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Erasmus+ Programme  
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**ERASMUS + PROGRAMME- STRATEGIC PARTNERSHIP**

**‘Youngsters Nowadays. Where from, Where to?’**

**2017-1-RO01-KA219-037190**

**The Environment- Our Common Goal**

This material, ‘The Environment- Our Common Goal’, is made up of three parts:

‘Part 1. Environmental Issues’, which is a presentation of the environmental issues in each partner country: Italy, Greece, Portugal, Romania and Turkey;

‘Part 2. The Survey on Saving Energy’, which is based on a questionnaire that was applied in each partner school and it shows how concerned the youngsters from the five countries are about saving energy through their daily actions;

‘Part 3. Challenge:Saving Energy for One Month’, which is an experiment that the students did together with their families, in which they tried to be careful with the amount of energy and water they used. They created models of saving energy through the steps they took for protecting the environment.

The aim of this material is to show how students performed activities that proved to be examples of good practice for their peers and that made them acquire skills through which they became environmentally friendly and prompted them to campaign for the present and the future of our planet.

# **Part 1: Environmental Issues**

# **Environmental Issues in Italy**



# Welcome to Italy!

Italy is famous for its large boot-shaped peninsula jutting down into the Mediterranean Sea from Southern Europe.

Italy also includes the two nearby islands of Sicily and Sardinia, and dozens of other small Mediterranean islands.

Ecosystems within Italy include mountains, temperate woodlands, coasts, freshwater river systems and shrub lands in the southern part of the country.

Generally speaking, Italy has warm, dry summers and mild winters, with higher elevations in northern Italy experiencing colder and wetter winters.



# Environmental Issues in Italy



Major environmental issues currently present in Italy include air pollution from energy and heating, transportation and industrial sources, polluted inland waters, acid rain, and insufficient industrial waste treatment and disposal programs.

A 2006 World Health Organization report found significant levels of air pollution in Italian cities ranging from 26.3 to 61.1 milligrams per cubic meter.

The WHO guidelines establish the air quality standard at 20 micrograms per cubic meter, whereas the European Union Air Quality Directive is set at 40 micrograms per cubic meter.

The European Environment Agency (EEA) has estimated that more than 66000 people die prematurely due to particulate air pollution. EEA has observed the annual average trend of PM10 in Italy in the period 2012-2015 to be below the threshold levels. Traffic stations continue to have high particulate concentrations.

# Calabria

Calabria is the tip of the Italian peninsula; it borders with Basilicata and stretches between the Tyrrhenian Sea and the Ionian Sea in the direction of Sicily, from which it is divided by the Strait of Messina.

Geographically, Calabria has its own distinct individuality, due to its peripheral and almost isolated position, compared with the rest of Italy, to its characteristic conformation and morphological structure.

Forty-two percent of Calabria's area, corresponding to 15,080 km<sup>2</sup>, is mountainous, 49% is hilly, while plains occupy only 9% of the region's territory. Calabria Region has five provinces. The capital city of Calabria is Catanzaro. Its most populated city, and the seat of the Regional Council of Calabria is Reggio Calabria.

The other three provinces are Vibo Valentia, Crotone and Cosenza.





# Sustainable Urban Development Strategies for the main urban areas of the Region: Cosenza-Rende, Catanzaro and Reggio Calabria

The main urban areas, even in a marginal productive context as the Calabrian one, are the engines of the regional economy and concentrate within them the main functions and services for the regional area.

At the same time, these are the areas with the main problems of poverty, uncomfortable living conditions and social exclusion.



The most evident signal of these phenomena is the presence of marginal neighbourhoods, characterised by critical and persistent issues in relation to the provision and quality of base services and affected by social distress.

Based on this, action should be focused on the theme of urban regeneration with the aim to enhance living conditions, energy efficiency in the public estate and services for social inclusion. The Programme will act in these areas as provided by art. 7 of the ERDF Regulations.



# Sustainable Urban Development Strategy for Smaller Urban Areas –Harbour Cities and Regional Service Hubs

This Strategy aims at strengthening the other two provincial capitals, Crotone and Vibo Valentia, the urban system of Corigliano-Rossano, the city of Lamezia Terme and the Harbour City of Gioia Tauro (including Gioia Tauro, Rosarno and San Ferdinando).

These areas are characterised by economic, social and environmental issues which require on the one hand, urban regeneration actions for the main urban areas of the region, and on the other, actions aiming to strengthen the productivity and the attractiveness capacity.



