



# Agrupamento de Escolas de Vila Nova de Poiares

## European Challengers to Save Climate

### Erasmus+ Project 2020/23



# "WE ARE WORRIED"

EUROPEAN CHALLENGERS TO SAVE CLIMATE  
PROJECT 2020/23 ERASMUS+  
[HTTP://AEPOIARES.CCEMS.PT/COURSE/VIEW.PHP?ID=1227](http://AEPOIARES.CCEMS.PT/COURSE/VIEW.PHP?ID=1227)  
SLOVAKIA \* ITALY \* PORTUGAL \* TURKEY

2020-1-SK01-KA229-078270\_2



Cofinanciado pelo  
Programa Erasmus+  
da União Europeia



# WE ARE WORRIED!

## DEFORESTATION

HOW CAN WE SAVE OUR FORESTS?



Deforestation is the removal of a forest or stand of trees from land that is then converted to non-forest use.

According to the United Nations Framework Convention on Climate Change (UNFCCC) secretariat, the overwhelming direct cause of deforestation is agriculture. Subsistence farming is responsible for 48% of deforestation; commercial agriculture is responsible for 32%; logging is responsible for 14%, and fuel wood removals make up 5%.

### Effects:

- Complex ecosystems are disrupted or perish.
- Human communities that depend on forests also suffer the consequences of widespread deforestation. In countries like Uganda, people rely on trees for firewood, timber and charcoal.
- In tropical regions, deforestation can also affect the way water vapor forms over the canopy, which can reduce rainfall.
- Deforestation not only eliminates vegetation that is important for removing carbon dioxide from the air, but the act of clearing the forests also produces greenhouse gas emissions.



### Solutions:

- Using sustainable farming practices and employing new farming technologies and crops might diminish the need for more land ;
- Forests can also be restored, through replanting trees in cleared areas or simply allowing the forest ecosystem to regenerate over time. The goal of restoration is to return the forest to its original state, before it was cleared;
- We can buy certified wood products (made from wood that has been sustainably harvested) go paperless, limit our consumption of products that use palm oil and plant a tree when possible.

However, deforestation is a global problem that won't be overcome by individual actions, and will require large-scale efforts by nations' leaders to change course and reduce forest destruction.

Emma Watgen Nº9 IIºAI  
Letícia Silva Nº15 IIºAI

## ***How can we save our forests?***

- ◆ Go Digital With Your Bills;
- ◆ Prefer paper and other bamboo products;
- ◆ Read magazines and books online;
- ◆ Plant trees;
- ◆ Don't use paper, use cloth towels and shopping bags, reusable lunch boxes, and others;
- ◆ Choose to live a fully vegetarian lifestyle;
- ◆ Choose products originating from sustainable sources;
- ◆ Expand protected areas;
- ◆ Don't buy exotic pets;
- ◆ Use less water.

Use the hashtag:  
**#erasmushelpstheplanet**

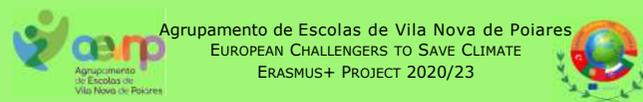
## ***Erasmus and deforestation***

With Erasmus project young people from different cultures and with different perspectives for the future can exchange ideas and develop projects on how to stop deforestation.



The (in)practical side of deforestation by Diogo Veríssimo

***If you don't want to save the planet, don't open this leaflet!!!***



EB2,3/SDr. Daniel de Matos  
Inglês 11º

Work done by:  
Carolina, nr 4  
Joana, nr 14

## ***What Is Deforestation?***

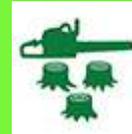
Deforestation refers to the decrease in forest areas across the world that are lost for other uses, it has been negatively affecting natural ecosystems, biodiversity, and the climate.



## ***Do you know the causes of deforestation?***

Deforestation has multiple factors, either of human or natural origin.

- ◆ Agriculture;
- ◆ Fuelwood harvesting;
- ◆ New constructions;
- ◆ Urbanization;
- ◆ Conversion of forests;
- ◆ Forest fires;
- ◆ Illegal and unsustainable logging;
- ◆ Mining;
- ◆ Palm tree plantations;
- ◆ Climate change;
- ◆ Wood extraction.



