIVE BUT NON VIOLENT PROTESTING, EXTINCTION REBELLION'S ACTIONS HAVE BEEN SUCCESSFUL IN GETTING LARGE MEDIA COVERAGE AND GAINING THE ATTENTION OF THE

LONDON'S MAJOR SADIQ KHAN AND MICHAEL GROVE, THE SECRETARY OF STATE FOR ENVIRONMENT AND MEETING WITH THEM FOR DISCUSSIONS ABOUT THEIR POLICIES THEY WANT SET IN PLACE TO SECURE THIS GENERATIONS FUTURE. EXTINCTION REBELLION HAVE BEEN INCREDIBLY TRANSPARENT AND DIRECT WITH THAT THEY HAVE ASKED OF PEOPLE IN POWER. TO DECLARE A CLIMATE AND ECOLOGICAL EMERGENCY, WORKING WITH OTHER INSTITUTIONS TO COMMUNICATE THE URGENCY FOR CHANGE.

TO ACT NOW TO HALT BIODIVERSITY LOSS AND REDUCE GREENHOUSE GAS EMISSIONS TO NET ZERO BY 2050.

TO CREATE AND BE LED BY THE DECISION OF A CITIZENS' ASSEMBLY ON CLIMATE AND ECOLOGICAL JUSTICE.

THE GOVERNMENT HAS ALSO RECOGNISED THE EFFORTS OF EXTINCTION REBELLION AND CRE-ATED A NEW PLEDGE FOR BRITAIN TO WORK TO-WARDS A MORE SUSTAINABLE FUTURE, WHICH IS A HUGE ADVANCEMENT FOR THEIR EFFORTS. THE MOTION SET AN OUTLINE OF ACTIONS TO BE CARRIED OUT BY THE BRITISH GOVERNMENT. TO WORK TOWARDS AN AGREEMENT TO REDUCE OUR NET CARBON EMISSIONS TO 0% BY 2050, INCREASING THERE EFFORTS OF THE CLIMATE CHANGE ACT OF 2008 DUE TO THE INCREASE IN EMERGENCY. OTHER PROMISES INCLUDE IN-TRODUCING MORE CARBON FRIENDLY TRANS-PORT AND TO CAPTURE ECONOMIC OPPORTUNI-TIES TO CREATE GREENER JOBS FOR EMPLOYEES WORKING IN FOSSIL FUEL INDUSTRIES.





CHANGE

TODAY HALF OF THE PEOPLE ON PLANET EARTH ARE UNDER THE AGE OF 35 - THIS IS MORE PEOPLE THAN WERE ALIVE IN 1950. THEIRS IS THE MOST CONNECTED, EDUCATED AND TECHNOLOGICALLY SAVVY GENERATION EVER. YET THE HARDSHIPS THEY FACE THREATEN TO CULMINATE IN A PERFECT STORM OF ECONOMIC, HUMANITARIAN, ENVIRONMENTAL AND POLITICAL CRISIS."

"There's no way that we can make this much noise without the government listening to us. We won't stop until they do" - Scarlet, UK Student Climate Network

TICKELL, 2018.

























THE FASHION INDUSTRY IS ONE OF THE 5TH LARGEST CONTRIBUTORS TO GLOBAL WARMING AND ACCORDING TO THE 2014 VALUING PLASTIC REPORT BY THE UNEP, CLOTHING AND ACCESSORIES ARE THE SECOND LARGEST POLLUTERS OF PLASTIC IN THE OCEAN.

