

— USEFUL TIPS —

SUSTAINABILITY GUIDE

TO MOVE TOWARDS A SUSTAINABLE FUTURE



The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

SUSTAINABILITY GUIDE

USEFUL TIPS TO MOVE TOWARDS A SUSTAINABLE FUTURE

THIS GUIDE IS PREPARED WITHIN THE FRAMEWORK OF THE PROJECT, COORDINATED BY GREEN INITIATIVE YOUTH GROUP, ENTITLED "SUSTAINABLE GREEN FUTURE" AND NUMBERED 2021-1-TR01-KA152-YOU-000019363.

THE EUROPEAN COMMISSION'S SUPPORT FOR THE PRODUCTION OF THIS PUBLICATION DOES NOT CONSTITUTE AN ENDORSEMENT OF THE CONTENTS, WHICH REFLECT THE VIEWS ONLY OF THE AUTHORS, AND THE COMMISSION CANNOT BE HELD RESPONSIBLE FOR ANY USE WHICH MAY BE MADE OF THE INFORMATION CONTAINED THEREIN.

GREEN INITIATIVE YOUTH GROUP
ANKARA, 2023



@green.in.tr



@greeninitiative.tr



@greeninitiative-tr



@Green_Int_TR



TABLE OF CONTENTS

SUSTAINABILITY GUIDE USEFUL TIPS TO MOVE TOWARDS A SUSTAINABLE FUTURE

PART I, WHAT IS THE SITUATION?.....	5
PLANET EARTH'S RESOURCES ARE LIMITED!.....	6
POLLUTION.....	7
CLIMATE CHANGE.....	8
OCEAN ACIDIFICATION.....	9
FRESHWATER CONSUMPTION AND THE GLOBAL HYDROLOGICAL CYCLE.....	10
BIODIVERSITY LOSS AND EXTINCTIONS.....	11
STRATOSPHERIC OZONE DEPLETION.....	12
LAND SYSTEM CHANGE.....	13
NITROGEN AND PHOSPHORUS FLOWS TO THE BIOSPHERE AND OCEANS.....	14
ATMOSPHERIC AEROSOL LOADING.....	15
PART II, THE POLLUTION.....	16
"WE" PRODUCE POLLUTION.....	17
ORGANIC POLLUTANTS.....	18
ELECTRONIC POLLUTANTS.....	19
METAL POLLUTANTS.....	20
PLASTIC POLLUTANTS.....	21
GLASS POLLUTANTS.....	22
PAPER POLLUTANTS.....	23
HAZARDOUS POLLUTANTS.....	24
DIGITAL WASTE.....	25



PART III, WHAT WE CAN DO?.....	26
FOR A SUSTAINABLE FUTURE.....	27
FOR A GREENER HOME.....	28
FOR A GREENER WORKPLACE.....	29
TRAVELLING/OUTING MINDFULLY.....	30



PART 1

WHAT IS THE SITUATION?



PLANET EARTH'S RESOURCES ARE LIMITED!

HUMANITY HAS BEEN CONSUMING NATURAL RESOURCES MUCH FASTER THAN OUR PLANET'S CAPACITY CAN GENERATE. WE WOULD NEED AT LEAST 2.6 PLANET EARTH IF EVERYONE LIVED AND CONSUMED LIKE THE AVERAGE TURKISH CITIZEN TODAY. WE WOULD NEED 4.3 EARTH IF EVERYONE LIVED LIKE A BELGIAN, 3.8 EARTH IF EVERYONE LIVED LIKE AN AUSTRIAN, AND 2.3 EARTH IF EVERYONE LIVED LIKE AN AVERAGE BULGARIAN . AFTER ALL, WE ARE CONSUMING MORE THAN OUR PLANET IS CAPABLE OF PROVIDING FOR US.