## ***Do you know the consequences of deforestation?***

The consequences of deforestation are diverse and devastating.

- ◆ Soil erosion;
- ◆ Destruction of the ozone layer;
- ◆ Extinction of plants and animals;
- ◆ Climate change;
- ◆ Social conflict.



WE ARE  
**WORRIED**

Climate change effects

*Global Warming*



The emission of greenhouse gases due to human activity causes global warming, which in turn causes an increase in temperature that then leads to rising sea levels, melting of polar ice caps, flash floods and desertification.



*Deforestation*

Loss of trees in order to make space for residential, industrial or commercial projects means that less oxygen is produced, and temperature and rainfall are affected.



*Loss of biodiversity*

Species and habitats are becoming extinct due to human activity. This causes an imbalance in natural processes like pollination and poses a threat to ecosystems – coral reef destruction is particularly affected.



*Polar Ice Caps*

There is enough evidence that shows sea levels are rising, and the melting of Arctic ice caps is a major contributor. Over time, the melting of polar ice caps could lead to extensive flooding, contamination of drinking water and major changes in ecosystems.



REFERENCES

<https://www.conserve-energy-future.com/15-current-environmental-problems.php>

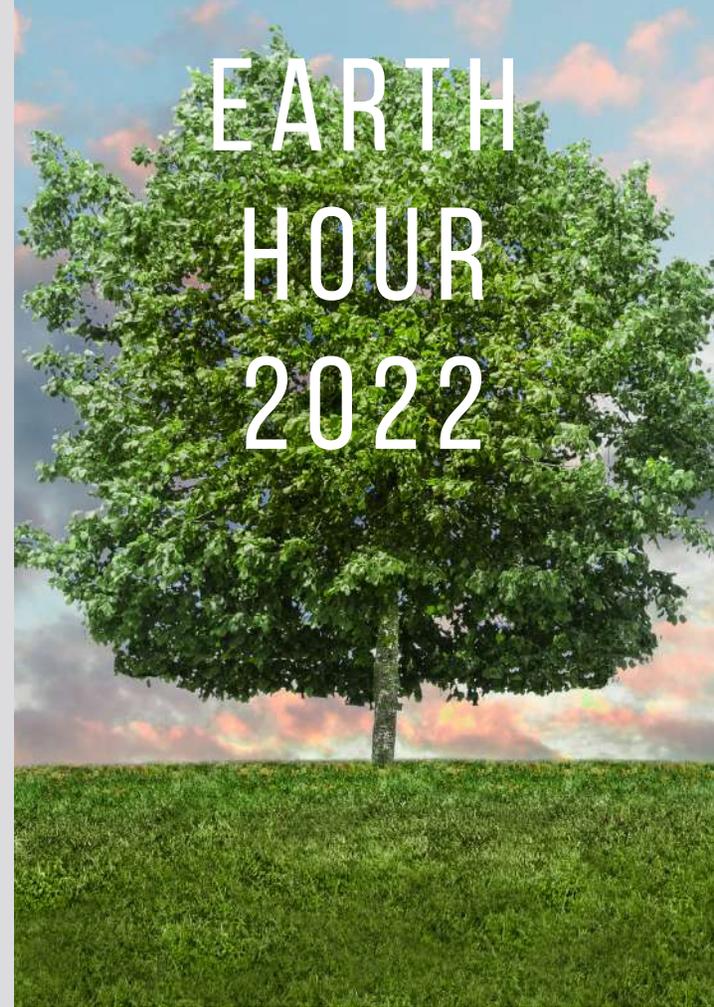
AGRUPAMENTO DE ESCOLAS DE VILA NOVA DE POIARES

EUROPEAN CHALLENGERS TO SAVE CLIMATE

ERASMUS+ PROJECT 2020/23



EARTH  
HOUR  
2022



HOW CAN WE SAVE  
OUR FORESTS?