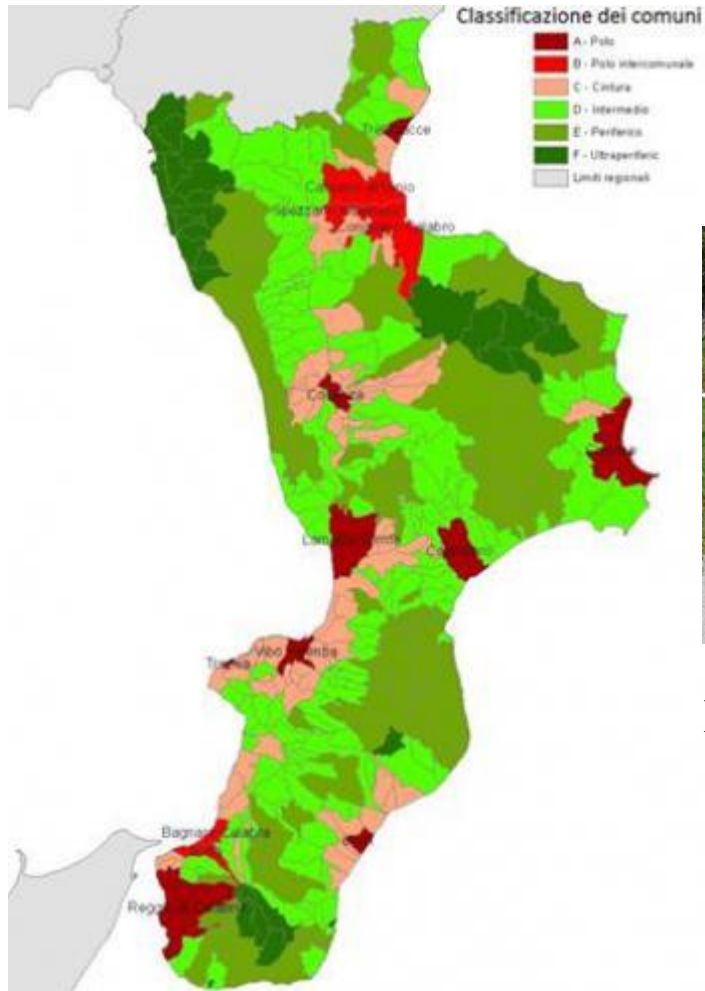
Pollution in the sea



Illegal dumping



# Strategy for Internal Areas



Electric cars supplied to armed forces

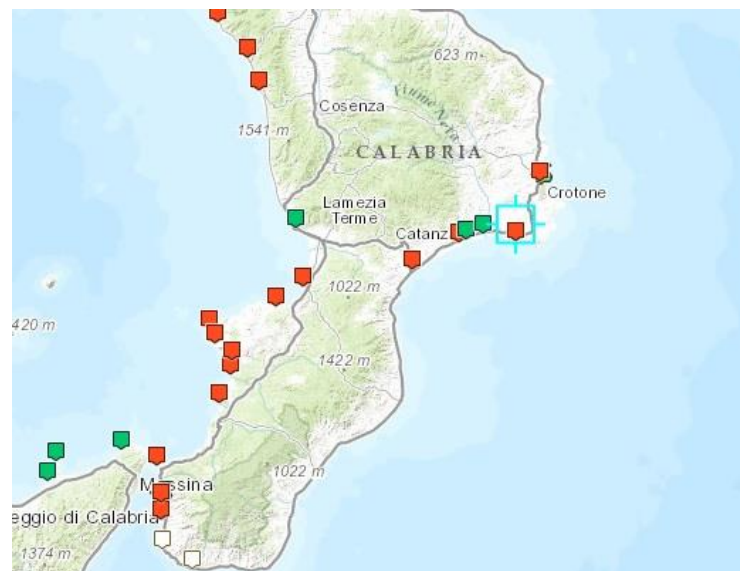
Calabrian territory is largely made of Internal Areas. In the last years a considerable part of these areas has been affected by a strong reduction of the residential population and has been subject to a gradual process of marginalization.

These areas are central for the provision of environmental goods and services, for local food chains and for the production of renewable energy.

The Region aims at supporting these areas through actions which improve the essential services and promote the economic development through the valorization of its potential value.

# Beaches in Calabria: 19 Polluted Beaches versus 9 Blue Beaches

The monitoring carried out in Calabria by "Goletta Verde", the campaign dedicated to monitoring and informing about the state of health of Italian coasts and waters, shows that in the Calabrian coast nineteen beaches are heavily polluted.



This proves that we need to improve our environmental consciousness!!!!



Praia a Mare, Trebisacce, Cirò Marina, Melissa, Roccella Ionica, Soverato, Roseto Capo Spulico, La Pineta Fiume Noce in Tortora and Sellia Marina with Ruggero-San Vincenzo-Sena Jonio and Rivachiarà.

# **Environmental Issues in Greece: Our Area**



# The River of Assopia

The **Asopos** is a river in Boeotia and northern Attica. Its source is on the northern slope of the Cithaeron mountain, southwest of Thebes. It empties into the South Euboean Gulf, near Skala Oropou. Its total length is 57 km. The river is polluted with hexavalent chromium due to industrial activity. The Asopos River basin, 60 km to the north of Athens, is a heavily industrialized area responsible for an estimated twenty percent of Greece's industrial output. It also produces agricultural goods destined for domestic and international consumption.



# The Problem

Studies have shown that since industrialization in the region began in the late 1960s, **cancer and mortality rates** have risen disproportionately among the residents of **Oinofyta** compared to the rest of the country. The river started turning purple 10 years ago, but the people in the small Greek town of Oinofyta who were losing loved ones to cancer never thought of blaming the water.

Factories have been dumping waste in the Asopos River for decades and nearby tourist beaches were declared unfit for swimming, but there were no official warnings to the people of the town, in an industrial zone about 60 km (35 miles) north of Athens.



# The Problem

Official tests show drinking water was contaminated with high levels of the carcinogen chromium 6, catching the attention of U.S. advocate Erin Brockovich and spreading shock and anger in the town. Used as an anti-corrosive in the production of stainless steel, paint, ink, plastics and dyes, the metal is on the European Union's list of restricted substances and listed as a carcinogen by the World Health Organization.

The severity of the case has drawn international attention, with Greece being condemned for violating the residents' right to health by the **European Committee of Social Rights**, an institution overseen by the **Council of Europe**.





# Causes

## Causes of water pollution

**Discharging industrial waste**



**Oil Spills (hard to clean up)**



**Dumping garbage and raw sewage**



**Seepage from landfill**



# 1. Industrial Waste

Industries produce huge amounts of waste which contains toxic chemicals and pollutants which can cause air pollution and damage to us and our environment. They contain pollutants such as lead, mercury, sulphur, asbestos, nitrates and many other harmful chemicals. Many industries do not have a proper waste management system and drain the waste in the fresh water which goes into rivers, canals and later into the sea. The toxic chemicals have the capability to change the color of water, increase the amount of minerals, also known as eutrophication, change the temperature of water and pose serious hazard to water organisms.