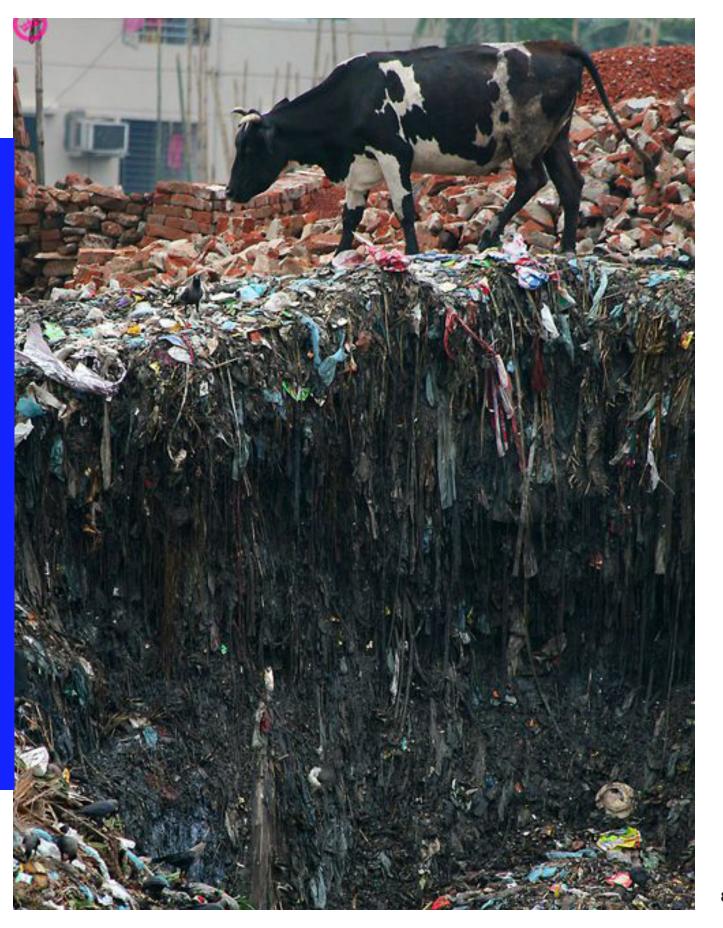
IN THE PAST FEW DECADES, THE FASHION INDUSTRY HAS DEVELOPED A MONUMENTAL AMOUNT. WITH GLOBALISATION
GROWING AT A RAPID RATE, FAST-FASHIONS NEW DEMOCRATISED MODUS OPERANDI MEANS THAT NOW MORE THAN
EVER FAST FASHION IS AVAILABLE TO AND
ENTICING MORE OF A MASS AUDIENCE
WORLDWIDE. AS THE INDUSTRY IS BEING
PUSHED TO EXPAND ITS MARKET, THIS
INEVITABLY MEANS MORE PRODUCTION,
MORE WASTE, MORE POLLUTION AND
MORE MANPOWER TO KEEP UP WITH THE
INCREASING DEMAND.

IN THE PAST, FASHION HAD DIFFERENT MOTIVATIONS. BEFORE THE INDUSTRIAL REVOLUTION IN 1700'S PEOPLE MADE CLOTHES FOR NECESSITY AND FOR PRO-TECTION, TYPICALLY MADE IN THEIR OWN HOME, WITH HAND MADE TOOLS AND LOCALLY SOURCED MATERIALS SUCH AS LEATHER AND WOOL. SINCE MASS PRO-DUCTION WAS COINED, IT BECAME EASIER TO CREATE A LARGE QUANTITY OF THE SAME PATTERNS IN A FRACTION OF THE TIME IT WOULD HAVE TAKEN PREVIOUSLY. FAST FASHION EXPLODED LATE 90'S -2000'S WITH SHOPS COORDINATING WITH AMERICA TO GLOBALISE APPAREL STORES AND DEMOCRATISE FASHION. BY OUTSOURCING MATERIALS AND USING WHOLESALE ITEMS, IT MADE IT CHEAPER AND MORE ACCESSIBLE.

"

THE EVIDENCE DOES NOT SUPPORT ANY CREDIBLE EXPLANATION FOR THIS AMOUNT OF WARMING. INSTEAD THE EVIDENCE CONSISTENTLY POINTS TO HUMAN ACTIVES".

- THE FOURTH NATIONAL ASSESSMENT BY THE US GOVERNMENT CLIMATE SCIENCE SPECIAL REPORT, 2018.





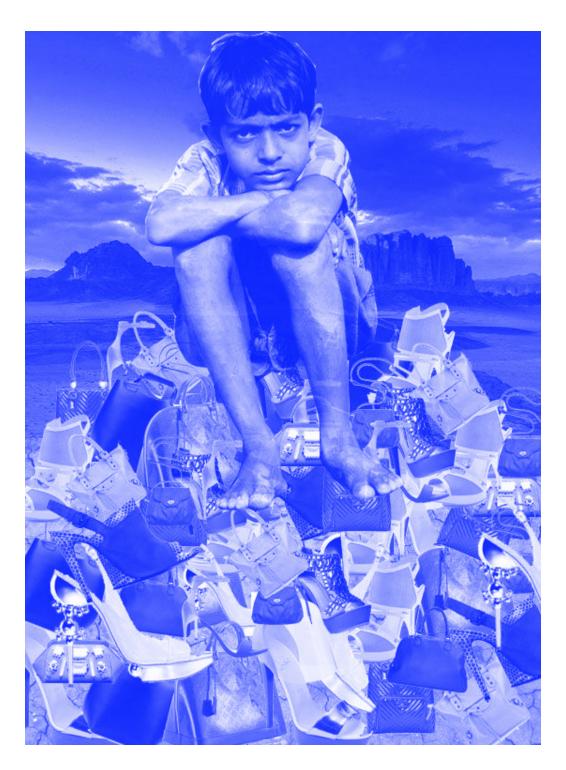
DIRECTLY AFTER THE WAY THE CON-TEMPORARY PRODUCTION METHOD WORKS. THE PURPOSE OF FAST-FASHION IS TO TURN OVER LARGE UNITS OF GAR-MENTS IN A SHORT TIME SCALE TO KEEP THE CONSUMER HOOKED ON KEEPING UP WITH THE MOST UP TO DATE TRENDS. MANY FAST FASHION RETAILERS CAN HAVE FROM 10 COLLECTION DROPS A YEAR TO TWO A WEEK, LIKE ZARA, DUE TO THE HIGH VOLUME OF UNIT'S MANUFACTUR-ERS MUST KEEP UP WITH AS A RESULT OF HYPER-CONSUMERISM, THE PROCESS OF CREATING THE GARMENTS TAKES MANY IT IS IMPERATIVE TO FIND ALTERNATIVE METHODS AND PRACTICES THAT ARE NOT SUSTAINABLE SUCH AS SAND BLASTING, DUCE AND DISTRIBUTE CLOTHING AND CHROME TANNING, MATERIAL DYEING, CHANGE THE CONSUMERS OUTLOOK ON FUR PRODUCTION AND MANY MORE. AN-OTHER OUTCOME OF THERE BEING SUCH TO AVOID THE CONTRIBUTION TOWARDS A LARGE QUANTITY OF UNITS THAT MUST A CATACLYSMIC ENVIRONMENTAL DOWN-BE PRODUCED, MANUFACTURERS HAVE TO FALL. KEEP COSTS TO A MINIMUM WHICH MAY SOMETIMES INCUR LOW QUALITY MATERI-AL. AS A RESULT OF THIS, THE GARMENTS