REPÚBLICA  
PORTUGUESA  
EDUCAÇÃO

agência nacional  
**erasmus**  
educação e formação



Cofinanciado pelo  
Programa Erasmus+  
da União Europeia  
2020-1-SK01-KA229-078270\_2

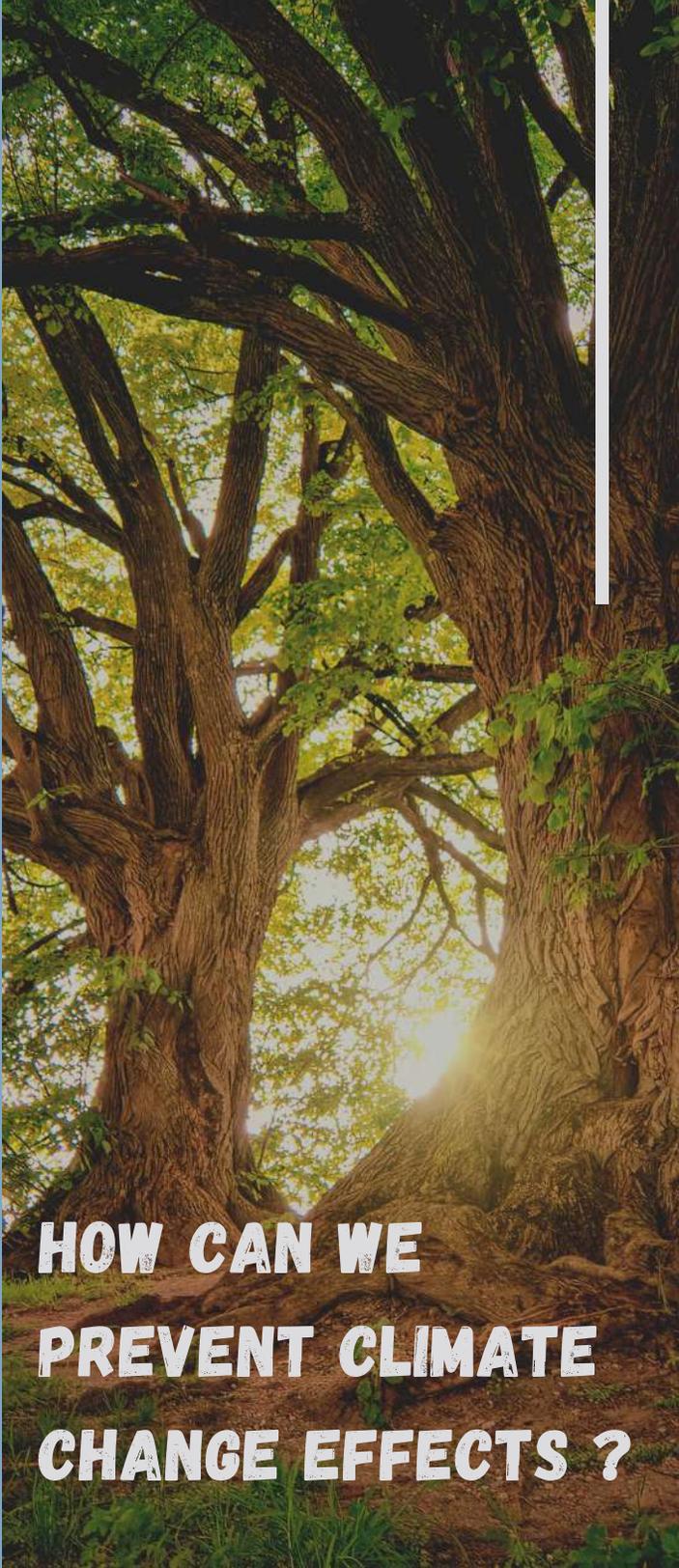
European Challengers to Save Climate  
Project 2020/23 ERASMUS+  
<http://espolares.ccecm.pt/courses/view.php?id=1227>  
Slováquia \* Itálya \* Portugal \* Turkey

# CLIMATE CHANGE

---

Climate change refers to long-term shifts in temperatures and weather patterns. These shifts may be natural, such as through variations in the solar cycle. But 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.



**HOW CAN WE  
PREVENT CLIMATE  
CHANGE EFFECTS ?**

# SOLUTIONS

---

## GLOBAL WARMING

Use your car less, whenever possible, instead use sustainable transportation, such as bicycling, or use public transportation more often. In the case of long-distance travel, trains are more sustainable than airplanes, which cause a great deal of the CO2 emitted into the atmosphere.