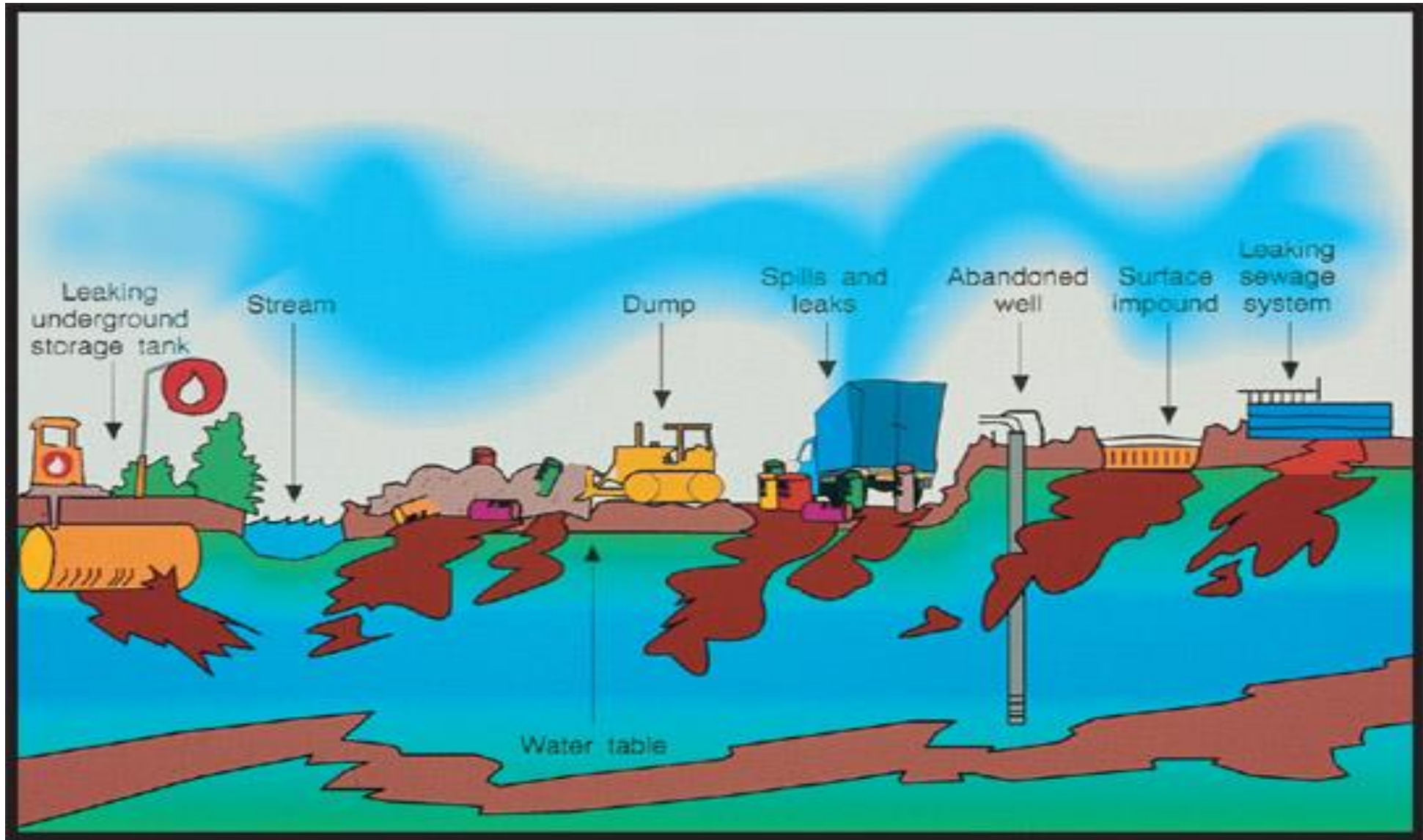


## 2. Mining Activity

Mining activity is the process of crushing the rock and extracting coal and other minerals from underground. These elements when extracted in the raw form contain harmful chemicals and can increase the amount of toxic elements when mixed up with water which may result in health problems. Mining activities emit several metal waste and sulphides from the rocks, which are harmful to the water.



# Water Wise





### 3. Marine Dumping

The garbage produced by each household in the form of paper, aluminum, rubber, glass, plastic, food, is collected and deposited into the sea in some countries. These items take from 2 weeks to 200 years to decompose. When such items enter to the sea, they do not only cause water pollution but also harm animals in the sea.



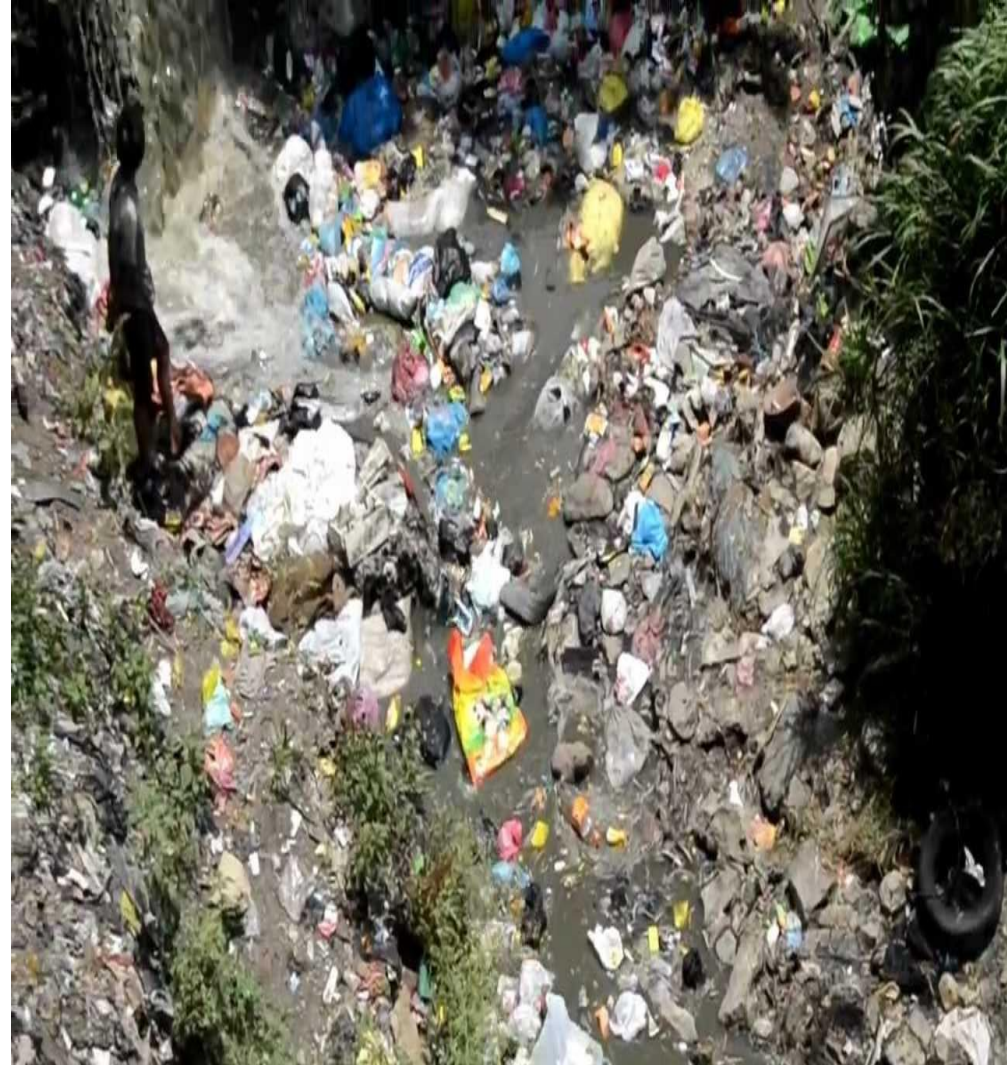


# River

**THEN 1975**



**NOW 2015**





## 4. Accident Oil Leakage

Oil spill poses a huge concern as a large amount of oil enters the sea and does not dissolve with water; there it is a huge problem for the local marine wildlife such as fish, birds and sea otters. For e.g.: a ship carrying a large quantity of oil may spill oil if an accident happens and this can cause various sorts of damage to species in the ocean, depending on the quantity of oil spill, the size of the ocean or toxicity of pollutant.