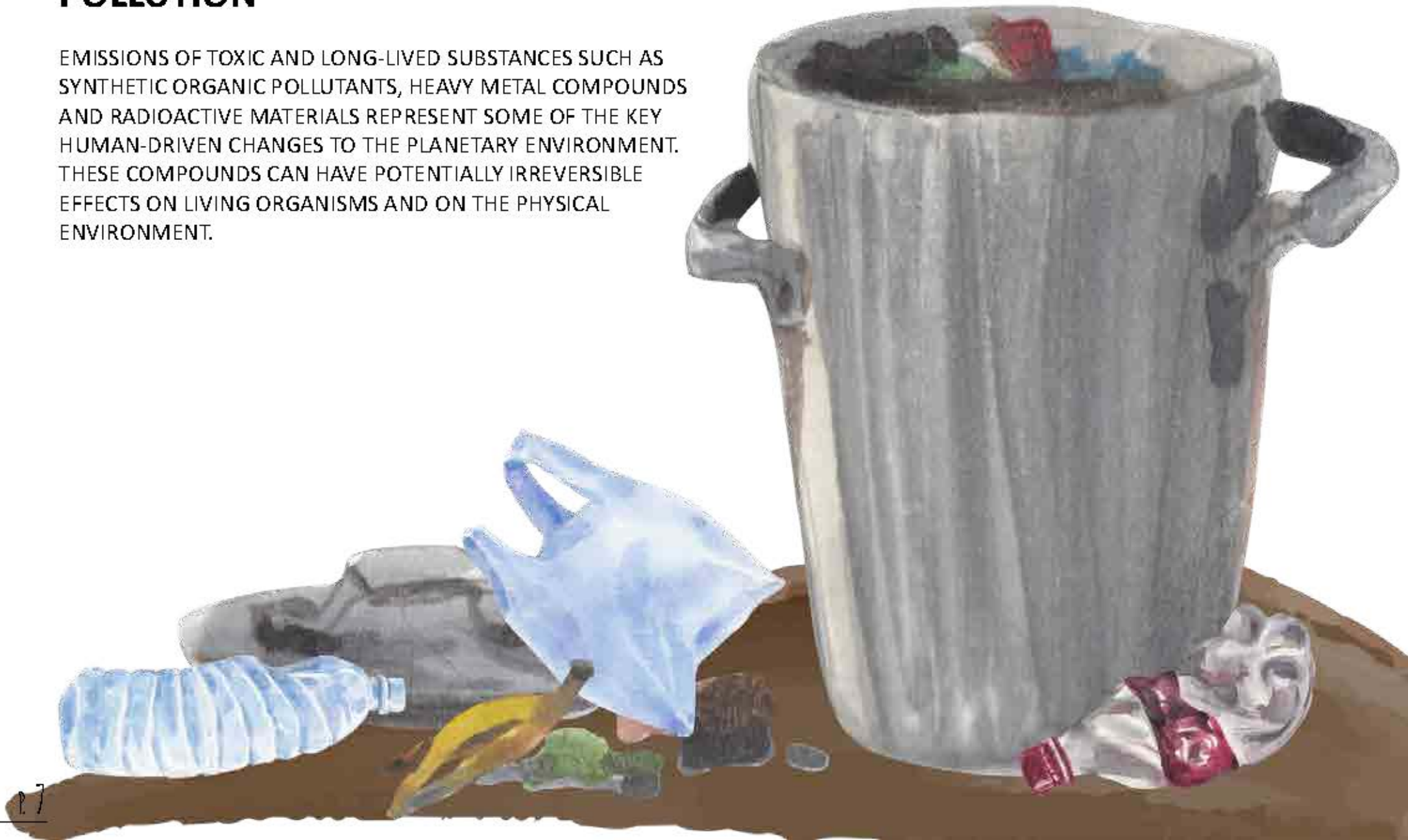
IT'S IMPORTANT TO KEEP IN MIND THAT WE'RE ALL ON THIS PLANET TOGETHER, AND IT'S UP TO US TO MAKE SURE THAT WE LEAVE IT IN A BETTER PLACE THAN WE FOUND IT.

LET'S START BY LOOKING AT HOW FAR WE'VE COME:



POLLUTION

EMISSIONS OF TOXIC AND LONG-LIVED SUBSTANCES SUCH AS SYNTHETIC ORGANIC POLLUTANTS, HEAVY METAL COMPOUNDS AND RADIOACTIVE MATERIALS REPRESENT SOME OF THE KEY HUMAN-DRIVEN CHANGES TO THE PLANETARY ENVIRONMENT. THESE COMPOUNDS CAN HAVE POTENTIALLY IRREVERSIBLE EFFECTS ON LIVING ORGANISMS AND ON THE PHYSICAL ENVIRONMENT.



CLIMATE CHANGE

SINCE THE 1800S, HUMAN ACTIVITIES HAVE BEEN THE MAIN DRIVER OF CLIMATE CHANGE, PRIMARILY DUE TO BURNING FOSSIL FUELS LIKE COAL, OIL AND GAS. BURNING FOSSIL FUELS GENERATES GREENHOUSE GAS EMISSIONS THAT ACT LIKE A BLANKET WRAPPED AROUND THE EARTH, TRAPPING THE SUN'S HEAT AND RAISING TEMPERATURES.



OCEAN ACIDIFICATION

AROUND A QUARTER OF THE CO₂ THAT HUMANITY EMITS INTO THE ATMOSPHERE IS ULTIMATELY DISSOLVED IN THE OCEANS. HERE IT FORMS CARBONIC ACID, ALTERING OCEAN CHEMISTRY AND DECREASING THE PH OF THE SURFACE WATER. THIS INCREASED ACIDITY REDUCES THE AMOUNT OF AVAILABLE CARBONATE IONS, AN ESSENTIAL 'BUILDING BLOCK' USED BY MANY MARINE SPECIES FOR SHELL AND SKELETON FORMATION.