## DEFORESTATION

Improved agricultural practices, along with paper recycling and forestry management – balancing the amount of wood taken with the amount of new trees growing – can quickly eliminate a significant part of emissions.

If you want to buy wood, choose wood with certification or seal that proves its sustainable origin. Plant a tree! Over its lifetime, it can absorb up to a ton of CO2.

## LOSS OF BIODIVERSITY

In order to mitigate the problem of the loss of biodiversity, governments are responsible to provide a framework that protects the natural variety of animals and plants. Since populations of many animals decline at an alarming rate, we should protect them by setting strict hunting and fishing limits.

## POLAR ICE CAPS

The main way to prevent melting glaciers and ice caps is to act to reduce the carbon footprint per individual, because it is the best way to reduce the impact of climate change.

# WE ARE WORRIED

## How can we save our forests?

-HUMAN  
DEFORESTATION

-FIRES

-ACID RAINS

-CYCLONES

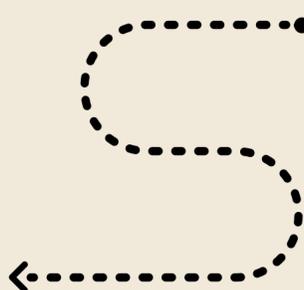
-POLLUTION

-GROWTH IN TOURISM

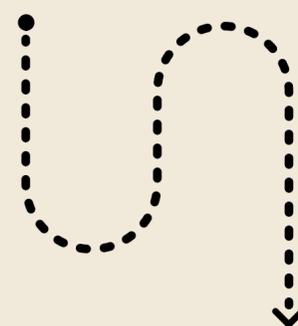
-WOOD EXTRACTION

-MINE EXPLORATION

### PROBLEMS



### SOLUTIONS



- REUSE AND RECYCLE PAPER
- CREATE NATURAL RESERVATIONS
- DON'T MAKE FIREPITS
- DON'T LAUNCH ROCKETS
- CREATE MORE GREEN SPACES
- PLANT TREES



## Consequences that can occur due to a forest fire:

- Change in nutrient properties;
- Emission of gases into the atmosphere;
- Soil erosion affected;
- Loss of forest soils due to combustion;
- Increase in runoff (rainwater that circulates freely on the soil surface);
- Elimination or degradation (partial or total) of plant roots;
- Change in the degree of acidity (pH).

## Portugal without fires depends on everyone

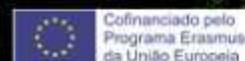
In case of fire, call 112.  
Don't throw cigarette butts into the forests;  
Clean the forests;  
Watch out for any fire attempt.