## 5. Agricultural Reasons

Not only is the agricultural sector the biggest consumer of global freshwater resources, with farming and livestock production using about 70 percent of the earth's surface water supplies, but it's also a serious water polluter. Around the world, agriculture is the leading cause of water degradation. Every time it rains, fertilizers, pesticides, and animal waste from farms and livestock operations wash nutrients and pathogens—such bacteria and viruses—into our waterways. Nutrient pollution, caused by excess nitrogen and phosphorus in water or air, is the number-one threat to water quality worldwide and can cause algal blooms, a toxic soup of blue-green algae that can be harmful to people and wildlife.

Despite the fact that the majority of the existing in the area industrial units has a system of waste water collection and treatment, the problem of the degradation of the water quality of the receptors and in general, of the aquifer of the area remains severe. This fact is due to either the non satisfactory operation of the wastewater systems because of technical or operational problems or to the small degree of effectiveness of the existing wastewater treatment systems. All these factors have contributed to characterize Asopos as one of the most polluted rivers having an impact not only to the areas that it crosses, but also to the coastal area of Chalkoutsí in which it flows into.

# Solutions to the Problem

- To create a monitoring mechanism for the quality of groundwater.
- To install antifouling systems.
- To create a network for removal of the waste.
- To set up a series of seminars to provide information on the problem and how to deal.
- The broader industries to create new infrastructures that are environmentally friendly.

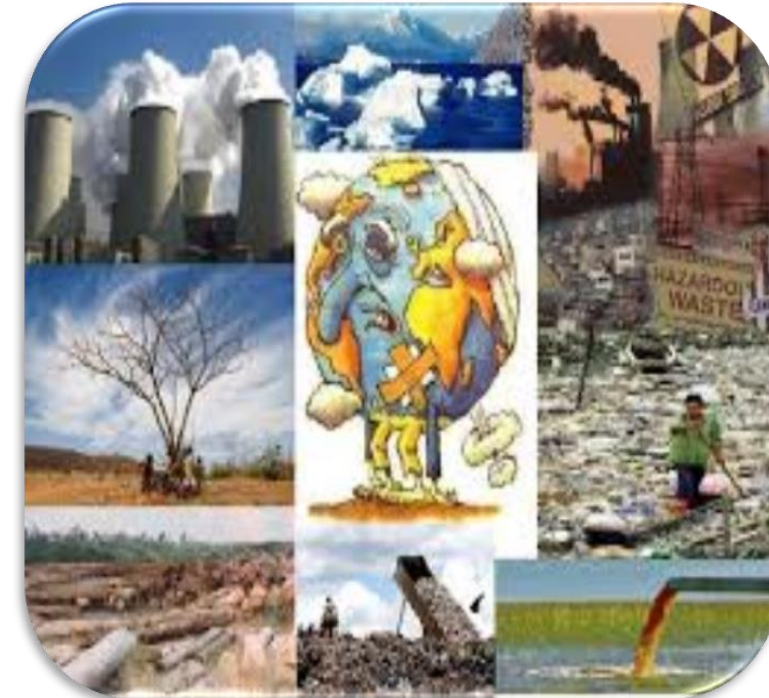






- The riparian zone of Assopos river should be cleaned for the access and control security along the whole length of the river.
- The industries craft authorizing services should be immediately and significantly supported by scientific-technical staff.
- The environmental terms of industrial units which have already processed dangerous industrial waste materials should be immediately revised.

# Environmental Issues in Portugal





# Environmental Problems

These environmental issues are caused by

- ✓ Transport;
- ✓ Industries;
- ✓ Garbage;
- ✓ Modern Agriculture;





Environmental problems are caused by

- ✓ River and ocean pollution;
- ✓ Deforestation;
- ✓ Forest fires;





# Transport

In general, the impact on the environment caused by transport can be divided into:

- Consumption of natural resources: for example; oil, alcohol, rubber and metals for vehicle manufacturing.



# Transport

- Negative impact on people's lives: pollution (air, noise, visual), traffic accidents and quality of travelling (congestion), among others.

In both cases there are costs related to consumption and this impact and their consequences on people's lives.





# Industries

Industries are responsible for causing much damage to the environment and to human health, because they create biological substances, gases and liquids that contaminate rivers, seas, lakes, air and soil.

Industry pollution is also associated with Global Warming, a phenomenon associated with the melting of polar caps, rising sea levels and climate changes.



# Industries

As a consequence, the presence of industries directly contributes to the devastation of forests and the extinction of several animals species.





# Garbage

Garbage is considered one of the biggest environmental problems in our society.

Population consumption is growing and at the same time, the amount of waste produced.

- Contamination of the surface water is caused by the litter we throw into rivers.
- Contamination of soil and the presence of oils, solvents, fats, heavy metals and acids change the physical, chemical and soil properties, and may represent a great risk to the population.