FRESHWATER CONSUMPTION AND THE GLOBAL HYDROLOGICAL CYCLE

THE CONSEQUENCES OF HUMAN MODIFICATION OF WATER BODIES INCLUDE BOTH GLOBAL-SCALE RIVER FLOW CHANGES AND SHIFTS IN VAPOUR FLOWS ARISING FROM LAND USE CHANGE. THESE SHIFTS IN THE HYDROLOGICAL SYSTEM CAN BE ABRUPT AND IRREVERSIBLE. WATER IS BECOMING INCREASINGLY SCARCE - BY 2050 ABOUT HALF A BILLION PEOPLE ARE LIKELY TO BE SUBJECT TO WATER-STRESS, INCREASING THE PRESSURE TO INTERVENE IN WATER SYSTEMS.



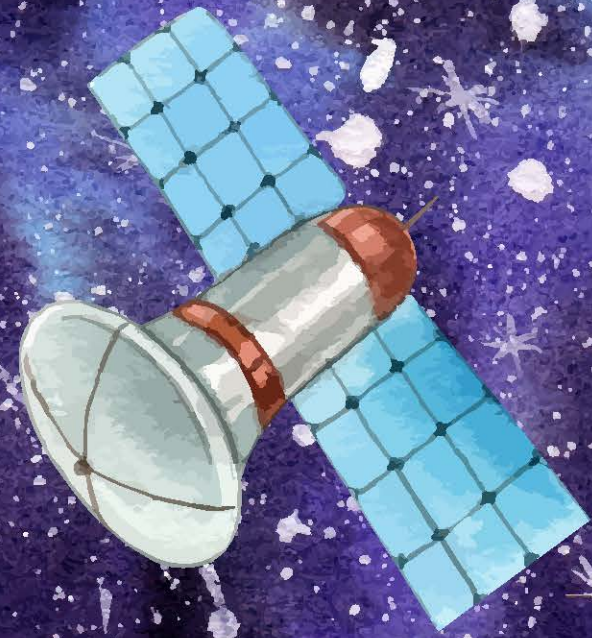
BIODIVERSITY LOSS AND EXTINCTIONS

THE MILLENNIUM ECOSYSTEM ASSESSMENT OF 2005 CONCLUDED THAT CHANGES TO ECOSYSTEMS DUE TO HUMAN ACTIVITIES WERE MORE RAPID IN THE PAST 50 YEARS THAN AT ANY TIME IN HUMAN HISTORY, INCREASING THE RISKS OF ABRUPT AND IRREVERSIBLE CHANGES.



STRATOSPHERIC OZONE DEPLETION

THE STRATOSPHERIC OZONE LAYER IN THE ATMOSPHERE FILTERS OUT ULTRAVIOLET (UV) RADIATION FROM THE SUN. IF THIS LAYER DECREASES, INCREASING AMOUNTS OF UV RADIATION WILL REACH GROUND LEVEL. THIS CAN CAUSE A HIGHER INCIDENCE OF SKIN CANCER IN HUMANS AS WELL AS DAMAGE TO TERRESTRIAL AND MARINE BIOLOGICAL SYSTEMS.



