



UNEP

OZZY OZONE

DEFENDER OF OUR PLANET

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 Multilateral Fund
Implementation of the Montreal Protocol

 SCOUTS
Creating a Better World



4. ISSUE:

**OZZY
GOES
ISLAND
HOPPING**

OZZY OZONE

DEFENDER OF OUR PLANET

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THE OZZY OZONE CHARACTER IS A REGISTERED TRADEMARK OF THE GOVERNMENT OF BARBADOS. UNEP WOULD LIKE TO THANK THE GOVERNMENT OF BARBADOS FOR ITS PERMISSION TO USE THIS CHARACTER.

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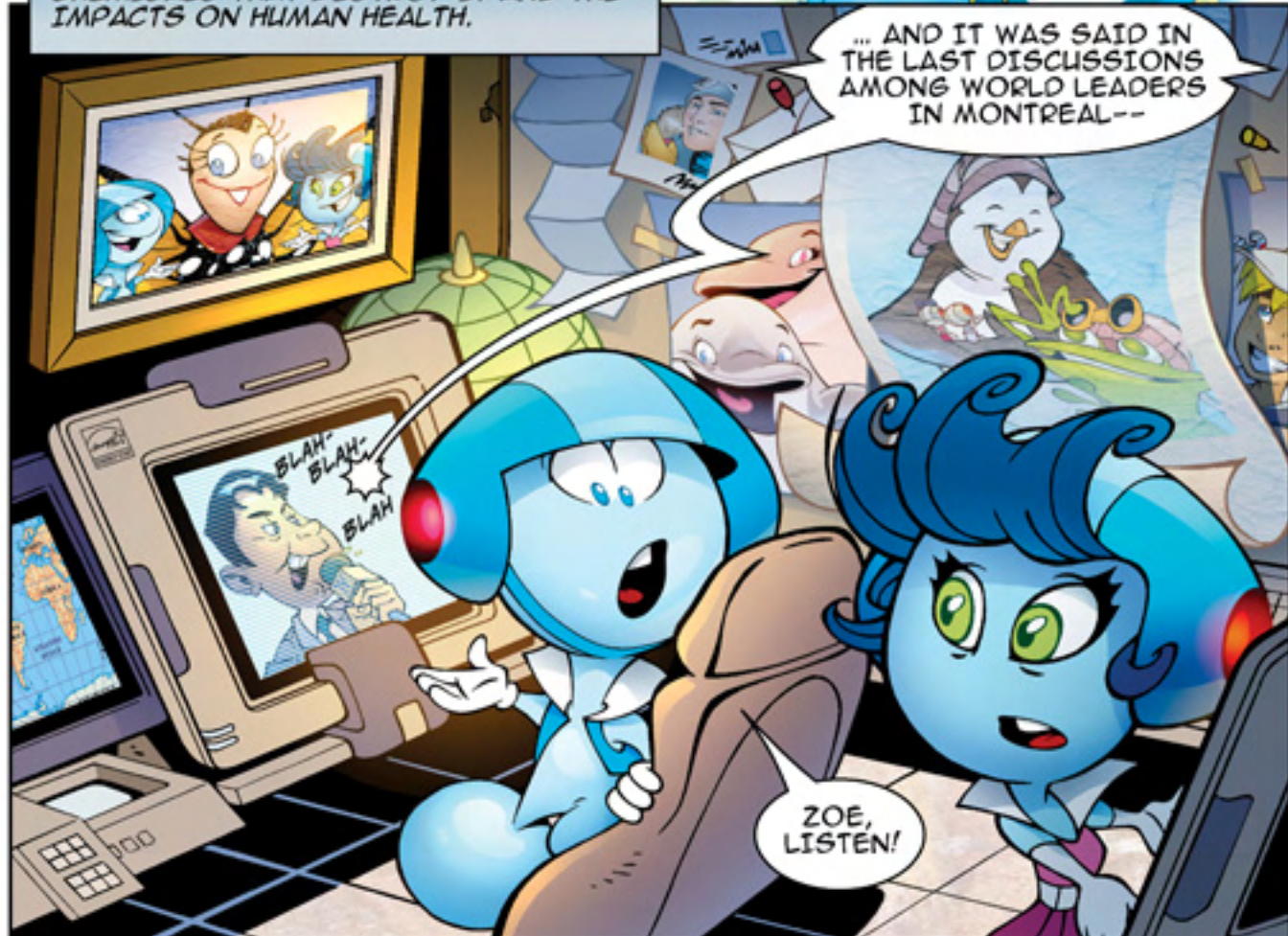
THIS PUBLICATION IS LINKED TO UNEP'S **TUNZA** STRATEGY FOR CHILDREN AND YOUTH.



OUR PLANET EARTH IS DEFENDED BY OZZY OZONE AND HIS FRIENDS. THESE SMALL OZONE MOLECULES ARE ALWAYS READY TO PROTECT AND HELP ALL LIVING-BEINGS ON EARTH.

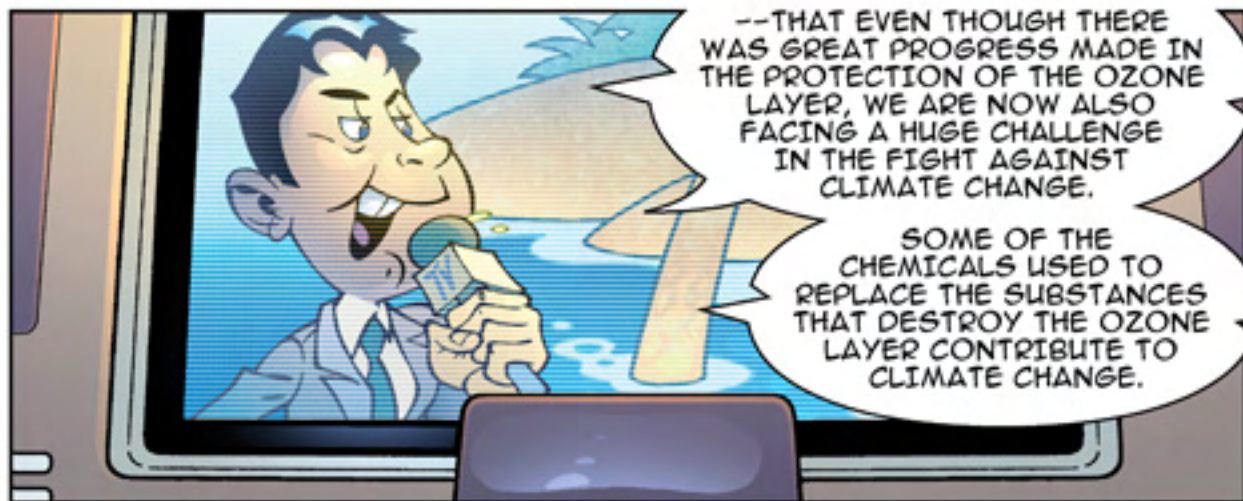


IN THE PAST ADVENTURES OF OZZY OZONE AND FRIENDS, THEY HELPED THE WORLD TO UNDERSTAND THE IMPORTANCE OF THE PROTECTION OF THE OZONE LAYER FROM THE CHEMICALS THAT DESTROY IT AND THE IMPACTS ON HUMAN HEALTH.




... AND IT WAS SAID IN THE LAST DISCUSSIONS AMONG WORLD LEADERS IN MONTREAL--

ZOE, LISTEN!




--THAT EVEN THOUGH THERE WAS GREAT PROGRESS MADE IN THE PROTECTION OF THE OZONE LAYER, WE ARE NOW ALSO FACING A HUGE CHALLENGE IN THE FIGHT AGAINST CLIMATE CHANGE.

SOME OF THE CHEMICALS USED TO REPLACE THE SUBSTANCES THAT DESTROY THE OZONE LAYER CONTRIBUTE TO CLIMATE CHANGE.



ONE OF THE RESULTS IS THAT SMALL ISLANDS AND LOW LYING COSTAL STATES ARE EXPERIENCING A RISE IN SEA LEVEL--


--WHICH HAS AN IMPACT ON PEOPLE, HEALTH, ECONOMIES AND ECOSYSTEMS...



