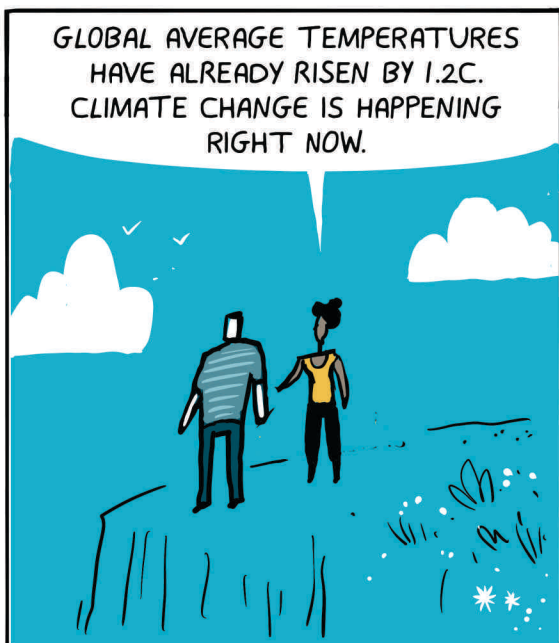
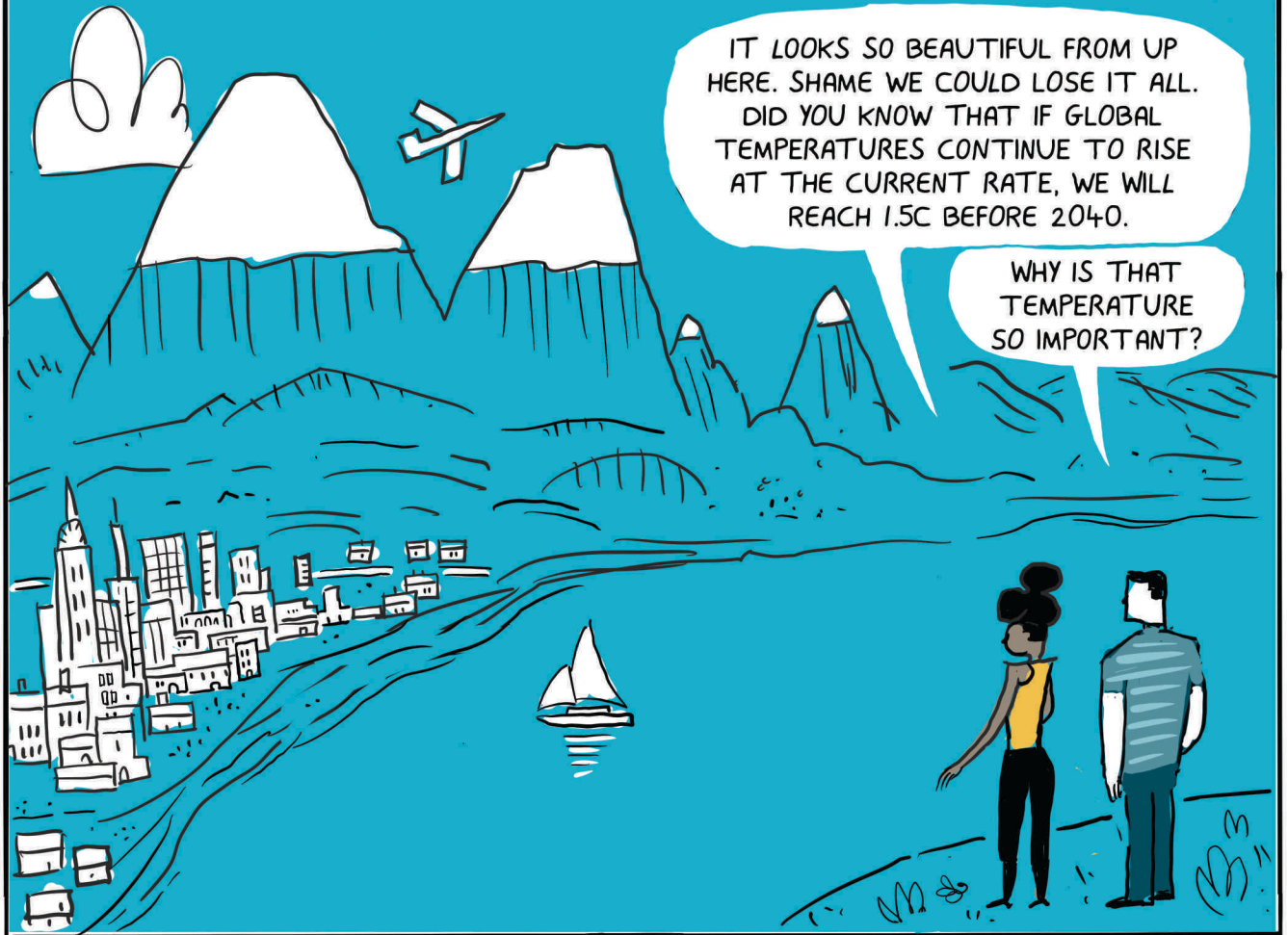