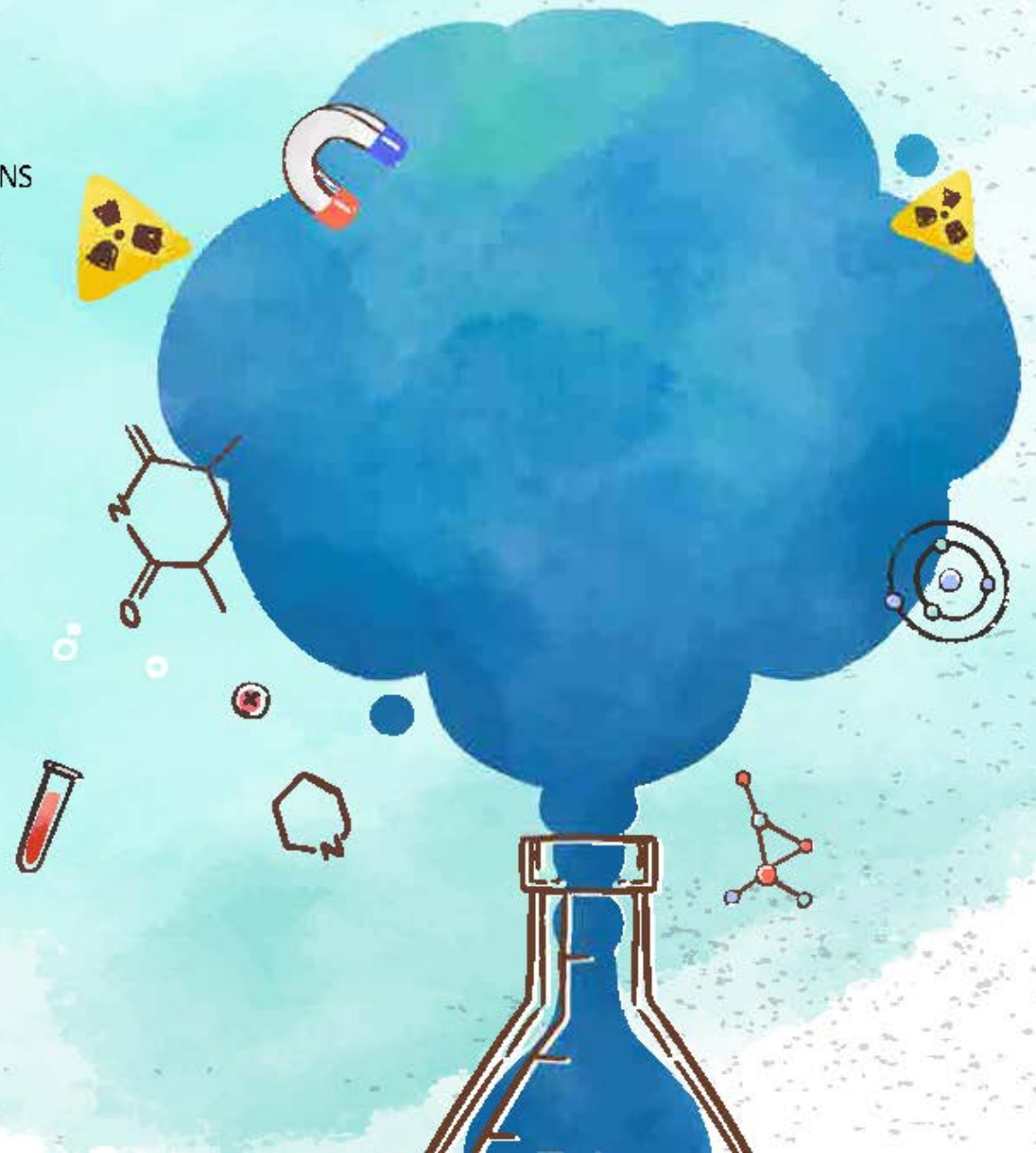
LAND SYSTEM CHANGE

LAND IS CONVERTED TO HUMAN USE ALL OVER THE PLANET. FORESTS, GRASSLANDS, WETLANDS AND OTHER VEGETATION TYPES HAVE PRIMARILY BEEN CONVERTED TO AGRICULTURAL LAND. THIS LAND-USE CHANGE IS ONE DRIVING FORCE BEHIND THE SERIOUS REDUCTIONS IN BIODIVERSITY, AND IT HAS IMPACTS ON WATER FLOWS AND ON THE BIOGEOCHEMICAL CYCLING OF CARBON, NITROGEN AND PHOSPHORUS AND OTHER IMPORTANT ELEMENTS.



NITROGEN AND PHOSPHORUS FLOWS TO THE BIOSPHERE AND OCEANS

THE BIOGEOCHEMICAL CYCLES OF NITROGEN AND PHOSPHORUS HAVE BEEN RADICALLY CHANGED BY HUMANS AS A RESULT OF MANY INDUSTRIAL AND AGRICULTURAL PROCESSES. MUCH OF THIS NITROGEN AND PHOSPHORUS ENDS UP IN AQUATIC SYSTEMS. IT POLLUTES WATERWAYS AND COASTAL ZONES OR ACCUMULATES IN THE TERRESTRIAL BIOSPHERE.



ATMOSPHERIC AEROSOL LOADING

HUMANS CHANGE THE AEROSOL LOADING BY EMITTING ATMOSPHERIC POLLUTION (MANY POLLUTANT GASES CONDENSE INTO DROPLETS AND PARTICLES), AND ALSO THROUGH LAND-USE CHANGE THAT INCREASES THE RELEASE OF DUST AND SMOKE INTO THE AIR. SHIFTS IN CLIMATE REGIMES AND MONSOON SYSTEMS HAVE ALREADY BEEN SEEN IN HIGHLY POLLUTED ENVIRONMENTS, GIVING A QUANTIFIABLE REGIONAL MEASURE FOR AN AEROSOL BOUNDARY.