OZZY, LISTEN! THIS IS WHAT WE LEARNED WHEN WE WENT TO THE POLES. WE HAVE NO TIME--

--WE NEED TO GO AND HELP THESE PEOPLE IN THE SMALL ISLANDS. PUT ON YOUR SWIMMING SUIT.

YES, I WILL CALL MY FRIEND ALIDA THE LEATHERBACK TURTLE, SHE LIVES IN THE CARIBBEAN.

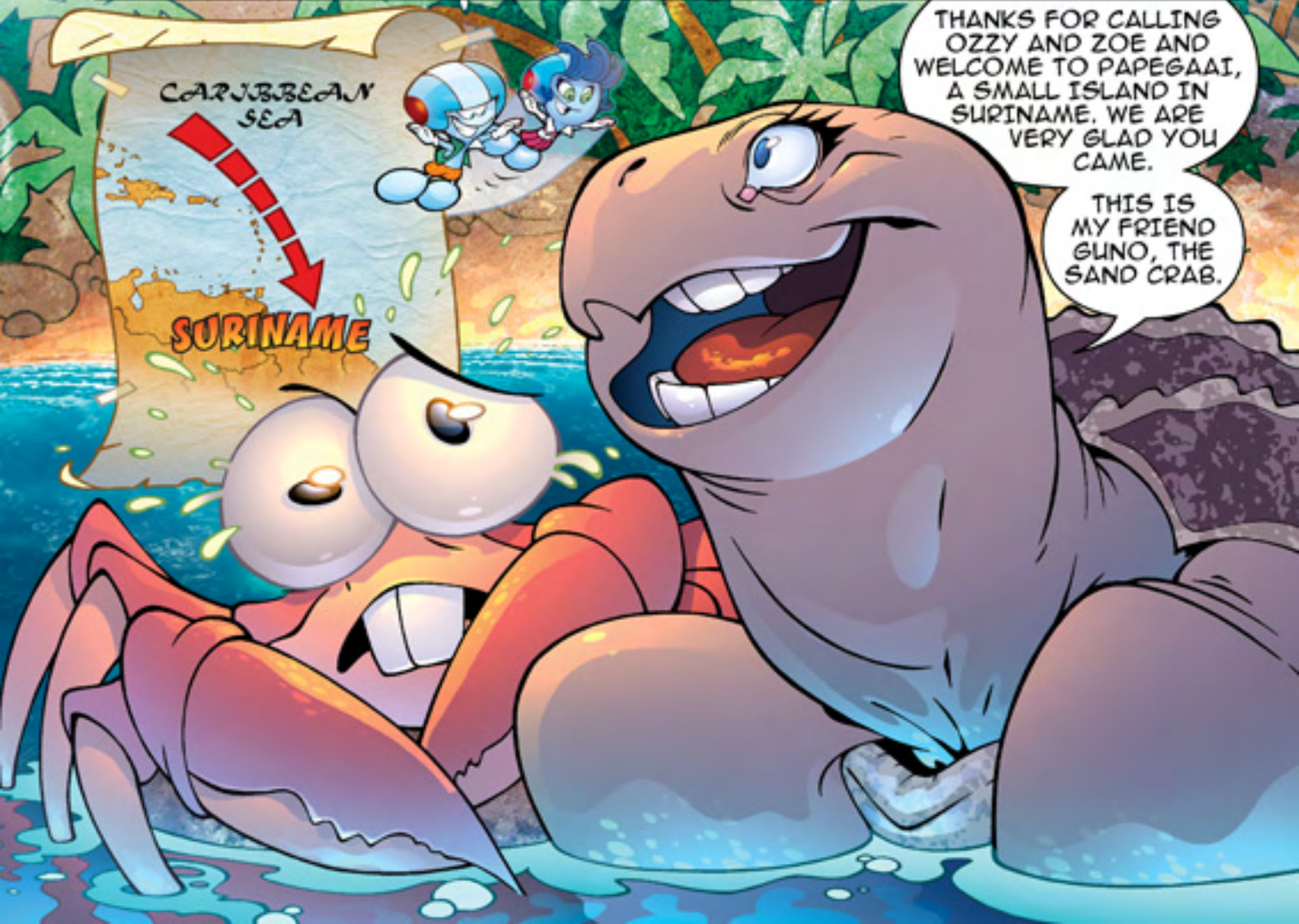


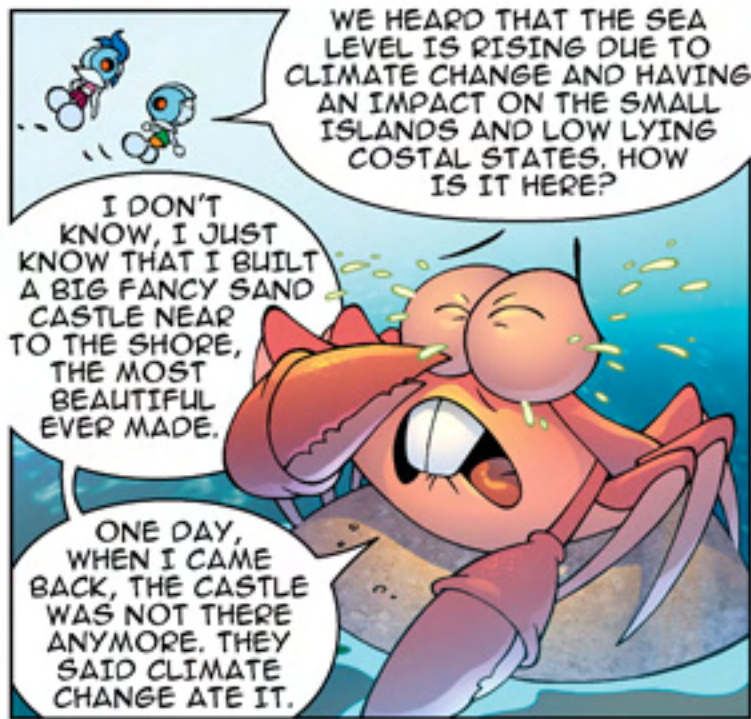
THANKS FOR CALLING OZZY AND ZOE AND WELCOME TO PAPEGAAT, A SMALL ISLAND IN SURINAME. WE ARE VERY GLAD YOU CAME.

THIS IS MY FRIEND GUNO, THE SAND CRAB.

CARIBBEAN SEA

SURINAME





WE HEARD THAT THE SEA LEVEL IS RISING DUE TO CLIMATE CHANGE AND HAVING AN IMPACT ON THE SMALL ISLANDS AND LOW LYING COSTAL STATES. HOW IS IT HERE?

I DON'T KNOW, I JUST KNOW THAT I BUILT A BIG FANCY SAND CASTLE NEAR TO THE SHORE, THE MOST BEAUTIFUL EVER MADE.

ONE DAY, WHEN I CAME BACK, THE CASTLE WAS NOT THERE ANYMORE. THEY SAID CLIMATE CHANGE ATE IT.



SINCE THEN GUNNO HAS NOT STOPPED CRYING. NOTHING CAN CONSOLE HIM...

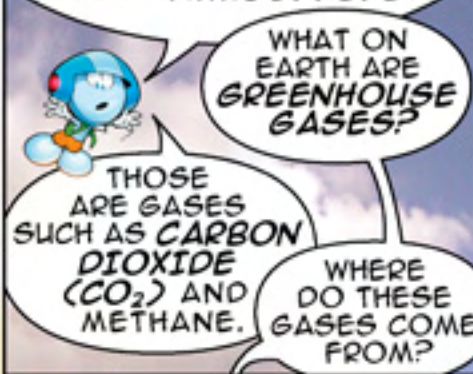
BUT OZZY, HERE IN PAPEGAAT, WE HAVE A LOW LYING COASTAL LINE.



OZZY, ZOE, PLEASE TELL ME WHO THIS FAMOUS CLIMATE CHANGE IS AND WHY HE DESTROYED MY CASTLE.