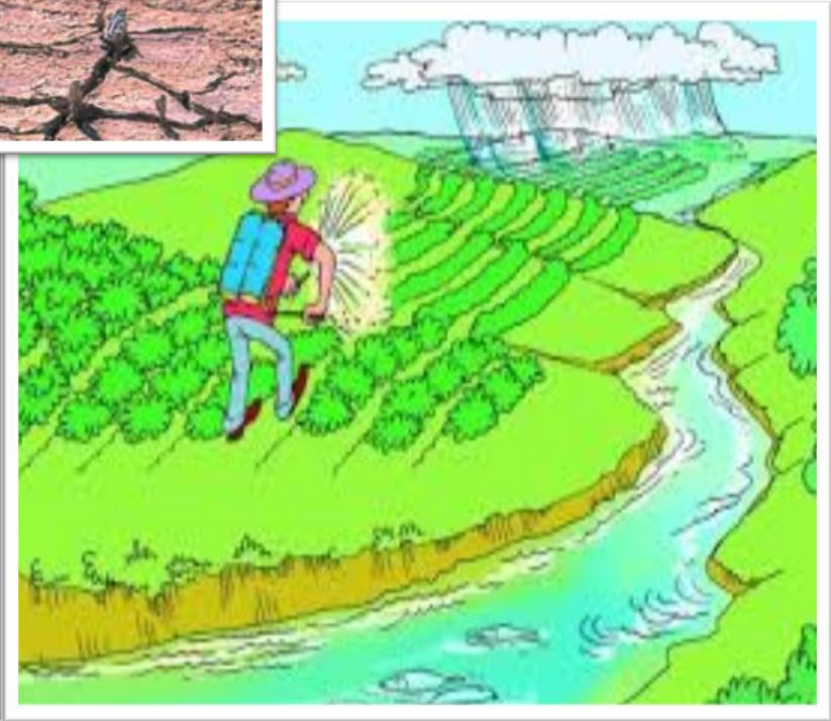




# Modern Agriculture

Food production is one of the greatest challenges in the modern world. Agriculture today produces food for an estimated 7.4 billion people across the globe.

- Erosion;
- Loss of biodiversity;
- Contamination of fresh water.





# Modern Agriculture

- Pollution;
- Water;
- Desertification.



Air pollution from shipping is manifested by the emission by ships of greenhouse gases including carbon dioxide and the emission of pollutants.





# Deforestation

Deforestation occurs when forests disappear and this is due to human actions like:

cutting trees, burning and polluting actions which cause the disappearance of carbon dioxide absorbers, so triggering the reduction of their ability to absorb the carbon dioxide.

As a consequence we have to deal with the greenhouse effect and global warming problems.



# Forest fires

The occurrence of a fire has a number of effects both in the burned area and in the surrounding areas. The degree of the effects depends, in particular, on the intensity of the fire, which, in turn, depends on the meteorological conditions, the fuel and the topography.

## Consequences of the Forest fires

- Destruction of the forests
- Loss of biodiversity
- CO<sub>2</sub> emissions
- Soil loss



# Conclusion

Unfortunately, our planet is being affected by different types of environmental problems, most of them are provoked by human actions. It's important to talk about these environmental problems and our near or distant future, and for sure, we need to take some action before it is too late for our planet.



# **Environmental Issues in Romania**

# Environmental Problems

- Deforestation;
- Industrial pollution sources with significant weight : steel industry, shipbuilding and ship repair, electricity and thermal energy production, petrochemical oil extraction, refining and petrochemical processing, plastics industry, food industry, the woodworking industry and pesticides;
- Landslides;
- Flooding;
- Periods of droughts;
- Insufficient green spaces in cities to secure a high quality of life;
- There are ground areas with contamination due to industrial activities;
- Existence of non-compliant landfills on the area of growth;
- Some segments of the adduction networks water / sewage systems are very old and require rehabilitation;
- Monitoring environmental factors is only done in urban areas, and not the entire area of the growth;
- Fragmentation of habitats due to the development of infrastructure that cause the animals to enter the habitat of the man (eg the garbage bears).

The greatest environmental concerns perceived by the Romanians are deforestation (70%), followed by waste management (34%) and air pollution (32%).





Deforestation is the main environmental problem our country faces with. As a direct consequence, there are floods and landslides that are increasingly damaging.

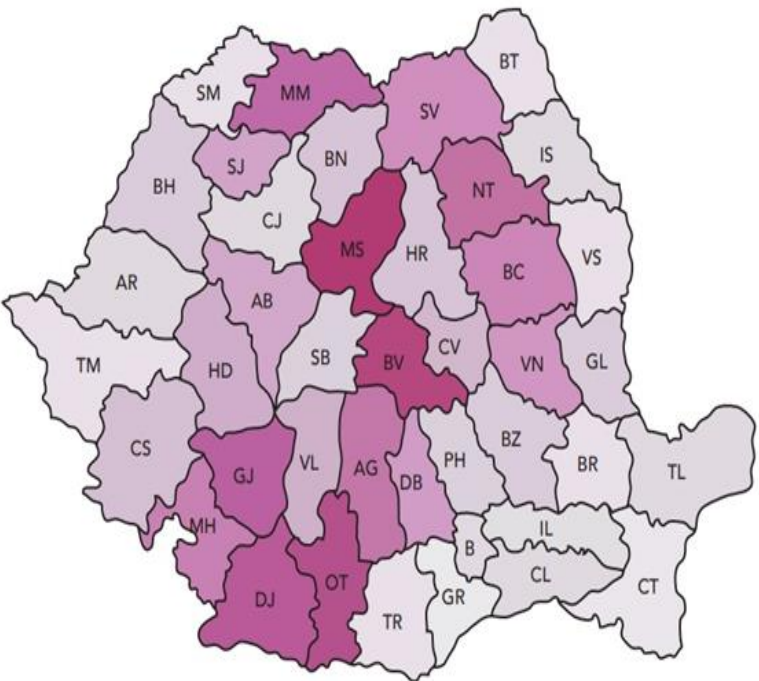
In 2010, forests covered more than a quarter of Romania's surface, namely 26%, but unfortunately, 300,000 hectares of forest were cut in Romania between 2001 and 2016, The counties in which the deforestation has been at its peak since 2001 are Suceava, Harghita, Maramureş and Cluj.



Moldova's forests disappear and hundreds of illegal cuts are recorded. According to the latest report made by Greenpeace Romania, 111 illegal offenses were committed in Iași County in 2016, four times less than in the previous year. The publication puts this decrease on account of the harsh sanctions and risks to those who practice illegal cuts. "The study follows the official data on the cases of illegal cuts identified and investigated by the authorities. In 2016, 9,444 cases of illegal cuts were identified at national level, out of which 5,222 constituted criminal offenses, the average criminal offenses being 26 cases per day. The good news is that, although in 2016 there were 5,222 offenses, this figure represents a 47% decrease in comparison with the previous year. The halving of the number of cases of illegal cuts is the result of new legislative provisions that have increased the number and value of sanctions, greater involvement of civil society in the reporting process, and the increasing role of the police in the process of finding and sanctioning.", the Greenpeace report states.