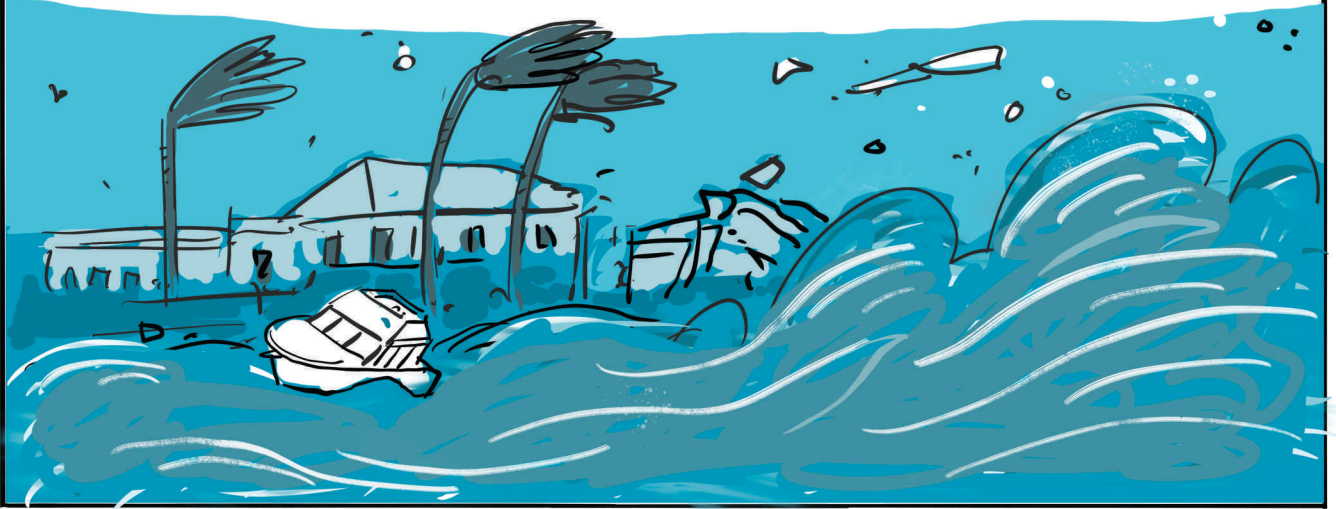