NO, GUNNO--

--CLIMATE CHANGE ISN'T A PERSON OR AN ANIMAL; IT IS ONE OF THE MOST CRITICAL ENVIRONMENTAL ISSUES OF OUR TIME. IT IS THE RISE OF THE EARTH'S SURFACE TEMPERATURE CAUSED BY THE INCREASED CONCENTRATION OF GREENHOUSE GASES IN THE ATMOSPHERE.



WHAT ON EARTH ARE GREENHOUSE GASES?

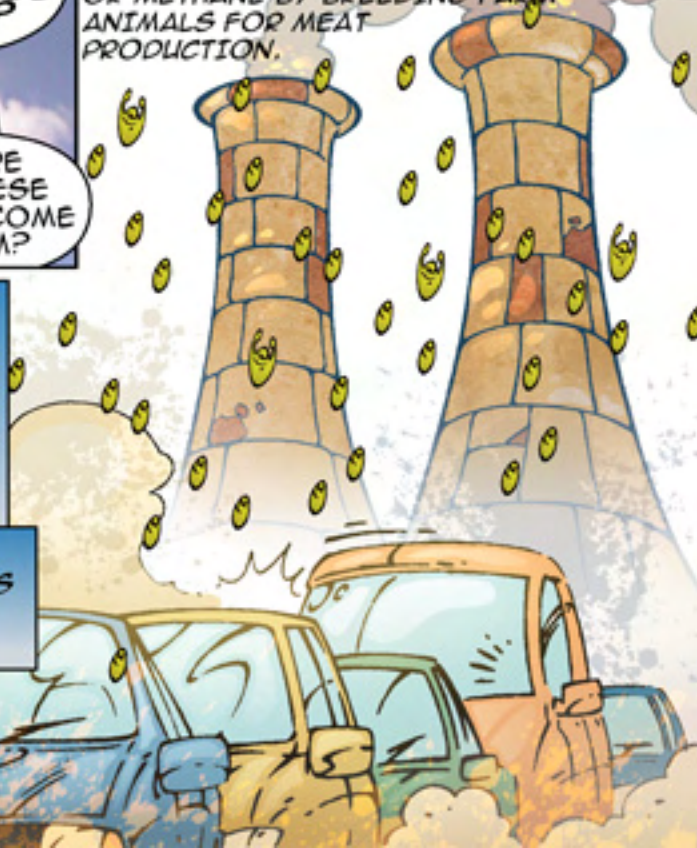
THOSE ARE GASES SUCH AS CARBON DIOXIDE (CO₂) AND METHANE.

WHERE DO THESE GASES COME FROM?

SEE, THE ATMOSPHERE ACTS NATURALLY AS A GREENHOUSE AND ENSURES A RELATIVELY STABLE AND MILD TEMPERATURE ON EARTH'S SURFACE. THE PROBLEM ARISES BECAUSE GREENHOUSE GASES ARE INCREASINGLY EMITTED BY HUMAN ACTIVITIES INTO THE ATMOSPHERE... SUCH AS CO₂ BY BURNING FOSSIL FUELS FOR RUNNING CARS OR PRODUCING ELECTRICITY FOR HEATING AND COOLING HOMES AND BY DESTROYING TROPICAL FORESTS, OR METHANE BY BREEDING FARM ANIMALS FOR MEAT PRODUCTION.

ANOTHER CAUSE OF CLIMATE CHANGE IS THE EMISSION OF THE VERY POTENT GREENHOUSE GASES HFCs, AS WELL AS THE OZONE DEPLETING SUBSTANCES SUCH AS CFCs AND HCFCs, WHICH ARE ALL USED PARTICULARLY IN REFRIGERATION AND AIR CONDITIONING EQUIPMENTS AND FOR THE PRODUCTION OF SYNTHETIC FOAMS.

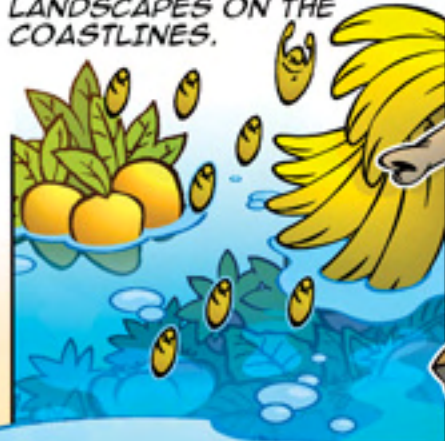
THE INCREASE OF GREENHOUSE GAS CONCENTRATION IN THE ATMOSPHERE IS THEN CAUSING GLOBAL WARMING, WHICH MEANS CLIMATE CHANGE.



WITH THE CURRENT CONCENTRATION OF GREENHOUSE GASES, WE KNOW THAT CLIMATIC CHANGE IS OCCURRING, HAVING AN IMPACT ON THE ENVIRONMENT. THIS WILL AFFECT FOOD PRODUCTION, RAISE THE SEA-LEVELS AND MODIFY LIFE AND LANDSCAPES ON THE COASTLINES.

THIS IS THE CASE IN PAPEGAAI IN SURINAME, DUE TO ITS LOW-LYING COASTAL ZONE; THE SEA LEVEL RISE IS DROWNING LARGE PARTS OF THE COUNTRY, INCREASING NATURAL DISASTERS, SPECIES EXTINCTION, DISPLACING OF POPULATION AND THE SPREAD OF SOME DISEASES.

MAYBE THIS IS WHAT HAPPENED WITH YOUR CASTLE GUNO, THE SEA LEVEL RISE THAT WE ARE EXPERIENCING HERE PROBABLY SANK YOUR CASTLE.



SPLASH

PUP PUP

DON'T WORRY, ALIOA! I WILL GO DIVING AND TRY TO SEE IF IT IS STILL THERE. HOLD ON, WE WILL BRING IT BACK FOR YOU.



HELLO RONALDO, HAVE YOU SEEN A BIG AND BEAUTIFUL SAND CASTLE AROUND?

OH, YES! WE WERE LIVING THERE FOR A WHILE. COME THIS WAY AND YOU WILL FIND IT...



WHAT IS THIS RONALDOO?

AH, THAT WAS ONCE A BEAUTIFUL CORAL REEF. IT WAS THE HOME OF THOUSANDS OF MY FRIENDS, BUT RECENTLY IT BECAME WHITE AS IF IT WAS MADE OF STONE.

WE COULD NOT LIVE THERE ANYMORE AND WE HAD TO MOVE TO ANOTHER PLACE NEAR TO THE CASTLE.

THIS IS CALLED CORAL BLEACHING---

--IT HAPPENS WHEN THE CORALS LOSE THEIR ALGAE THAT SUPPLY THE FOOD AND COLOR.

DON'T TELL ME THAT THIS ALSO COMES FROM CLIMATE CHANGE!

SEE, IRRESPONSIBLE FISHING PRACTICES SUCH AS OVERFISHING AND POLLUTION PLAY A PART, BUT THE BIGGEST THREAT IS THAT OCEANS ARE GETTING WARMER. WATER THAT IS WARMER THAN NORMAL CAN CAUSE DEADLY CORAL BLEACHING.

THE OCEANS HAVE ALSO BECOME MORE ACID AS THEY HAVE ABSORBED A BIG PART OF CARBON DIOXIDE AND THE CORALS SEEM NOT TO BE ABLE TO COPE WELL.

ALSO, OZONE LAYER DEPLETION WHICH CAUSES HIGHER LEVELS OF ULTRA VIOLET (UV) RAYS CAN CONTRIBUTE TO CORAL REEF DAMAGE.

WOW, HOW BAD IS THE SITUATION?