PART 2

THE POLLUTION



“WE” PRODUCE POLLUTION

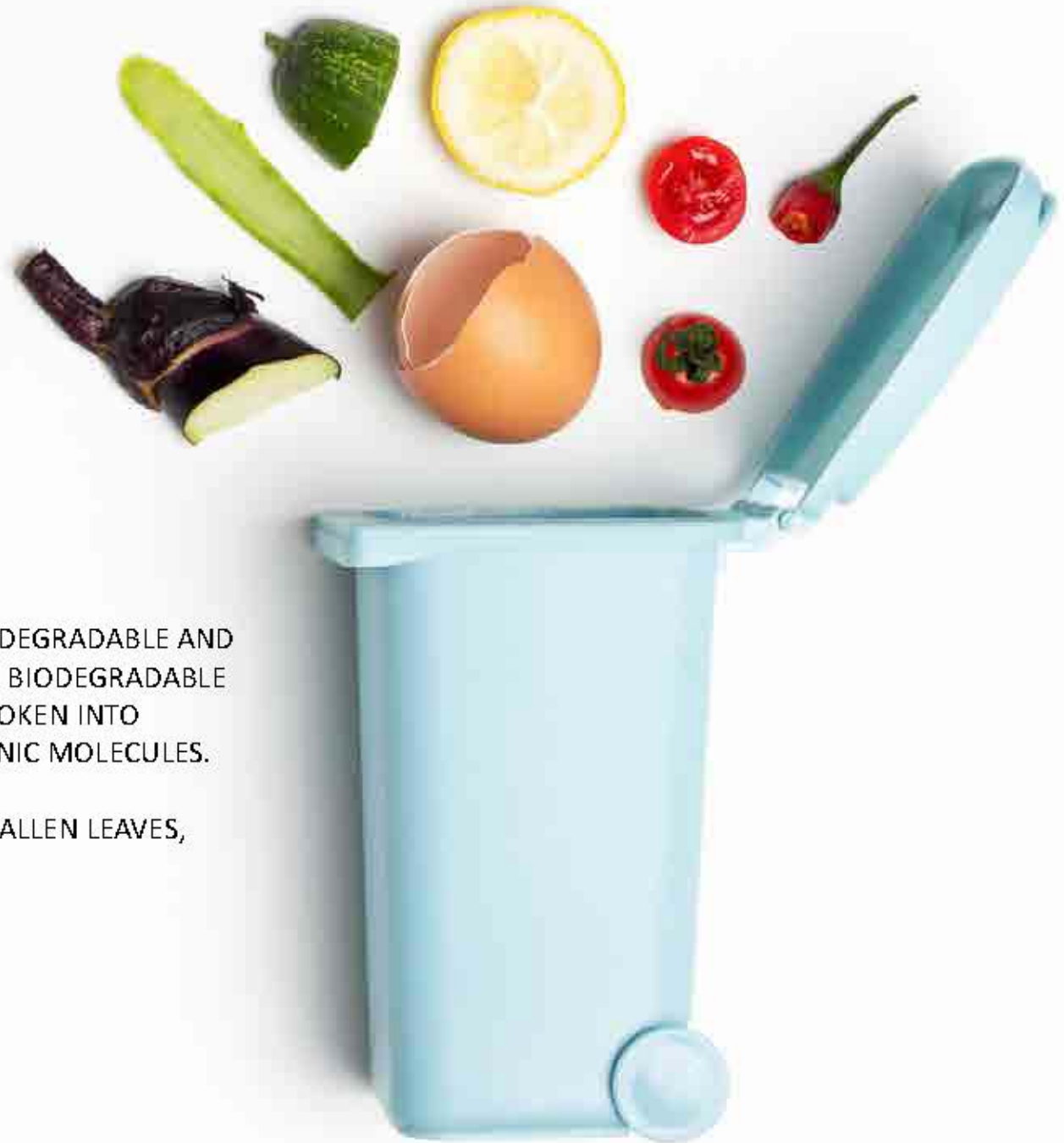
MANY THINGS THAT WE USE PRODUCE POLLUTION. WHEN WE DRINK WATER FROM PLASTIC BOTTLES, WE PRODUCE PLASTIC WASTE. BURNING COAL OR FUEL TO CREATE ELECTRICITY POLLUTES THE AIR. INDUSTRIES AND HOMES GENERATE GARBAGE AND SEWAGE THAT CAN POLLUTE THE LAND AND WATER. PESTICIDES SEEP INTO LANDS, RIVERS, LAKES, AND SEAS AND HARM WILDLIFE.

ALL LIVING CREATURES—FROM MICROBES TO WHALES—DEPEND ON OUR PLANET’S SUPPLY OF AIR AND WATER. WHEN THESE RESOURCES ARE POLLUTED, ALL FORMS OF LIFE ARE THREATENED.