## Protect the forest

Protection starts with you

Ana Rodrigues 11ºA1 Nº2  
Maria Fernandes 11ºA1 Nº16  
Rafaela Simões 11A1 Nº21

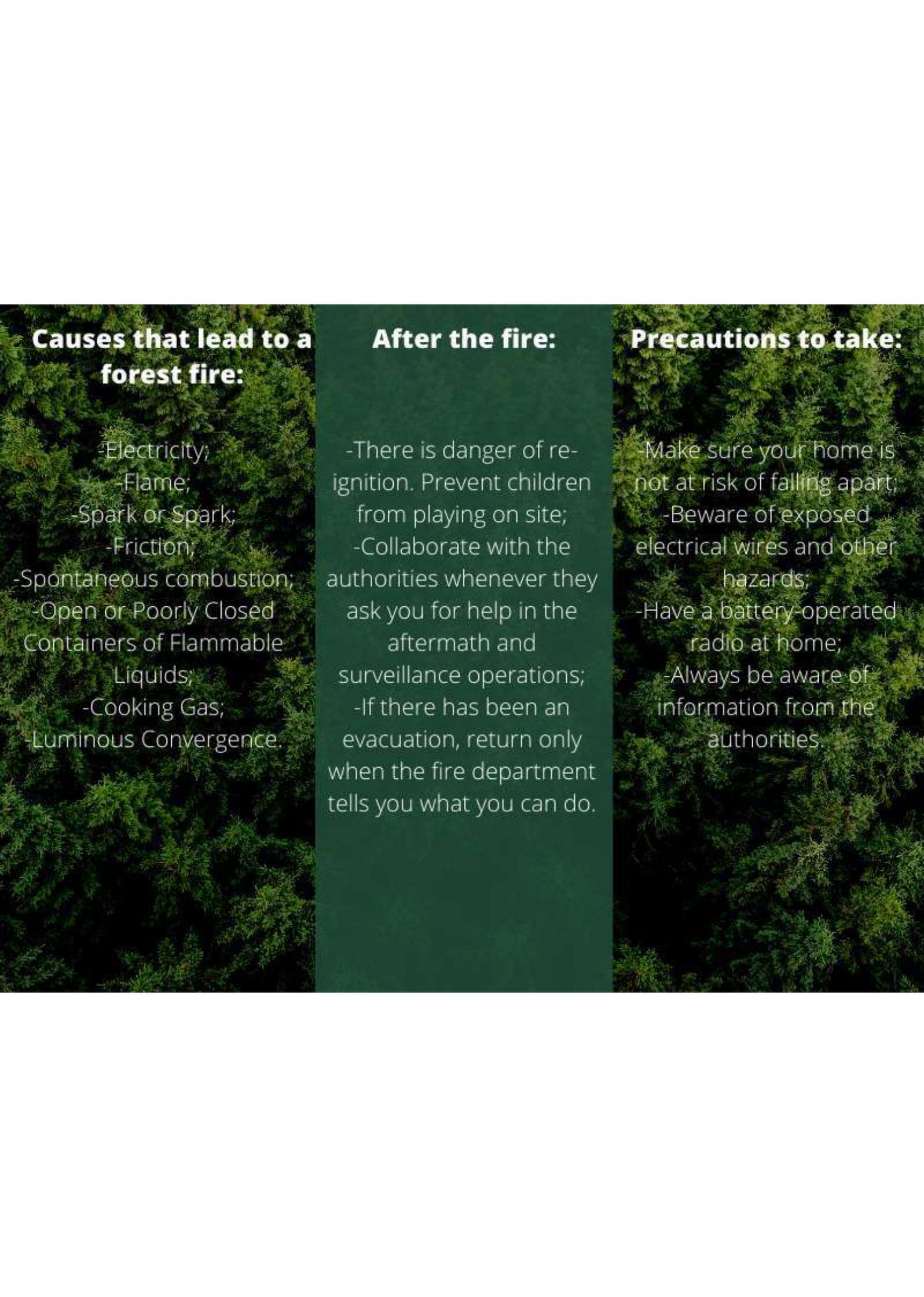


Cofinanciado pelo Programa Erasmus+ da União Europeia



European Challengers to Save Climate Project 2020/23 ERASMUS+

<http://aepoiars.ccems.pt/course/view.php?id=1227>  
Slovakia \* Italy \* Portugal \* Turkey



## Causes that lead to a forest fire:

- Electricity;
- Flame;
- Spark or Spark;
- Friction;
- Spontaneous combustion;
- Open or Poorly Closed Containers of Flammable Liquids;
- Cooking Gas;
- Luminous Convergence.

## After the fire:

- There is danger of re-ignition. Prevent children from playing on site;
- Collaborate with the authorities whenever they ask you for help in the aftermath and surveillance operations;
- If there has been an evacuation, return only when the fire department tells you what you can do.

## Precautions to take:

- Make sure your home is not at risk of falling apart;
- Beware of exposed electrical wires and other hazards;
- Have a battery-operated radio at home;
- Always be aware of information from the authorities.