THE TERM "FAST-FASHION" WAS COINED LIFESPAN IS SHORT AS IT WILL NOT BE ABLE TO STAND THE TEST OF TIME, ULTIMATELY THE CONSUMER WILL THROW THEM AWAY AND THEY WILL BE A WASTE PRODUCT.

> AS REPORTED BY SIEGLE, L. (2017), "AC-CORDING TO A RECENT REPORT FROM WRAP (THE WASTE AND RESOURCES AC-TION PROGRAMME), THE AVERAGE PIECE OF CLOTHING LASTS 3.3 YEARS BEFORE BEING DISCARDED. FOR A YOUNGER DE-MOGRAPHIC, YOU CAN PROBABLY HALVE THAT."

> AND MORE SUSTAINABLE WAYS TO PRO-THE FAST-FASHION INDUSTRY IF WE WANT

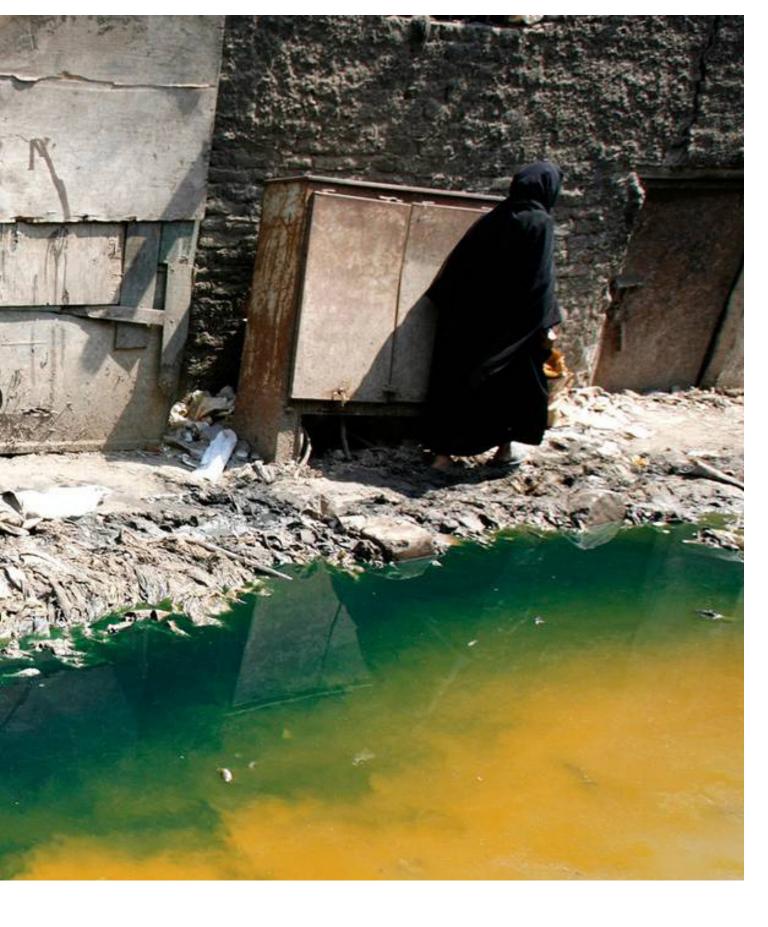




CONSUMER BEHAVIOUR



DYE AND MATERIAL WASTE POLLUTION



COME ARE NO HISTORY, WE THERE IS ST FIX THIS. IT 

## W STANDING R(0)/A\D\S\ | N NOT FAILED, 18 UP TO US?

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## **PLEASE FOLLOW ON TO ALPHA 50/50: DYSTOPIA**

THIS NEXT VOLUME IS A FORECAST INTO A DYSTOPIAN WORLD IN 2030, BASED ON THE FACTS IN VOLUME ONE.