POLLUTION IS A GLOBAL PROBLEM NOW. IN SPITE OF THE FACT THAT URBAN AREAS ARE USUALLY MORE POLLUTED THAN THE COUNTRYSIDE, POLLUTION CAN SPREAD TO REMOTE PLACES WHERE NO PEOPLE LIVE.

LET’S CHECK OUT THE POLLUTANTS THAT HARM OUR PLANET:





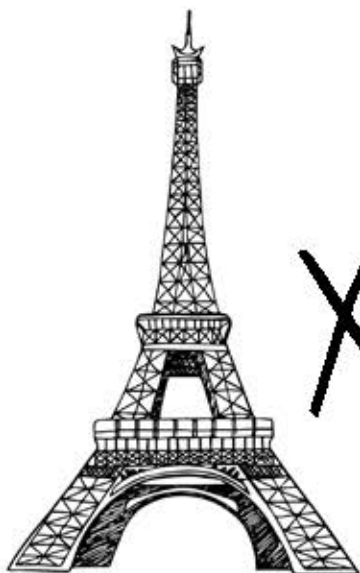
ORGANIC POLLUTANTS

ORGANIC WASTE IS ANY MATERIAL THAT IS BIODEGRADABLE AND COMES FROM EITHER A PLANT OR AN ANIMAL. BIODEGRADABLE WASTE IS ORGANIC MATERIAL THAT CAN BE BROKEN INTO CARBON DIOXIDE, METHANE OR SIMPLE ORGANIC MOLECULES.

COFFEE GROUNDS, APPLE CORE, EGG SHELLS, FALLEN LEAVES, LEFTOVER FOOD, DROPPINGS ETC.

ELECTRONIC POLLUTANTS

ELECTRONIC POLLUTANT (E-WASTE) IS A POPULAR, INFORMAL NAME FOR ELECTRONIC PRODUCTS NEARING THE END OF THEIR "USEFUL LIFE." COMPUTERS, TELEVISIONS, PHONES, COPIERS, FAX MACHINES, LAMPS ETC.



X 4500

50 MILLION METRIC TONS OF
ELECTRONIC WASTE

AND ONLY 20 PERCENT OF IT IS RECYCLED.



METAL POLLUTANTS

METALS ARE RESOURCES THAT ARE LIMITED. THE DEPLETION OF METALS CAN BE A BIG ISSUE IN THE FUTURE SINCE THE WORLD POPULATION GROWS RAPIDLY AND THUS ALSO THE DEMAND FOR GOODS MADE OUT OF METAL WILL INCREASE. THROUGH THE RECYCLING PROCESS, WE CAN USE RESOURCES MORE EFFICIENTLY AND THEREFORE SLOW DOWN THE DEPLETION PROCESS.



FROM 50 TO 500 YEARS, IT TAKES TO DECOMPOSE



PLASTIC POLLUTANTS

PLASTIC POLLUTION HAS BECOME ONE OF THE MOST PRESSING ENVIRONMENTAL ISSUES, AS RAPIDLY INCREASING PRODUCTION OF DISPOSABLE PLASTIC PRODUCTS OVERWHELMS THE WORLD'S ABILITY TO DEAL WITH THEM.

PRODUCTION INCREASED EXPONENTIALLY, FROM 2.3 MILLION TONS IN 1950 TO 448 MILLION TONS BY 2015. PRODUCTION IS EXPECTED TO DOUBLE BY 2050.

EVERY YEAR, ABOUT 8 MILLION TONS OF PLASTIC WASTE ESCAPES INTO THE OCEANS FROM COASTAL NATIONS. THAT'S THE EQUIVALENT OF SETTING FIVE GARBAGE BAGS FULL OF TRASH ON EVERY FOOT OF COASTLINE AROUND THE WORLD.



STOP USING
SINGLE-USE
PLASTICS!



GLASS POLLUTANTS

WASTE GLASS IS ANOTHER WASTE MATERIAL THAT IS PRODUCED IN LARGE QUANTITIES AND IS DIFFICULT TO ELIMINATE. IT IS KNOWN THAT MOST OF THE WASTE GLASS IS COLLECTED, ESPECIALLY CONTAINER GLASSES, REMELTED, AND USED TO PRODUCE NEW GLASS. HOWEVER, NOT ALL OF THE WASTE GLASS IS SUITABLE FOR THE PRODUCTION OF NEW GLASS.

32% of glass wastes
in the world



are
recycled



$\frac{1}{3}$ OF ALL GARBAGE IS
PAPER IN THE WORLD.