# WE ARE WORRIED

## WHAT ARE THE PROBLEMS?



# WE ARE WORRIED WHAT ARE THE SOLUTIONS?

Reduce how much  
you use

Air pollution control  
system

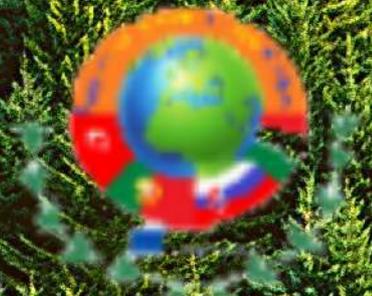
*Affordable and  
clean energy*

ENVIRONMENTAL  
*solutions*

Forest fire  
management

*Recycling*

Purification of the  
water



# WE ARE WORRIED!

## ENVIRONMENTAL ISSUES

IMPROPER WASTE DISPOSAL

OZONE LAYER DEPLETION

OCEAN ACIDIFICATION

CLIMATE CHANGE

DEFORESTATION

POLLUTION

ACID RAIN

## DEFORESTATION

### PORTUGAL

FROM 2001 TO 2020, PORTUGAL LOST 1.09MHA OF TREE COVER, EQUIVALENT TO A 47% DECREASE IN TREE COVER SINCE 2000.

### SLOVAKIA

FROM 2001 TO 2020, SLOVAKIA LOST 223KHA OF TREE COVER, EQUIVALENT TO A 9.3% DECREASE IN TREE COVER SINCE 2000.

### ITALY

FROM 2001 TO 2020, ITALY LOST 387KHA OF TREE COVER, EQUIVALENT TO A 4.2% DECREASE IN TREE COVER SINCE 2000.

### EU

THE EU IS THE SECOND BIGGEST IMPORTER OF DEFORESTATION AFTER CHINA. IN 2017, THE EU WAS RESPONSIBLE FOR 16% OF DEFORESTATION ASSOCIATED WITH INTERNATIONAL TRADE, TOTALING 203,000 HECTARES AND 116 MILLION TONNES OF CO<sub>2</sub>.

### WORLD

YEARLY, 10 MILLION HECTARES OF FORESTS ARE LOST WORLDWIDE

WORK BY DIOGO GOMES N.º 1.1.ºA1



Co-funded by the Erasmus+ Programme of the European Union



ERASMUS+ CHALLENGERS TO SAVE THE PLANET  
PROJEKT ERASMUS+ CHALLENGERS  
HTTP://WWW.ERASMUS+CHALLENGERS.EU  
SLOVENSKO, ŠPIŠKA POSAVLINA, TURKEY



AGRUPAMENTO DE ESCOLAS DE VILA NOVA DE FOIARES  
EUROPEAN CHALLENGERS TO SAVE CLIMATE  
ERASMUS+ PROJECT 2020/23



# WHAT CAN WE DO?

PROTECTING THE ENVIRONMENT  
REDUCE YOUR PLASTIC ADDICTION  
CUT DOWN ON PRINTING AND INK  
REDUCE, REUSE, RECYCLE  
BUY SECONDHAND GOODS  
SWITCH TO LED BULBS  
DRIVE AND FLY LESS  
EAT LESS MEAT  
ETC...

## SAVING OUR FOREST

### PLANT TREES

THIS IS AN IMPORTANT PART OF FOREST RESTORATION, BUT FUNDING FOR DOING SO OFTEN RUNS DRY. MANY REFORESTATION PROGRAMS NEED TO PLANT SEEDLINGS AND GROW THEIR OWN NATIVE TREES.

### IMPROVE SOILS

SOILS NEED MICROBES AND SMALL BUGS SUCH AS CENTIPEDES, BEETLES, AND WORMS TO THRIVE. ADDING ORGANIC MATTER TO THE SOIL CAN RADICALLY CHANGE A FOREST AND SUPPORT RESTORED FOREST HEALTH.

### PROTECT WILDLIFE CORRIDORS

LOOKING AT HOW PLANTS AND ANIMALS MOVE AND REPRODUCE ACROSS LANDSCAPES IS KEY TO FOREST RESTORATION. A CORRIDOR THE WIDTH OF A SWIMMING POOL CAN ALLOW ANIMALS TO TRAVEL AMONG FOREST FRAGMENTS, SIGNIFICANTLY IMPROVING THEIR CHANCES OF SURVIVING, REPRODUCING, AND FLOURISHING.

WORK BY DIOGO GOMES N.º 8 11.º A1



Cofinanciado pelo Programa Erasmus+ da União Europeia  
2020-1-SK01-KA229-078270\_2



**European Challengers to Save Climate Project** 2020/23 ERASMUS+  
<http://acpoiars.ccems.pt/course/view.php?id=1227>  
Slovakia \* Italy \* Portugal \* Turkey

Jessica Matos, nº13  
Matilde Martins, nº19



# Deforestation

Deforestation is the result of a systematic and multi-secular intervention of man in the environment, aiming at the domination of nature.