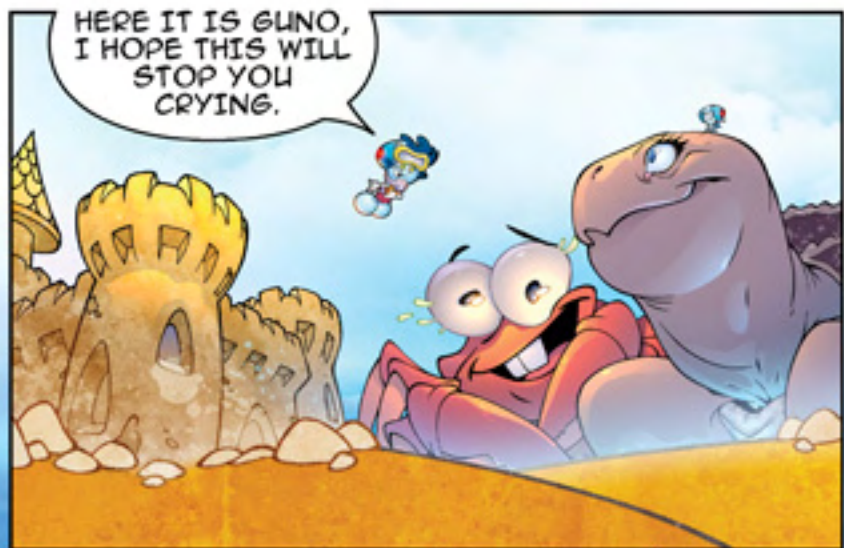
LAST YEAR, WARMING IN THE CARIBBEAN SEA BLEACHED MORE THAN 90% OF THE CORAL ON MANY REEFS. THIS IS 9 OUT OF 10! AS YOU CAN SEE, THE SITUATION IS CRITICAL.

THERE ARE MORE THAN 50 SMALL ISLANDS IN THE WORLD WHICH SHARE SIMILAR PROBLEMS AND AN INCREASE IN THE NUMBER OF NATURAL DISASTERS. NOW CLIMATE CHANGE IS MAKING THE PROBLEMS WORSE.

THE EFFECT OF GLOBAL WARMING IS EVIDENT NOT ONLY IN THE POLES, BUT ALSO HERE ON THE COASTLINES.

THE CASTLE IS HERE; LET'S TAKE IT BACK TO GUNO.

MANY AREAS ARE EXPERIENCING A FASTER TEMPERATURE RISE.

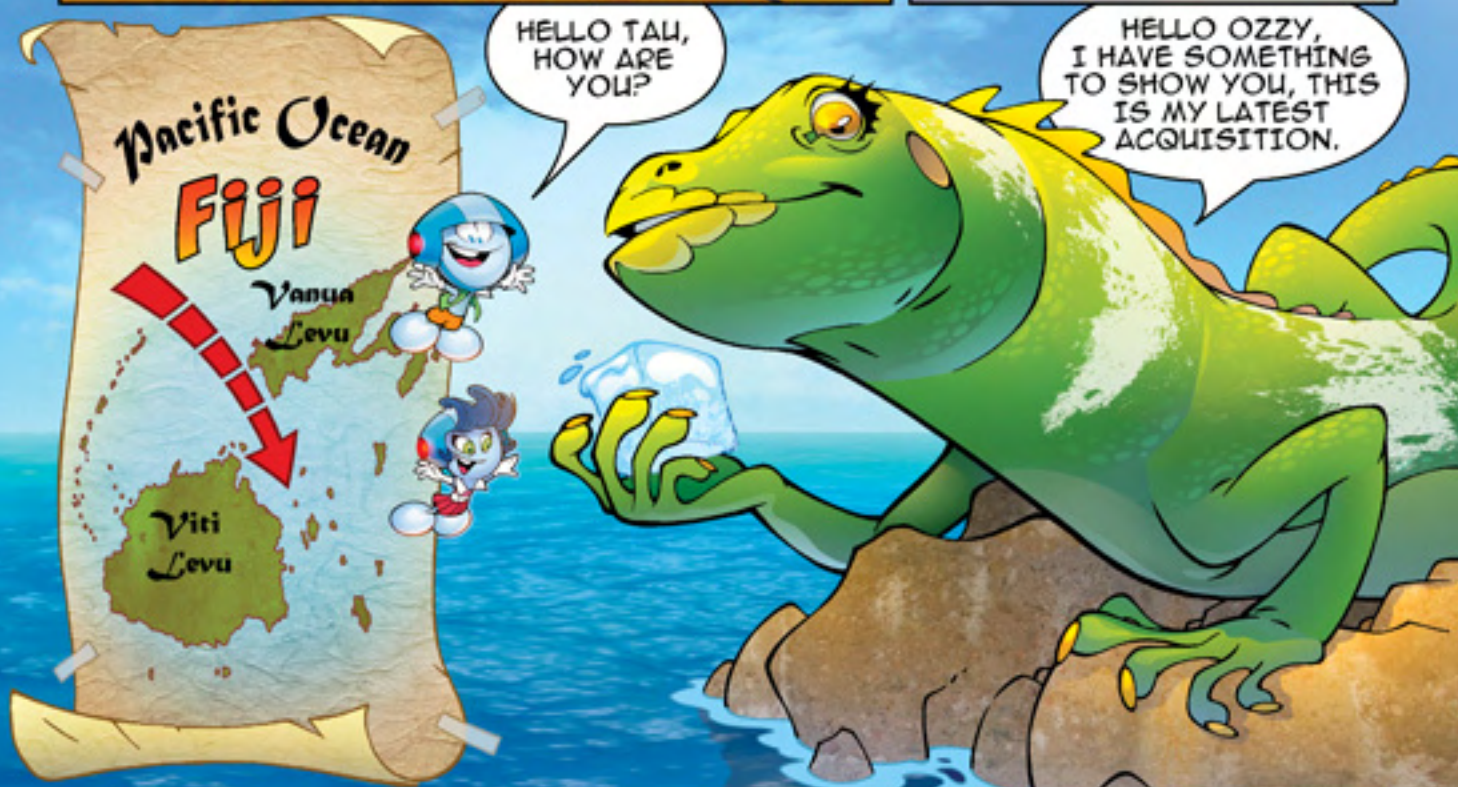


HERE IT IS GUNO, I HOPE THIS WILL STOP YOU CRYING.



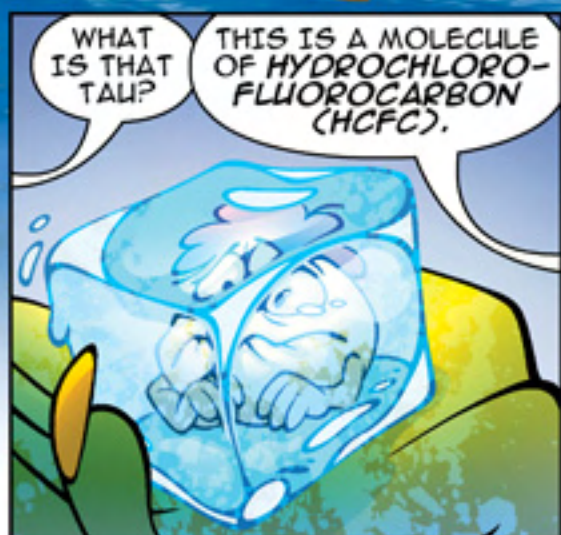
LISTEN OZZY, THE SEAS ARE ALSO SUFFERING FROM CLIMATE CHANGE. NOW LET'S GO TO FIJI, TO THE ISLAND OF YADUA TABA. TAU THE CRESTED IGUANA IS WAITING FOR US.

LET'S SEE WHAT IS HAPPENING THERE.



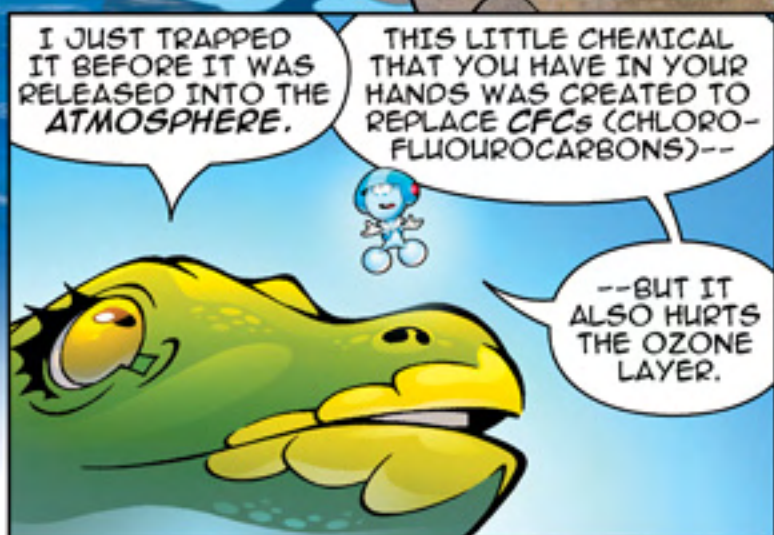
HELLO TAU, HOW ARE YOU?