DEGREES OF CHANGE: A CLIMATE COMIC



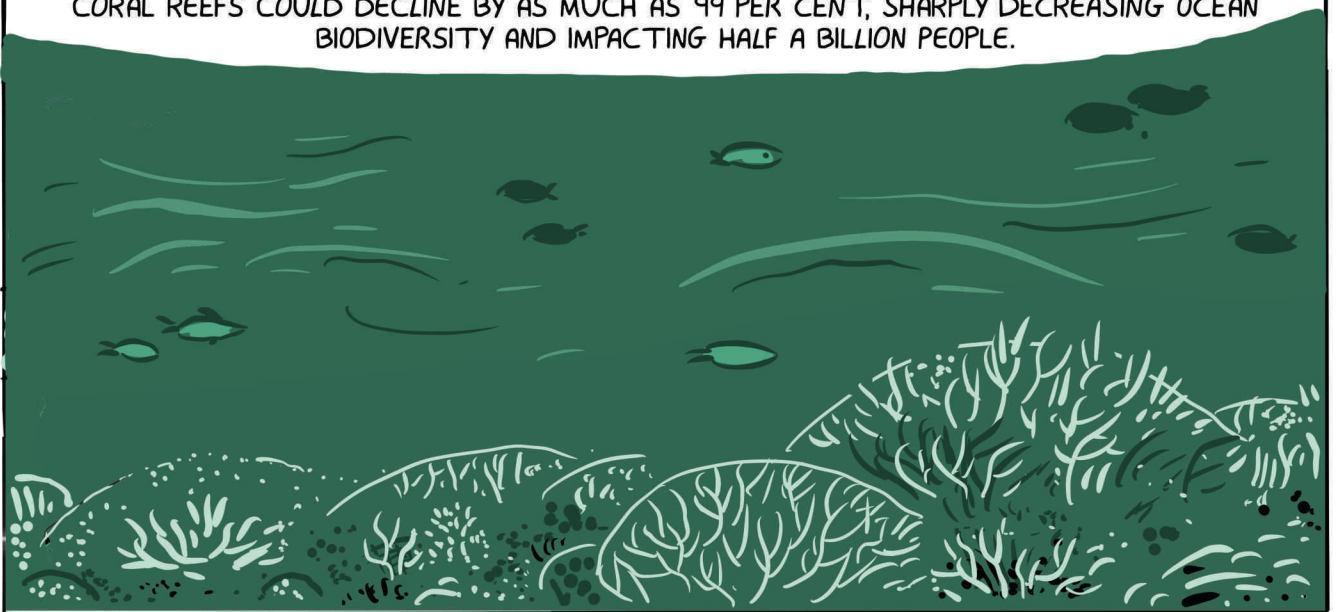
THAT MEANS CLIMATE IMPACTS ARE ALREADY OCCURRING ACROSS THE WORLD. WITH EVERY FRACTION OF A DEGREE THE PLANET WARMS, THESE IMPACTS INCREASE. FLOODING, HURRICANES AND OTHER EXTREME WEATHER EVENTS WILL ALL BECOME MORE FREQUENT.



AND IF GLOBAL TEMPERATURES WARM BY 2C, 61 MILLION MORE PEOPLE IN URBAN AREAS WILL BE EXPOSED TO SEVERE DROUGHT, THAN AT 1.5 DEGREES OF WARMING.



CORAL REEFS COULD DECLINE BY AS MUCH AS 99 PER CENT, SHARPLY DECREASING OCEAN BIODIVERSITY AND IMPACTING HALF A BILLION PEOPLE.



ON A THERMOMETER, A TENTH OF A DEGREE MIGHT SEEM TINY, BARELY NOTICEABLE.



BUT SMALL CHANGES IN AVERAGE TEMPERATURE CAN CREATE BIG CHANGES ACROSS THE GLOBE, INCREASING THE RISKS OF FOOD AND WATER SHORTAGES...



...CONTRIBUTING TO POLITICAL INSTABILITY, RESOURCE SCARCITY AND EXTREME WEATHER, AND FORCING PEOPLE TO MIGRATE.



BUT THE EFFECTS OF TEMPERATURE CHANGE CAN BE MORE SUBTLE THAN THAT.



ALL SORTS OF BIOLOGICAL PROCESSES ARE AFFECTED BY TEMPERATURE, INCLUDING WHEN FRUITS FORM, INSECTS HATCH, AND FISH SPAWN.



OH, I SEE WHAT YOU'RE SAYING. IT'S LIKE THE TREES HERE. CATERPILLARS FEED ON THOSE LEAVES, AND BIRDS IN TURN FEED ON THOSE CATERPILLARS.