PAPER POLLUTANTS

PAPER WASTE IS A SEVERE PROBLEM IN MANY INDUSTRIES AND OFFICES. BECAUSE OF PRINTING MISTAKES, JUNK MAILS, BILLINGS, AND PACKAGING, THE PAPER MAY COMPRISE UP TO 70% OF A COMPANY'S TOTAL WASTE. AN AVERAGE OFFICE EMPLOYEE WOULD BE USING ABOUT 10,000 SHEETS OF PAPER IN A YEAR. IN ADDITION TO PAPER USED FOR PRINTING, COMPANIES ALSO CONSUME OTHER PAPER PRODUCTS, SUCH AS CARDBOARD, ENVELOPES, AND WRAPPERS, TO NAME A FEW.

WITH MUCH OF THE ATTENTION FOCUSED ON PLASTIC DISPOSAL, THE IMPACT OF PAPER WASTE IS OFTEN OVERLOOKED. YET, IMPROPER PAPER WASTE DISPOSAL AND RECYCLING CAN IMPACT THE ECONOMY AND THE ENVIRONMENT AS THE OTHER WASTE PRODUCTS.

5,000 tons of recycled paper
saves **60,000 trees**





HAZARDOUS POLLUTANTS

TOXIC (HAZARDOUS) POLLUTANT IS A TYPE OF WASTE WITH PROPERTIES THAT MAKE IT HAVE A HARMFUL EFFECT ON HUMAN HEALTH AND/OR THE ENVIRONMENT. EXAMPLE: BATTERIES, PESTICIDES, CELL PHONES, VARNISH ETC.

DIGITAL WASTE

IN THE DIGITAL WORLD, SIMILAR TO THE ENVIRONMENT, THERE IS A HUGE AMOUNT OF TRASH. UNNECESSARY EMAILS, FILES, APPS, DUPLICATES OF PHOTOS AND VIDEOS ARE ALL DIGITAL WASTE.

THIS DIGITAL WASTE CREATES DIGITAL POLLUTION THAT CONTINUES TO CONSUME ENERGY EVEN WHEN WE HAVE FORGOTTEN IT. DIGITAL TRASH SITS IN THE BACKUPS ON SERVERS THAT PROVIDE US WITH CLOUD SERVICE AND CONTINUE CONSUMING ELECTRICITY.

150.000.000
EMAILS ARE SENT
A MINUTE
IN THE WORLD

EACH YEAR THE INTERNET AND ITS SUPPORTING
SYSTEMS PRODUCE 900 MILLION TONS OF
CO₂

IF WE DELETE ALL UNNECESSARY FILES, EMAILS, APPS, PHOTOS AND VIDEOS, WE ARE NOT JUST SAVING A HUGE AMOUNT OF CO₂ BUT WE ARE ALSO EXTENDING THE LIFE OF OUR GADGETS, FEEL MORE BALANCED, AND WE TAKE CONTROL OVER OUR LIVES, FORGE NEW DIGITAL HABITS, AND WE WILL BE MORE EFFICIENT AND SATISFIED.



PART 3

WHAT WE CAN DO?



FOR A SUSTAINABLE FUTURE

THE WORLD WE LIVE IN IS CHANGING. WE'RE SEEING MORE AND MORE EVIDENCE OF THE IMPACT THAT UNSUSTAINABLE PRACTICES ARE HAVING ON OUR ENVIRONMENT, AND IT'S CLEAR THAT IF WE DON'T CHANGE THE WAY WE LIVE, THINGS ARE GOING TO GET WORSE.

WE KNOW THAT SUSTAINABILITY IS IMPORTANT, BUT WHY? AND WHAT DOES IT MEAN FOR US?

SUSTAINABILITY MEANS "THE ABILITY TO BE MAINTAINED AT A CERTAIN RATE OR LEVEL OVER TIME." IT'S BASICALLY ABOUT MAINTAINING BALANCE IN NATURE SO THINGS DON'T GET OUT OF WHACK AND START HURTING EACH OTHER (OR US!). WHEN WE TALK ABOUT SUSTAINABILITY IT MEANS WE NEED TO CHANGE HOW WE LIVE OUR LIVES RIGHT NOW SO THAT OUR ACTIONS DON'T CAUSE TOO MUCH HARM IN THE FUTURE!