## The map of illegal tree cuts in Romania

Harta cazurilor de tăieri ilegale în 2016



Legendă

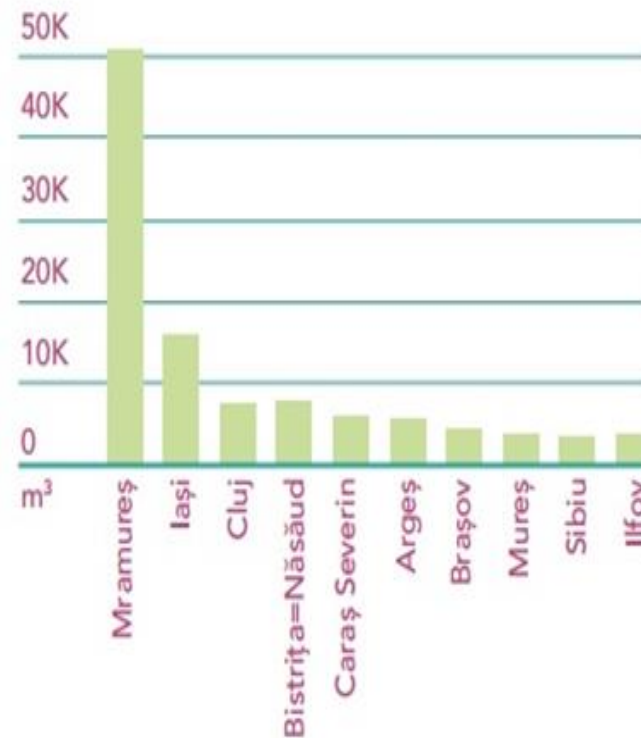
Mureș	1057	Bihor	180
Brașov	664	Buzău	172
Olt	605	Galați	160
Dolj	540	Prahova	154
Gorj	417	Sibiu	142
Maramureș	392	Cluj	133
Neamț	356	Călărași	126
Argeș	335	Ialomița	123
Mehedinți	316	Iași	111
Bacău	303	Tulcea	109
Suceava	296	Arad	98
Vrancea	290	Ilfov	88
Dâmbovița	261	Vaslui	77
Sălaj	250	Satu Mare	62
Alba	226	Timiș	58
Hunedoara	224	Botoșani	53
Vâlcea	208	Teleorman	42
Covasna	204	Brăila	14
Caraș Severin	202	Constanța	8
Bistrița Năsăud	194	Giurgiu	8
Harghita	185	București	1



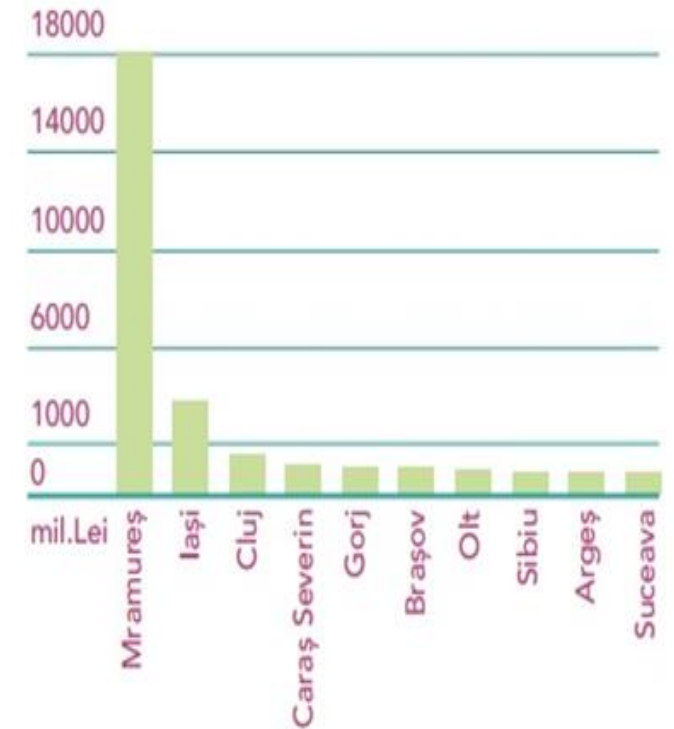
## The first 10 counties that are ordered according to the quantity of timber cut and to the prejudice that this causes

Even though, apparently, the number of tree illegal cuts in Iasi fell almost four times in one year, the amount of illegally cut timber in the county beats all records - 15 thousand cubic meters - and places this county second in the country after Maramures , with 50 thousand cubic meters. "As for the quantity of illegally cut wood in 2016, it amounts to 140,964.85 cubic meters, more than half of it - 52.59% - coming from the counties of Maramures, Iasi and Cluj. "We see an average of 14.82 cubic meters illegally cut per case in 2016 at national level. The counties in which the average per case, was found well above the national average, are Iași, with 144.60 cubic meters / case and Maramureș, with 129.21 cubic meters / case, "explains Greenpeace Romania specialists.

Primele 10 județe,  
ordonate după cantitatea de lemn  
tăiată ilegal, în anul 2016



Primele 10 județe, ordonate după  
valoarea prejudiciului, în anul 2016



**Deforestation în Măguri Răcățău, Cluj county**



**Deforestation in Valea Strajii, Bistrita-Nasaud county**





# **Landslides- The Deforestation Direct Results**

Even though landslides are not a widespread phenomenon, their effects can be devastating in affected areas. Both in 2017 and in 2018, on the territory of Romania there were landslides, affecting both houses, land and gardens, as well as infrastructure elements.

## **Landslides in Our Region**

Two examples of landslides: In March 2018 there were some land sliding in several areas of the country that were caused by the heavy rainfall. For example, following the rains, in the middle of the month, eight houses, two of which were in danger of collapse, were affected by the reactivation of a landslide produced in Scorteni in Prahova county, where the land started down the valley on a portion of about 100 meters.





Locuință afectată - Gornet, jud. Prahova (2014)

**Glodeni, Dâmbovița County**

A strong landslide was produced in the village of Glodeni in Dâmbovița County, due to the rain and melting of snow, in March 2018 and this affected eight houses, gardens and roads. In the area of houses the slippage occurred on a surface of 800 linear meters, but the land started down the valley on several hectares.