HELLO OZZY, I HAVE SOMETHING TO SHOW YOU, THIS IS MY LATEST ACQUISITION.



WHAT IS THAT TAU?

THIS IS A MOLECULE OF HYDROCHLORO-FLUOROCARBON (HCFC).



I JUST TRAPPED IT BEFORE IT WAS RELEASED INTO THE ATMOSPHERE.

THIS LITTLE CHEMICAL THAT YOU HAVE IN YOUR HANDS WAS CREATED TO REPLACE CFCs (CHLORO-FLUOROCARBONS)--

--BUT IT ALSO HURTS THE OZONE LAYER.

ALTHOUGH HCFCs ARE NOT SO DAMAGING TO THE OZONE LAYER AS CFCs, THE MAJOR PROBLEM WITH HCFCs IS THEIR ABILITY TO CAUSE CLIMATE CHANGE... THEY ARE UP TO 3000 TIMES MORE HARMFUL THAN CO₂.

--THEY, THE HUMANS, ARE HAVING LESS EFFECT ON THE OZONE LAYER, BUT AT THE SAME TIME ARE STILL CONTRIBUTING TO CLIMATE CHANGE?

THIS IS TERRIBLE! IT MEANS THAT BY USING HCFCs INSTEAD OF CFCs--

THAT'S RIGHT! YOU HAVE TO TALK WITH THIS MOLECULE AND ASK IT NOT TO HARM OUR ENVIRONMENT.

WE HAVE TO MAKE SURE IT IS NOT RELEASED INTO THE ATMOSPHERE.

BUT THERE ARE MANY HCFC MOLECULES EVERYWHERE AND THEY ARE BEING PRODUCED ALL OVER THE WORLD - AND THE PRODUCTION IS RAPIDLY INCREASING. WHAT CAN WE DO?

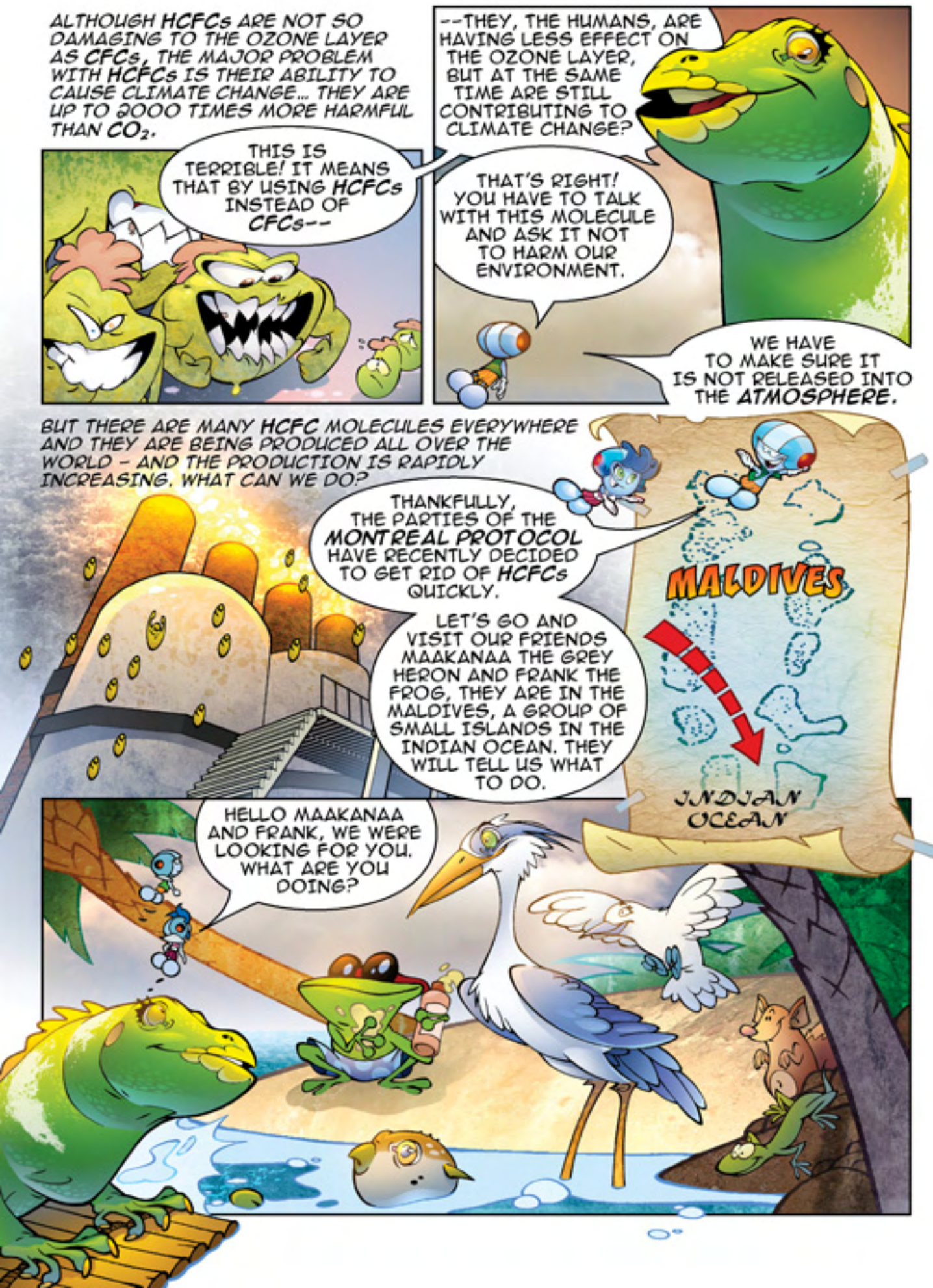
THANKFULLY, THE PARTIES OF THE MONTREAL PROTOCOL HAVE RECENTLY DECIDED TO GET RID OF HCFCs QUICKLY.