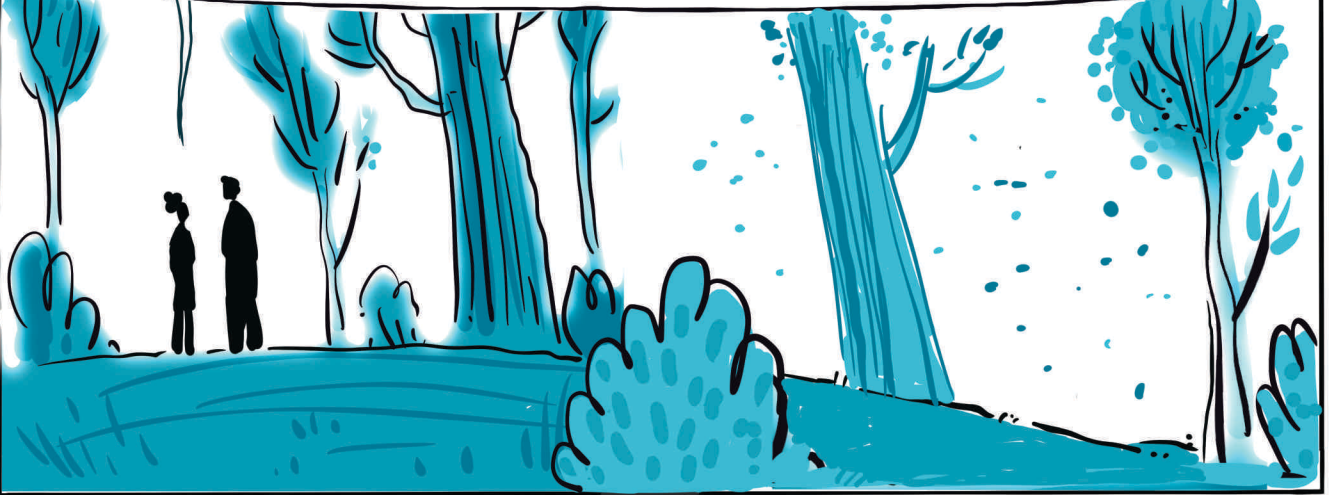
WHAT IF TREES BEGAN OPENING THEIR LEAVES BEFORE CATERPILLARS HATCH, AND BECAUSE OF THIS THE CATERPILLARS MISS OUT ON TASTY NEW LEAVES?



THERE WOULD BE FEW CATERPILLARS FOR THE BIRDS TO EAT WHEN THEY RETURNED FROM MIGRATION, AND THIS IN TURN WOULD HAVE CONSEQUENCES THROUGHOUT THE SYSTEM.



YES, AND IT ONLY TAKES THE SMALLEST SHIFT IN TEMPERATURE TO PRODUCE SUCH EFFECTS. 1.5C WASN'T CHOSEN LIGHTLY AS A LIMIT TO GLOBAL TEMPERATURE. THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC) REPORT HIGHLIGHTING 1.5C WAS PREPARED BY A GROUP OF NEARLY 250 CLIMATE SCIENTISTS FROM MORE THAN 40 COUNTRIES.



WHICH WAS THEN REVIEWED BY A SEPARATE GROUP OF ANOTHER 400 SCIENTISTS.

AND WHAT IS THIS INTERGOVERNMENTAL PANEL?



THE IPCC IS THE UNITED NATIONS BODY FOR ASSESSING THE SCIENCE RELATED TO CLIMATE CHANGE.