## **Landslides in Transylvania-Bistrița- caused by deforestation**



In Moldova, in the rural areas of the Curb Sub-Carpathians, the landslide processes are increasing and the floods affect numerous villages in the valleys of the Buzau and the Siret rivers.

# Waste Disposal

From all the European countries, Romania recycles only 5% of the total volume of waste it produces, the rest being dumped in the rubbish pit, fact which places a huge strain on the environment.





Tens of kilos of rubbish go to the Apuseni Natural Park every day. The mess is brought to the river's banks that flows at the edge of the park and by the people who live close to the protected area and prefer to throw the garbage, not in the bins, but in the Crișul Baitei. Unfortunately, there are also people who once they go hiking, have a barbecue or go camping, forget to clean the place they use and leave the rubbish there.



# Air Pollution





Eighty-five percent of the pollution in Cluj is generated by car traffic.



# **"Poison" in the Air of Cluj-Napoca**

Road, rail and air traffic, combustion systems for heating homes and offices, thermal energy plants and the Pata Rat trash dump poison the city of Cluj-Napoca. According to the Air Quality Plan for Cluj-Napoca (2016-2021), in the air in Cluj-Napoca there are suspended particles (PM10 and PM 2.5), sulfur dioxide, carbon monoxide (CO), benzene C<sub>6</sub>H<sub>6</sub>), lead (Pb), arsenic (As), cadmium (Cd) and nickel (Ni). What's even worse is that because of pollution, an average of 800-900 people die annually in Cluj from diseases caused or associated with air pollution.

According to the data provided by the City Hall, on July 13th 2016, the total number of streets in the municipality was 1173, without taking into account the total length of the streets. The city of Cluj-Napoca is crossed by the national road 1 C and the European road E 81. According to City Hall data, 146,000 cars are registered at the city level. In 2014, the amount of NO<sub>x</sub> emissions was 0.001061 tones / year, and NO<sub>x</sub> oxides were 726.647 tones / year.



Another sector that influences the air quality in Cluj-Napoca is the low-stationary sources, which include low-power combustion installations mainly designed for space heating and domestic hot water for residential and non-residential sectors. The danger in the air is also coming from the waste sector. The absence of an authorized waste repository at the county level is a problem for the environment, experts warn. "This sector, at the level of the city and the county of Cluj, is a" widow "sector in the sense that up to date there is no class" b "warehouse in the urban area. And the project "Integrated Waste Management System" in Cluj County, which provides for the realization of the zone deposit, has been practising for many years. The lack of such a deposit in the county is a major environmental problem, where the only temporary solution found by the local and county public authorities for waste disposal was the setting up of temporary waste storage platforms. From the data provided by the Environmental Protection Agency Cluj, in 2015, there were temporarily stored for the disposal of 65804,066 tons of household waste.

As a result of these activities, suspended particles (PM10 and PM 2.5), sulfur dioxide, carbon monoxide (CO), benzene (C<sub>6</sub>H<sub>6</sub>), lead (Pb), arsenic (As) cadmium (Cd) and nickel (Ni).

Suspended particles are a particle agglomerate of different sources and having different sizes, different compositions and different properties. They are a complex mixture of organic and inorganic substances. In combination with other pollutants in the air, this mixture may lead to human health effects. More specifically, it can affect the lung, cardiovascular apparatus, and can even cause cancer.

Sulfur dioxide (SO<sub>2</sub>) is a gas generated by the reaction of sulfur with oxygen ( $S + O_2 \rightarrow SO_2$ ), being toxic. Sulfur dioxide is today regarded as the most harmful chemical in the air. The most important influence is on plants and less on humans and animals.

Carbon monoxide is a major urban air pollutant, the total emissions of this pollutant exceed the sum of the emissions of all other pollutants. This is an asphyxiating pollutant, a concentration higher than 0.1% in the air begins to be harmful after a longer period, and a 1% concentration is deadly after a few minutes. A lethal carbon monoxide concentration can accumulate in a closed garage when the engine of a car is running for about 10 minutes.

Another poison in the air of Cluj is benzene. It acts on the central nervous system causing the body temperature to fall below normal limits and the paralysis of the vasomotor center. In contact with the skin, it exerts a caustic action, producing serious, whitish and painful injuries.

Lead, arsenic and cadmium are another category of substances that affect the air of Cluj.

These may affect the blood formation system as they reduce the survival time of the red blood cells.



**Critical areas of air pollution identified by the Environmental Protection Institutes in each county from the southern part of the country:**

**Dolj County :**

- Northwestern industrial area of the county generically named "hot spot" having as activities:
  - production of chemical fertilizers on the basis of nitrogen, organic products, inorganic products ;
  - the production of electric and thermal energy based on fossil coal (lower lignite from the carboniferous basin of Jiu Valley);
  - heavy traffic and rail traffic on DE 70 and CFR Craiova-Timisoara .
- The northern industrial platform of Craiova :
  - the production of electric and thermal energy for the city of Craiova based on oil and coal (lignite);
  - car traffic (north-south artery of Craiova) and railway (CFR Depot and CFR Craiova Regional)
  - primary processing of crude oil .



-The Western industrial platform of Craiova: agro-food products, precast concrete elements, tiles, building materials, construction sites, road traffic on DE 70 Craiova-Filiasi and the railway Craiova-Timisoara.

-Calafat industrial platform - agro-food production( sugar, starch and glucose, alcohol), as well as electric and thermal energy based on oil

**Olt County :**

- The Eastern Industrial Platform of Slatina (fluorine in the form of hydrofluoric acid, fluorine salts, coke powders, carbon dioxide, carbon monoxide and hydrocarbons, nitrogen oxides, volatile organic compounds), companies which produce petroleum coke powders, pitch powders, anthracite powders

-The industrial platform of Caracal (carbon monoxide, sulfur oxides, carbon black, suspended particulates)

-Balş industrial platform - powders, carbon monoxide, carbon dioxide, sulfur dioxide, nitrogen oxides

-The industrial platform of Corabia (sulfur dioxide, carbon monoxide, nitrogen dioxide, particulate matter, hydrogen sulphide, volatile organic compounds)



### **Gorj County :**

- Rovinari -pollutants from SE Rovinari (frequency of exceedances at the sedimentable dust indicator - 67.82%);
- Turceni - pollutants from SE Turceni (exceeding the sedimentable dust indicator - 13.68%);
- Areas near the mining quarries, namely: Timișeni, Roșiuta, Mătășari, Pinoasa, Jilt, Seciuri.