HERE ARE SOME TIPS FOR HOW YOU CAN HELP PROTECT YOUR ENVIRONMENT BY MAKING SIMPLE CHANGES IN YOUR DAILY LIFE:



FOR A GREENER HOME

- 1 HAVE SHOWER DON'T TAKE A BATH
- 2 DON'T KEEP THE TAP OPEN WHILE YOU ARE BRUSHING YOUR TEETH
- 3 BUY TOOTHPASTE OR TOOTH TABLETS IN GLASS JARS
- 4 USE A BAMBOO TOOTHBRUSH
- 5 SUPPORT LOCAL PRODUCTION BY BUYING VEGETABLES AND FRUITS FROM LOCAL MARKETS
- 6 COMPOST
- 7 GET A CLOTH BAG FOR SHOPPING. DON'T USE PLASTIC BAGS
- 8 DON'T KEEP THE FRIDGE DOOR OPEN

INSTEAD OF PAPER TISSUES, USE TOWELS 9

COOK AT HOME 10

TURN OFF THE HEATING WHEN IT IS NOT NECESSARY 11

DON'T CHARGE YOUR PHONE ALL NIGHT LONG 12

CHECK OUT SECOND-HAND STORES FOR FURNITURE, CLOTHES ETC. 13

TURN OFF THE TV IF YOU ARE NOT WATCHING IT 14

CLEAN YOUR PC, SMARTPHONE, AND MAILBOX UP 15

FOR A GREENER WORKPLACE

1 USE YOUR OWN CUP/MUG



2 BRING YOUR OWN UTENSILS

3 PREPARE YOUR FOOD AT HOME AND TAKE IT TO WORK

4 USE PUBLIC TRANSPORTATION

5 WALK OR RIDE A BICYCLE

6 SHARE CAR WITH YOUR COLLEAGUES

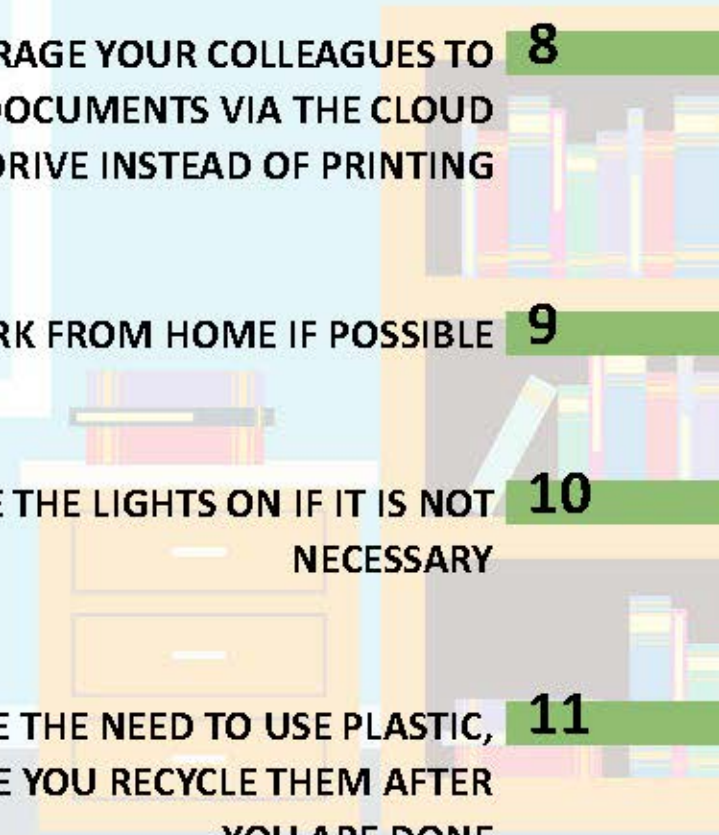
7 DON'T TAKE NOTES ON PAPER, YOU CAN USE YOUR PHONE FOR IT

8 ENCOURAGE YOUR COLLEAGUES TO SHARE DOCUMENTS VIA THE CLOUD DRIVE INSTEAD OF PRINTING

9 WORK FROM HOME IF POSSIBLE

10 DON'T LEAVE THE LIGHTS ON IF IT IS NOT NECESSARY

11 IF YOU HAVE THE NEED TO USE PLASTIC, MAKE SURE YOU RECYCLE THEM AFTER YOU ARE DONE



TRAVELLING/OUTING MINDFULLY

1 DON'T PRINT YOUR BOARDING PASS,
USE DIGITAL ONES

2 WE CAN DRINK WITHOUT A STRAW.
REFUSE IT!

3 USE YOUR OWN REUSABLE CUTLERY
SET, TRAVEL MUG AND BOTTLE ETC.
WHILE YOU ARE CAMPING OR HAVING
A PICNIC

4 IF POSSIBLE, INSTEAD OF PLANES
TRAVEL BY TRAIN

5 WALK FOR SHORT DISTANCES, DON'T
DRIVE

INSTEAD OF AN ELEVATOR USE STAIRS **6**

PREFER VEGAN OR VEGETARIAN OPTIONS **7**
WHEN YOU ARE EATING OUT

CHOOSE PUBLIC TRANSPORTATION **8**

KEEP YOUR THERMOS WITH YOU WHEN **9**
YOU ARE OUT

PARTICIPATE IN PLOGGING OR **10**
ENVIRONMENTAL CLEAN-UP ACTIVITIES