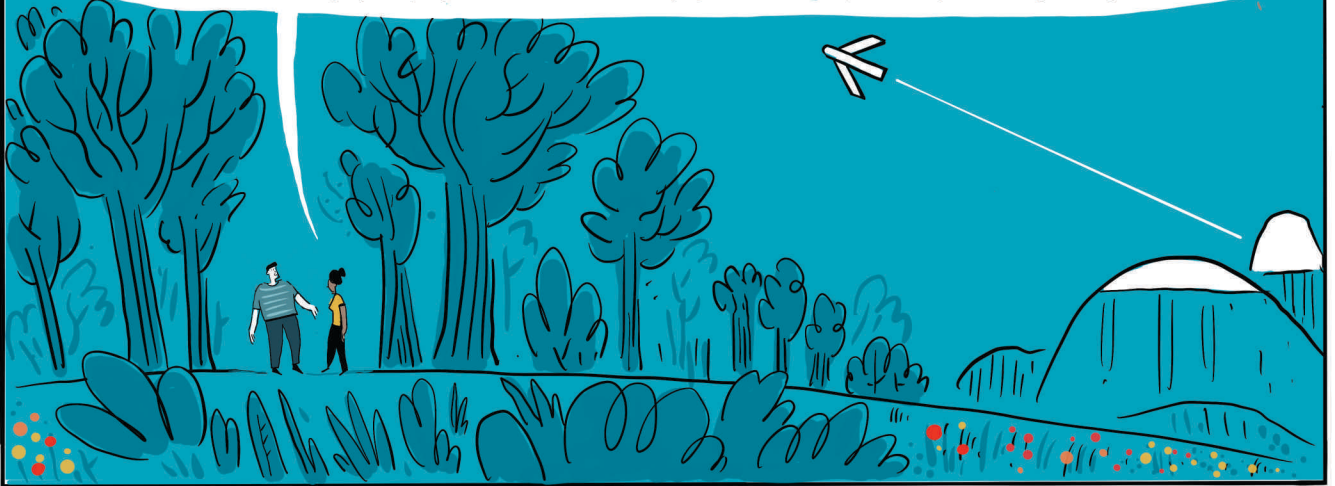


BUT SURELY IT'S IMPOSSIBLE TO TURN THIS AROUND NOW. THE WORLD BURNS VAST AMOUNTS OF FOSSIL FUELS EACH YEAR. WE'RE CONSTANTLY FILLING THE ATMOSPHERE WITH DANGEROUS CARBON DIOXIDE.

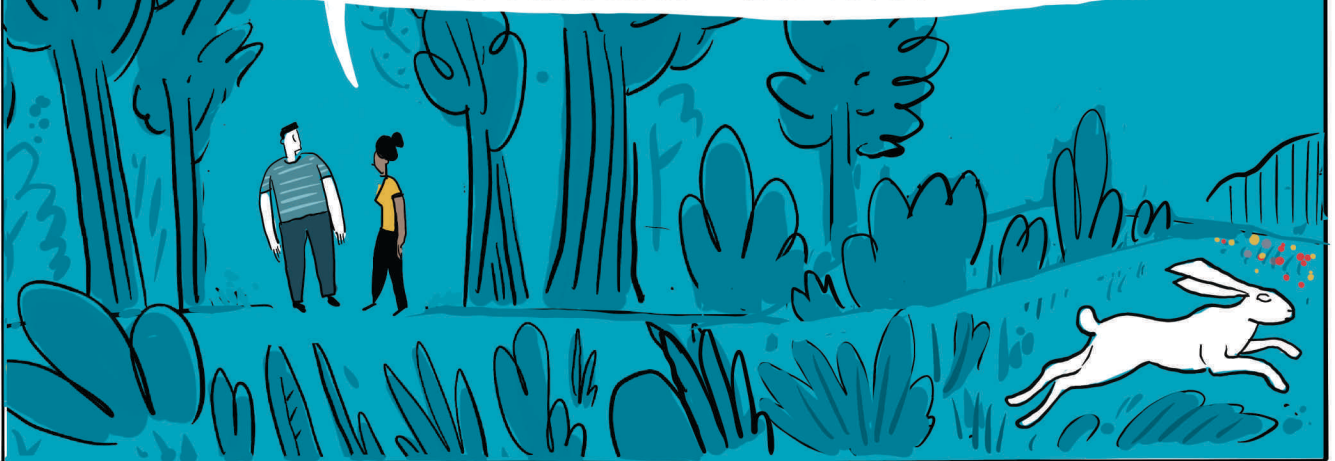
DON'T DESPAIR. THE WORLD'S GOVERNMENTS CAN SUCCESSFULLY TACKLE A GLOBAL ENVIRONMENTAL ISSUE. IT'S HAPPENED BEFORE WHEN THE HOLE IN THE OZONE LAYER WAS DISCOVERED.



THE OZONE LAYER IS A THIN PART OF THE EARTH'S ATMOSPHERE THAT ABSORBS ALMOST ALL OF THE SUN'S HARMFUL CANCER-CAUSING ULTRAVIOLET LIGHT. IN THE 1980s IT WAS DISCOVERED THAT HUMAN EMISSIONS OF CERTAIN CHEMICALS CAUSED A HOLE TO OPEN UP IN THE OZONE LAYER EACH YEAR OVER THE ANTARCTIC.



AS A RESULT, IN THE MONTREAL PROTOCOL OF 1987, 197 GOVERNMENTS AGREED THAT OZONE-DEPLETING CHEMICALS FOUND IN HAIR SPRAY, REFRIGERATORS, AIR CONDITIONERS AND INDUSTRIAL CLEANING PRODUCTS WOULD BE PHASED OUT. IF CURRENT POLICIES REMAIN IN PLACE, THE OZONE LAYER IS EXPECTED TO RECOVER WITHIN DECADES. SO IT CAN HAPPEN.