A large part of the wildlife is found in the warm and humid tropical rainforests. The huge trees, shrubs, and grasses provide food and habitat for large numbers of animals. Sometimes tribes live there and gather from the forest only what they need and do no damage.

Living things breathe in carbon dioxide, and trees turn it into oxygen and contribute to life. That is why we call them the lungs of the world.

## Causes:

- Industrial and urban development
- Tourist growth
- Increase in cultivated area
- Infrastructure construction

## Consequences:

- Weakening of the relationship between animal and plant life
- Global warming of the planet
- Decrease of biodiversity
- Excessive loss of plants and animals
- Emission of carbon dioxide into the atmosphere
- Modification of the earth's crust



With such rapid destruction of forest masses it is almost impossible to recreate these spaces with the same species, thus causing barren spaces and areas of grass and small vegetation.

It is necessary to protect green spaces!



## Ways to protect forests:

- Preventing fires, promoting reforestation, rehabilitating degraded forest areas, and recycling are some small steps that each of us can take
- It is important to have an efficient and controlled management of the forests, with protective legislation
- The creation of parks and natural reserves prevents the cutting and damaging of trees
- If newspapers, magazines and used paper are recycled fewer trees are cut down.



**DEFORESTATION IS THE PURPOSEFUL CLEARING OF FORESTED LAND. THROUGHOUT HISTORY AND INTO MODERN TIMES, FORESTS HAVE BEEN RAZED TO MAKE SPACE FOR AGRICULTURE AND ANIMAL GRAZING, AND TO OBTAIN WOOD FOR FUEL, MANUFACTURING, AND CONSTRUCTION.**

**THE THREAT OF GLOBAL WARMING AND CLIMATE CHANGE IS KNOWN AS THE CLIMATE CRISIS. CLIMATE CRISIS, OTHERWISE KNOWN AS ECOLOGICAL CRISIS, IS AN AGGRESSIVE ISSUE THAT EVERY HUMAN BEING MUST FOCUS ON. EVERY LIVING BEING SHOULD UNDERSTAND THE VITALITY OF CLIMATE CRISIS, AND THEY MUST ACT ON IT AS SOON AS POSSIBLE. THE PLANET IS OUR HOME, AND WE SHOULD DO EVERYTHING IN OUR POWER TO MAINTAIN THE FRESHNESS OF OUR NATURAL ENVIRONMENT, MAY IT BE THE RAINFORESTS OR THE MOUNTAINS.**

Afonso Santos

# WE ARE WORRIED

## HOW CAN WE SAVE OUR FOREST?

The causes of deforestation are namely climate change, human action including industry, pollution, soil intoxication resulting from agriculture and excessive use of chemicals.

To avoid deforestation:

- reduce pesticide use
- Don't make fire in the forests
- Establish a ban on destroying trees
- Reuse and recycle paper
- Don't use rockets
- Create nature reserves



# What are the main effects of deforestation?

## 1. Threatening the biodiversity.

By destroying the forests, human activities are putting entire ecosystems in danger, creating natural imbalances, and putting life at risk.

## 2. Climate change.

Firstly, taking down trees means they'll release back into the atmosphere the CO2 they were keeping. Secondly, fewer trees available means reducing the planet's overall ability to produce O2 and store CO2.

# Solutions to stop deforestation

1. **Consuming less and more consciously helps stop deforestation.**  
As consumers we can choose to buy less industrial and transformed products that use plenty of palm oil. Instead, we can go for a home-made approach with fewer chemicals and food preservatives which is better for both the planet and our health.
2. **Leaving Fossil Fuels and Palm Oil Behind**  
Since diesel and petrol are mixed with biofuels, choosing other transportation methods such as walking, cycling or car-sharing can be good ways of reducing palm oil importations and production and to help stop deforestation.
3. **Protecting forested areas by creating laws and policies that ensure forests are kept protected and restored and betting on land practices such as wildfire corridors.**
4. **Educating local communities and tourists about the need to protect forests and develop and enroll in ecotourism activities.**