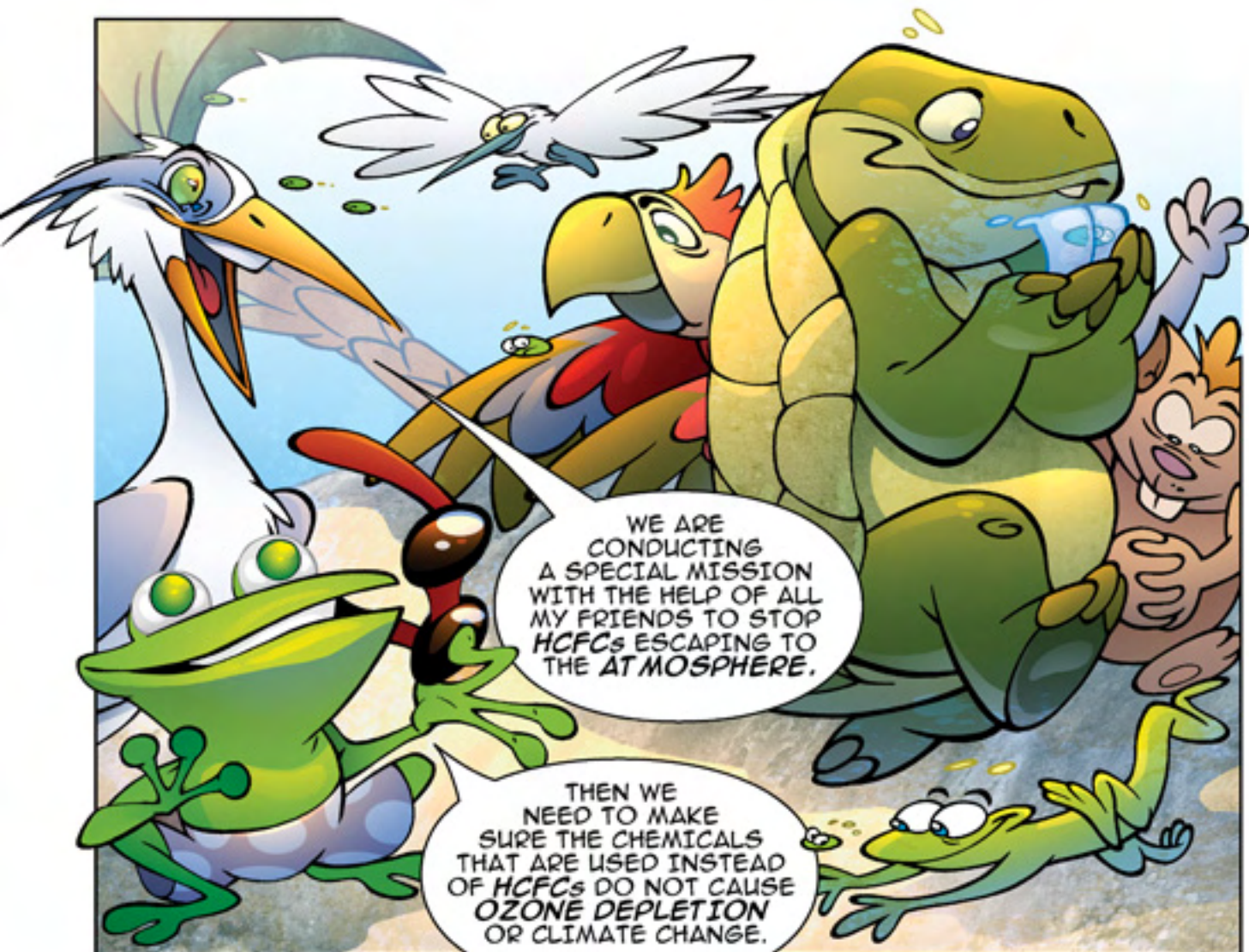
LET'S GO AND VISIT OUR FRIENDS MAAKANAA THE GREY HERON AND FRANK THE FROG, THEY ARE IN THE MALDIVES, A GROUP OF SMALL ISLANDS IN THE INDIAN OCEAN. THEY WILL TELL US WHAT TO DO.

MALDIVES

INDIAN OCEAN

HELLO MAAKANAA AND FRANK, WE WERE LOOKING FOR YOU. WHAT ARE YOU DOING?





WE ARE CONDUCTING A SPECIAL MISSION WITH THE HELP OF ALL MY FRIENDS TO STOP HCFCs ESCAPING TO THE ATMOSPHERE.

THEN WE NEED TO MAKE SURE THE CHEMICALS THAT ARE USED INSTEAD OF HCFCs DO NOT CAUSE OZONE DEPLETION OR CLIMATE CHANGE.

CAN WE REALLY DO THAT, CAN WE STOP CLIMATE CHANGE?

YES WE CAN!

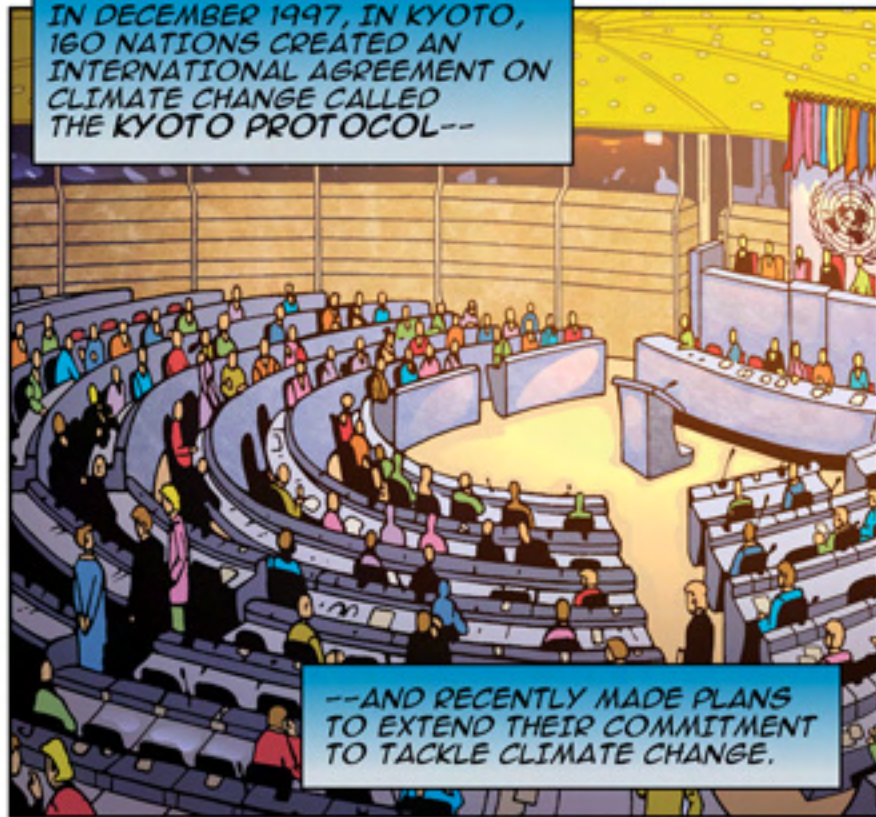
WE HAVE A GLOBAL PROBLEM, IT IS THE CLIMATE CHANGE, BUT WE HAVE THE POWER TO MAKE A CHANGE.

"WE ACT, WE DON'T JUST TALK. WE CONTROL THE CLIMATE CHANGE".

MOST GOVERNMENTS ARE ALREADY WORKING TOGETHER TO FIND SOLUTIONS TO CLIMATE CHANGE. IN JUNE 1992, THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC) WAS SIGNED BY MORE THAN 154 COUNTRIES.

THEY AGREED TO REDUCE THE AMOUNT OF GREENHOUSE GASES IN THE ATMOSPHERE TO LEVELS THAT WON'T CAUSE ANY FURTHER HARM.

IN DECEMBER 1997, IN KYOTO, 160 NATIONS CREATED AN INTERNATIONAL AGREEMENT ON CLIMATE CHANGE CALLED THE KYOTO PROTOCOL--



--AND RECENTLY MADE PLANS TO EXTEND THEIR COMMITMENT TO TACKLE CLIMATE CHANGE.

WHILE THE GOVERNMENTS DO THEIR WORK, WE CAN DO SO MUCH OURSELVES.

WE NEED TO CONSIDER HOW OUR LIFESTYLE -HOW WE LIVE AND TRAVEL, WHAT WE EAT, WHAT WE BUY- CONTRIBUTES TO THESE ENVIRONMENTAL PROBLEMS AND ASSUME RESPONSIBILITY FOR OUR INDIVIDUAL ACTIONS.



ALSO, WE HAVE THE UN DECADE ON EDUCATION FOR SUSTAINABLE DEVELOPMENT (UNDESD 2005-2014) WHICH IS A GLOBAL STRATEGY AIMING TO CONTRIBUTE TO BETTER EQUIP CITIZENS TO FACE THE CHALLENGES OF THE PRESENT AND THE FUTURE, AND DECISION-MAKERS WHO WILL ACT RESPONSIBLY TO CREATE A VIABLE WORLD.

WE NEED TO MAKE SURE THAT EARTH IS IN GOOD CONDITION FOR PRESENT AND FUTURE GENERATIONS.



BY REDUCING THE IMPACT OF OUR PERSONAL ACTIVITIES AND THE ENERGY IN OUR HOMES, SCHOOLS AND WORKPLACES, WE CAN CONTRIBUTE A LOT TO HELP SAVE PLANET EARTH.