LAST YEAR A MAJOR MILESTONE WAS PASSED WHEN WIND AND SOLAR POWER PRODUCED MORE OF THE EUROPEAN UNION'S ELECTRICITY THAN GAS FOR THE FIRST TIME.

RENEWABLE ENERGIES WERE RESPONSIBLE FOR A RECORD FIFTH OF THE BLOC'S ELECTRICITY.



THE INTERNATIONAL ENERGY AGENCY (IEA) HAS SAID THAT RENEWABLES ARE SET TO ACCOUNT FOR OVER 90 PERCENT OF GLOBAL ELECTRICITY CAPACITY EXPANSION IN THE NEXT FIVE YEARS...

...AND THAT RENEWABLES WILL BECOME THE LARGEST SOURCE OF GLOBAL ELECTRICITY GENERATION BY EARLY 2025, SURPASSING COAL.



IN EUROPE, THE IEA ESTIMATE THAT THE CONTINENT'S RENEWABLE ELECTRICITY EXPANSION WILL DOUBLE OVER THE 2022-2027 PERIOD.

BUT WHAT ABOUT JOBS? ISN'T ALL THIS CHANGE KILLING TRADITIONAL JOBS.



JOB'S ARE BEING CREATED. WORLDWIDE RENEWABLE ENERGY EMPLOYMENT REACHED 12.7 MILLION LAST YEAR, A JUMP OF 700,000 NEW JOBS IN ONE YEAR.



SOLAR ENERGY IS THE FASTEST-GROWING SECTOR. IN 2021 IT PROVIDED 4.3 MILLION JOBS, MORE THAN A THIRD OF THE CURRENT GLOBAL RENEWABLE WORKFORCE.



AND THIS IS ALL HELPING THE WORLD ACHIEVE, WHAT IS IT CALLED - NET ZERO?



WE NEED TO REDUCE EMISSIONS OF GREENHOUSE GASES AS MUCH AS WE CAN, AND BALANCE THE REST WITH WAYS OF TAKING UP CARBON DIOXIDE FROM THE ATMOSPHERE.



THAT'S WHAT WE MEAN BY NET ZERO.



THE NUMBER OF THE WORLD'S NATIONS AND CITIES THAT ARE INTRODUCING NET ZERO TARGETS IS INCREASING.



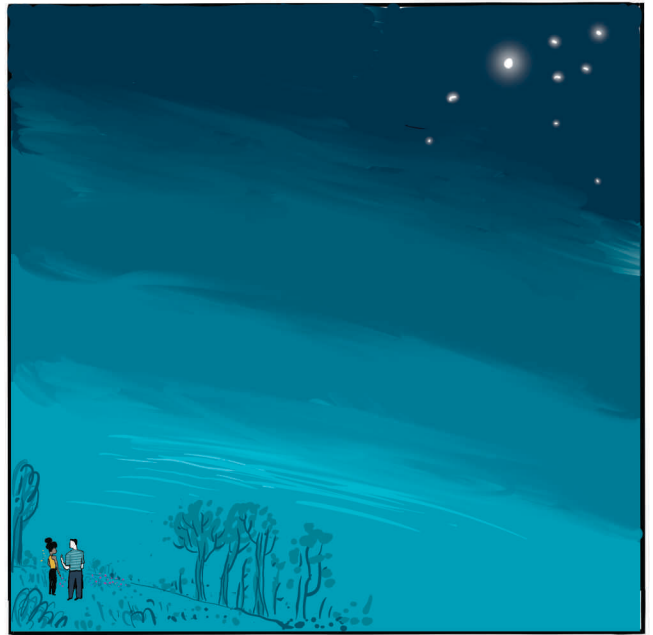
AND THE NUMBER OF LARGE CITIES WITH NET ZERO TARGETS HAS DOUBLED - FROM 115 TO 235 - BUT MORE THAN 900 LARGE CITIES STILL LACK A NET ZERO TARGET.



SO THERE'S STILL MUCH TO BE DONE...



...TO PROTECT OUR FRAGILE WORLD.



OUR HOME.



CONSTRRAIN

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