**LOOK HERE!
THESE ARE SOME SUGGESTIONS.**

SIMPLE ACTIONS YOU AND YOUR FAMILY CAN TAKE TO REDUCE THE IMPACT OF THE GLOBAL WARMING AND THE DEPLETION OF THE OZONE LAYER:

(PLEASE DISCUSS EACH OF THESE ACTIVITIES WITH YOUR PARENTS TO FIND THE BEST WAYS TO ACHIEVE THEM).

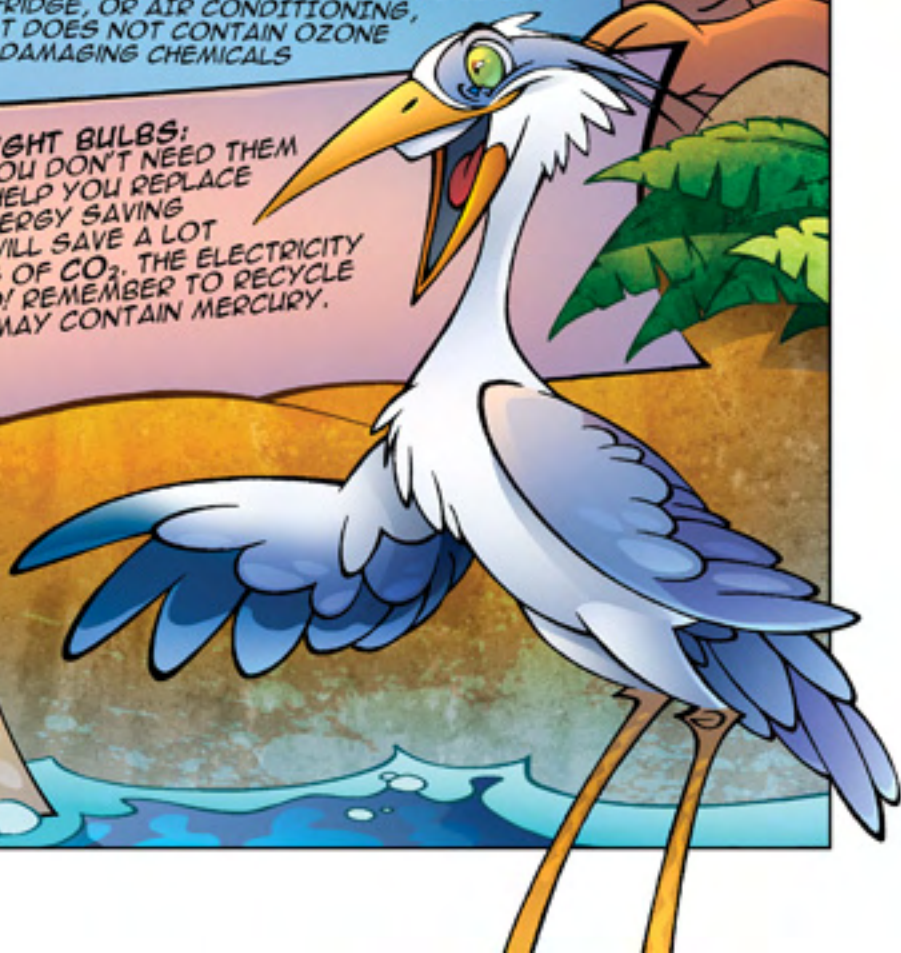
PLANT A TREE:
TO ABSORB CO₂ WHILE GROWING. FOR MORE INFORMATION PLEASE VISIT WWW.LINEP.ORG/BILLIONTREECAMPAIGN AND FRANK THE FROG TREE PLANTING CAMPAIGN: [HTTP://ENO.JOENSUU.FI/CAMPAIGNS/2008.HTM](http://ENO.JOENSUU.FI/CAMPAIGNS/2008.HTM)


RECYCLE AT HOME:
ASK YOUR PARENTS TO HELP YOU DESIGN A RECYCLING SYSTEM AT HOME SO YOU CAN SORT YOUR WASTE AND RECYCLE MATERIALS SUCH AS PAPER, GLASS, PLASTICS, METALS AND ORGANIC WASTE. CREATE A COMPOST FOR YOUR OWN VEGETABLE WASTE IF POSSIBLE. IT SAVES THE NATURAL RESOURCES.

AVOID THE USE OF OZONE DEPLETING SUBSTANCES (ODS):
AVOID THE USE OF SPRAYS. CHECK WITH YOUR PARENTS THE LABELS OF PRODUCTS YOU BUY TO MAKE SURE THEY ARE OZONE-FRIENDLY AND CLIMATE-FRIENDLY. IF YOU OR YOUR SCHOOL EVER NEEDS TO BUY A NEW FRIDGE, OR AIR CONDITIONING, TRY TO BUY ONE THAT DOES NOT CONTAIN OZONE OR CLIMATE DAMAGING CHEMICALS

GO FOR ENERGY SAVING LIGHT BULBS:
TURN OFF THE LIGHTS WHEN YOU DON'T NEED THEM AND ASK YOUR PARENTS TO HELP YOU REPLACE THE OLD LIGHT BULBS FOR ENERGY SAVING ONES. THIS SIMPLE ACTION WILL SAVE A LOT OF ENERGY AND EMISSIONS OF CO₂. THE ELECTRICITY BILL WILL ALSO BE REDUCED! REMEMBER TO RECYCLE THE USED ONES AS SOME MAY CONTAIN MERCURY.

TURN OFF THE AIR CONDITIONER AND HEATER WHEN YOU ARE NOT AT HOME OR NOT USING THEM:
YOU WILL ALSO SAVE A LOT OF ENERGY AND CO₂ WITH THIS SIMPLE ACTION. THIS WILL ALSO REDUCE YOUR ELECTRICITY BILL!





AVOID HEAVILY PACKAGED PRODUCTS AND PLASTIC BAGS:
WHEN YOU GO SHOPPING TRY TO AVOID PRODUCTS WITH LOTS OF PACKAGING. ASK YOUR PARENTS TO TAKE YOUR OWN BAGS TO AVOID USING PLASTIC BAGS. YOU CAN SAVE LOTS OF CO₂ EMISSIONS IF YOU CUT DOWN ON YOUR GARBAGE.

USE LESS HOT WATER:
IT TAKES A LOT OF ENERGY TO HEAT WATER. YOU CAN USE LESS HOT WATER BY INSTALLING A LOW FLOW SHOWERHEAD AND BY WASHING YOUR CLOTHES IN COLD OR WARM WATER INSTEAD OF HOT. YOU WILL SAVE A LOT OF ELECTRICITY OR GAS IN YOUR HOME!

BUY RECHARGEABLE BATTERIES:
BATTERIES CONTAIN HEAVY METALS, SUCH AS MERCURY AND CADMIUM, WHICH HAVE BECOME A MAJOR SOURCE OF CONTAMINATION. BY USING RECHARGEABLE BATTERIES YOU WILL HELP PROTECT THE ENVIRONMENT AND YOUR FAMILY. REMEMBER TO RECYCLE THEM AT THE END OF THEIR CYCLE.

TURN OFF AND UNPLUG ELECTRONIC DEVICES YOU'RE NOT USING:
SIMPLY TURN OFF AND UNPLUG YOUR TELEVISION, OR ANY OTHER ELECTRONIC DEVICE, WHEN YOU'RE NOT USING THEM. DON'T LEAVE THEM ON STANDBY. YOU WILL SAVE A LOT OF ENERGY AND CO₂ IN A YEAR!

RIDE A BICYCLE:
AS MUCH AS YOU CAN TRY TO USE YOUR BIKE TO GO TO SCHOOL OR ANY OTHER PLACE INSTEAD OF USING THE CAR. YOU WILL DO EXERCISE AND YOU WILL BE VERY HEALTHY.

LEARN MORE ABOUT EARLY WARNING SYSTEMS TO BE PREPARED IN CASE OF A NATURAL DISASTER IN YOUR LOCAL AREA:
TALK WITH YOUR PARENTS, TEACHERS, OR LOCAL AUTHORITIES TO FIND OUT IF THERE IS AN EXISTING EARLY WARNING SYSTEM OR A RISK LEVEL MONITOR AND SHARE THIS INFORMATION IN YOUR COMMUNITY.

TELL THE WORLD:
YOU CAN BECOME AN AGENT FOR CHANGE. SHARE THE MESSAGE! SPREAD THE NEWS! PROMOTE THE UN DECADE ON EDUCATION FOR SUSTAINABLE DEVELOPMENT (UNDESD).

WOW! THERE IS SO MUCH WE CAN DO, WE CAN CREATE AWARENESS WITH OUR GLOBAL FRIENDS ABOUT THE IMPORTANCE OF PROTECTING THE OZONE LAYER--

--AND REDUCING THE IMPACT ON CLIMATE CHANGE BY TEACHING THEM EASY WAYS TO CONTRIBUTE IN THEIR OWN EVERYDAY LIVES.

WE ALL CAN MAKE A DIFFERENCE... LET'S TAKE THIS MESSAGE ALL OVER THE PLANET. WE HOPE THAT THE CHILDREN OF THE WORLD SPREAD THESE MESSAGES TO THEIR FAMILIES AND FRIENDS.

BECAUSE WHEN IT COMES TO PROTECTING OUR PLANET EARTH...



EVERY ACTION COUNTS!!!



DEFINITIONS

ATMOSPHERE: LAYERS OF AIR COMPOSED OF GASES AND PARTICLES, SURROUNDING THE EARTH.

CARBON DIOXIDE (CO₂): COLORLESS, ODORLESS NONCOMBUSTIBLE GAS THAT IS PRESENT IN THE ATMOSPHERE. IT IS FORMED BY THE COMBUSTION OF CARBON AND CARBON COMPOUNDS (SUCH AS FOSSIL FUELS AND BIOMASS) AND BY RESPIRATION, WHICH IS A SLOW COMBUSTION IN ANIMALS AND PLANTS, AND BY THE GRADUAL OXIDATION OF ORGANIC MATTER IN THE SOIL.

CFCs: CHLOROFLUOROCARBONS. A FAMILY OF MAN-MADE CHEMICALS THAT IF RELEASED DESTROY THE OZONE LAYER. THEY ARE CONTROLLED BY THE MONTREAL PROTOCOL. E.G. CFC-12 (ALSO KNOWN AS R-12)

HFCs: HYDROFLUOROCARBONS. GASES FROM THE SAME FAMILY AS HCFCs BUT WITHOUT THE ODS EFFECT BUT STILL WITH VERY HIGH GLOBAL WARMING POTENTIAL.

CORAL REEF: A SYSTEM MADE OF THE HARD BONY SKELETONS OF CORAL POLYPS. WHEN CORAL POLYPS GROW INTO A GROUP THEY ARE CALLED A CORAL COLONY. AS POLYPS DIE, NEW ONES GROW ON TOP OF THE OLD EMPTY SHELLS. OVER TIME, THE COLLECTION OF SHELLS LEFT BEHIND BY DEAD CORAL POLYPS AND DEAD CORAL COLONIES BUILD LARGE GROUPS OF ROCK-LIKE STRUCTURE CALLED A CORAL REEF.

FOSSIL FUELS: FUEL THAT IS PRODUCED FROM THE REMAINS OF ORGANISMS PRESERVED IN ROCKS IN THE EARTH'S CRUST WITH HIGH CARBON AND HYDROGEN CONTENT.

HCFCs: THESE CHEMICALS HAVE A MUCH LOWER OZONE DEPLETING POTENTIAL THAN CFCs. THEY ARE ALTERNATIVE CHEMICALS CONTROLLED BY THE MONTREAL PROTOCOL, ALTHOUGH THE PHASE OUT DATES ARE SIGNIFICANTLY LATER. SOME HCFCs HAVE VERY HIGH GLOBAL WARMING POTENTIALS. E.G. HCFC-22 (ALSO KNOWN AS R-22)

GLOBAL WARMING: THE OBSERVED INCREASE IN THE AVERAGE TEMPERATURE OF THE EARTH'S NEAR-SURFACE AIR AND OCEANS.

GREENHOUSE GASES: GASES THAT WARM THE EARTH BY TRAPPING HEAT IN THE ATMOSPHERE, WHICH LEADS TO GLOBAL WARMING. SOME GREENHOUSE GASES CAN OCCUR NATURALLY IN THE ATMOSPHERE, WHILE OTHERS RESULT FROM HUMAN ACTIVITIES. GREENHOUSE GASES INCLUDE CARBON DIOXIDE, METHANE, CFCs AND OTHERS.

KYOTO PROTOCOL: THE INTERNATIONAL UNITED NATIONS TREATY THAT IS HELPING TO FIGHT AGAINST CLIMATE CHANGE AND IS HELPING PEOPLE TO ADAPT TO ITS UNAVOIDABLE IMPACT, ESPECIALLY IN POOR COUNTRIES.

MONTREAL PROTOCOL: THE INTERNATIONAL UN TREATY THAT IS HELPING TO RESTORE AND PROTECT THE STRATOSPHERIC OZONE LAYER.

OZONE: A FORM OF OXYGEN WITH THREE ATOMS IN A MOLECULE; FOUND IN THE STRATOSPHERE AS A PROTECTIVE "OZONE LAYER" ("GOOD OZONE"), AND ALSO CLOSE TO THE GROUND AS A POLLUTANT IN SMOG ("BAD OZONE").

OZONE DEPLETION: DESTRUCTION OF THE STRATOSPHERIC OZONE LAYER CAUSED BY THE BREAKDOWN OF CERTAIN CHEMICALS (FOR EXAMPLE CFCs).

OZONE-DEPLETING SUBSTANCE (ODS): A COMPOUND THAT CONTRIBUTES TO STRATOSPHERIC OZONE DEPLETION. THOSE INCLUDE CFCs, HCFCs, METHYL BROMIDE ETC.

UV RAYS - ULTRAVIOLET RAYS: AN INVISIBLE FORM OF ENERGY HARMFUL TO MOST LIVING ORGANISMS.

JOIN FRANK
THE FROG PLEDGES
CAMPAIGN ON THE WEB
"YOU CAN MAKE PLEDGES FOR
A BETTER ENVIRONMENT WITH
THOUSANDS OF OTHER KIDS
WHO HAVE DONE SO IN MY
PLEDGE BANK ON THE
INTERNET."
[www.joensuu.fi/en/
pledges/bank.htm](http://www.joensuu.fi/en/pledges/bank.htm)

INVITATION
TO ALL CHILDREN
OZZY AND ZOE WOULD LIKE
TO KNOW ALL IDEAS AND
PROJECTS THAT YOU ARE DOING
IN YOUR HOME, SCHOOL OR
COMMUNITY TO HELP FIGHT
AGAINST OZONE DEPLETION
AND CLIMATE CHANGE. WE
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PROTECT OZZY, OZZY PROTECTS YOU!



UNITED NATIONS DECADE OF EDUCATION FOR SUSTAINABLE DEVELOPMENT (2005-2014, DESD)

IN DECEMBER 2002, RESOLUTION 57/254 ON THE UNITED NATIONS DECADE OF EDUCATION FOR SUSTAINABLE DEVELOPMENT (2005-2014) WAS ADOPTED BY THE UNITED NATIONS GENERAL ASSEMBLY AND UNESCO WAS DESIGNATED AS LEAD AGENCY FOR THE PROMOTION OF THE DECADE. THE DECADE AIMS TO INTEGRATE THE VALUES INHERENT IN SUSTAINABLE DEVELOPMENT INTO ALL ASPECTS OF LEARNING TO ENCOURAGE CHANGES IN BEHAVIOUR, WHICH WILL ENABLE A MORE VIABLE AND FAIRER SOCIETY FOR EVERYONE.

DURING THIS DECADE, EDUCATION FOR SUSTAINABLE DEVELOPMENT WILL ENHANCE FIVE KINDS OF FUNDAMENTAL LEARNING: LEARNING TO KNOW, LEARNING TO DO, LEARNING TO BE, LEARNING TO LIVE TOGETHER, AND LEARNING TO TRANSFORM ONESELF AND SOCIETY.

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