### **Mehedinți County :**

The area of the county has not recorded areas with permanent critical situations in the atmospheric pollution.

Typical sources of pollution are through H<sub>2</sub>S and those produced by ROMAG THERMO emissions, which, through the quantities of CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub>, suspended particulate matter released into the atmosphere, have an essential contribution to the overall toxicities in the county.

### **Vâlcea County :**

- The chemical platform in Râmnicu Vâlcea
- Asbestos and slag storage
- Urban and high-traffic national roads
- Exploitation of surface coal from Berbești - Alunu
- Limestone exploitation from Bistrița



# **What We Can Do to Fight Against Air Pollution**

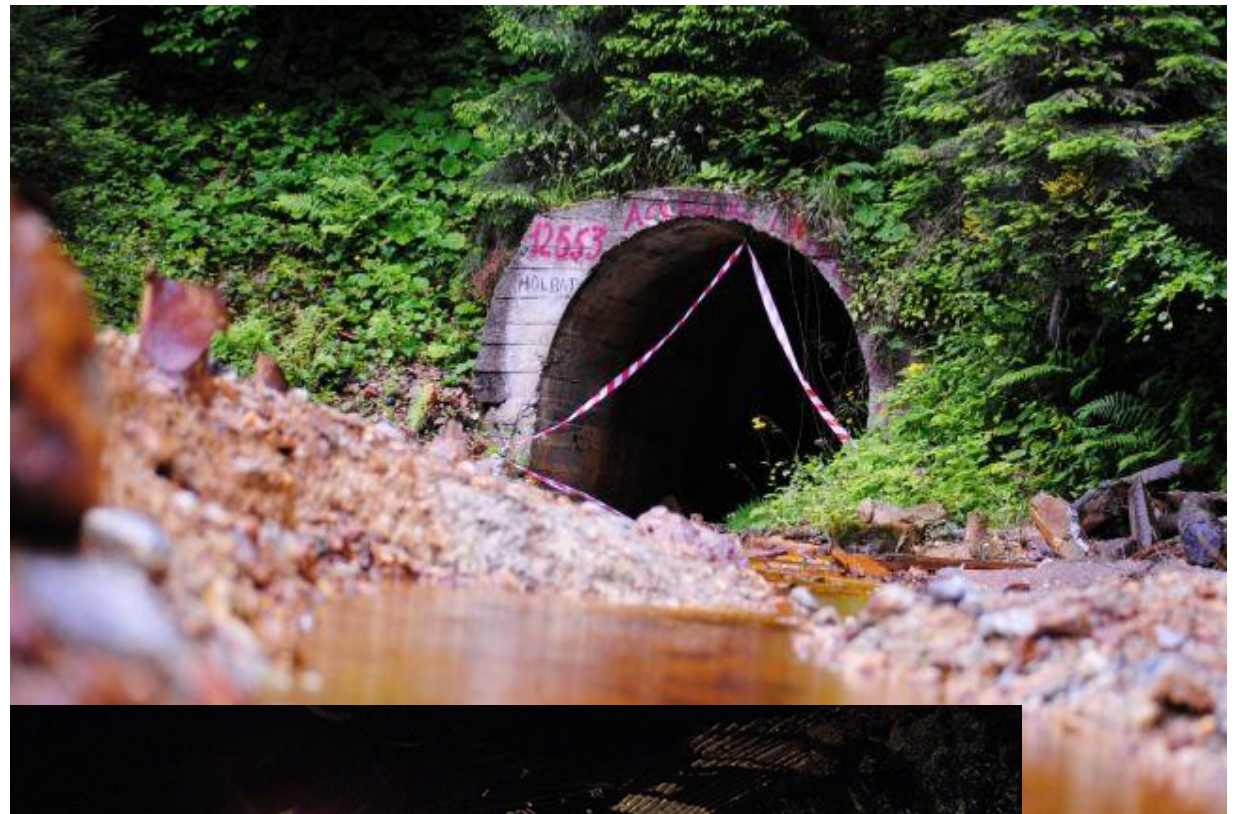
To improve the air quality, experts propose several measures. These include the construction of a metropolitan belt for each city, the renewal of the car park, the thermal insulation of the dwellings and institutions, the stimulation of the inhabitants to remain in the centralized district heating system, new quaternary power plants for the areas where the district heating network is not extended, attracting new subscribers to the centralized district heating system by the differentiated application of the tax base according to the heating methods of the dwelling, the intensification of the RAR controls for the identification of the cars whose catalytic converters and whose filters do not meet the current regulations, the checking of the aircraft maintenance by the operator, the encouragement of the population to use public transport in cities and municipalities, prompting local public transport operators to use buses, minibuses, coaches, etc. with new generation hybrids, electric motors, through the auction bills and the maintenance and realization of bicycle tracks.



# Mining

Mining leads to deforestation and releases of toxic minerals and heavy metals into soil and water. The effects of mining persist for years after the ore is exploited.

We should oppose mining and exploitation of underground resources through polluting practices that affect the environment, ecosystems and local communities. There should be infrastructure development for the exploitation of renewable energy.





# Long Periods with Too Much Heat and without Rain – Droughts

In Romania, the effects of climate change have had a major impact on agriculture. In the last decade, periods of drought and floods have become more frequent, with negative effects on agricultural productivity, especially wheat and maize, species with the most significant share in the crop culture structure.





Expansion and intensity of extreme weather phenomena reduce agricultural output. It is worrying that in Romania, about 14.7 million hectares of agricultural land, out of which 9.4 million hectares of arable land (64% of the arable land) are affected to a greater or lesser extent by frequent droughts over long periods and in consecutive years.

The unusual heat wave for some periods costs us enormously.

In Romania, there was a drought in early May 2018 as it had not been in the last 50 years. In the south of the country, the earth cracked like in the middle of the summer, and the effects on wheat and grain were huge. Moreover, corn, sunflower and peas, barely sown, could not grow without water, in the absence of irrigation systems.

In terms of desertification, the area of south west of the Olt county - Ianca - Potelu - Stefan cel Mare can be considered the critical area in terms of soil deterioration.

In 2002, the perimeter of ecological reconstruction was set up in the Danube Meadow in the area of 1048 ha, in the range of localities: Orlea - 258 ha, Ianca - 621 ha, Grojdibodu - 169 ha.

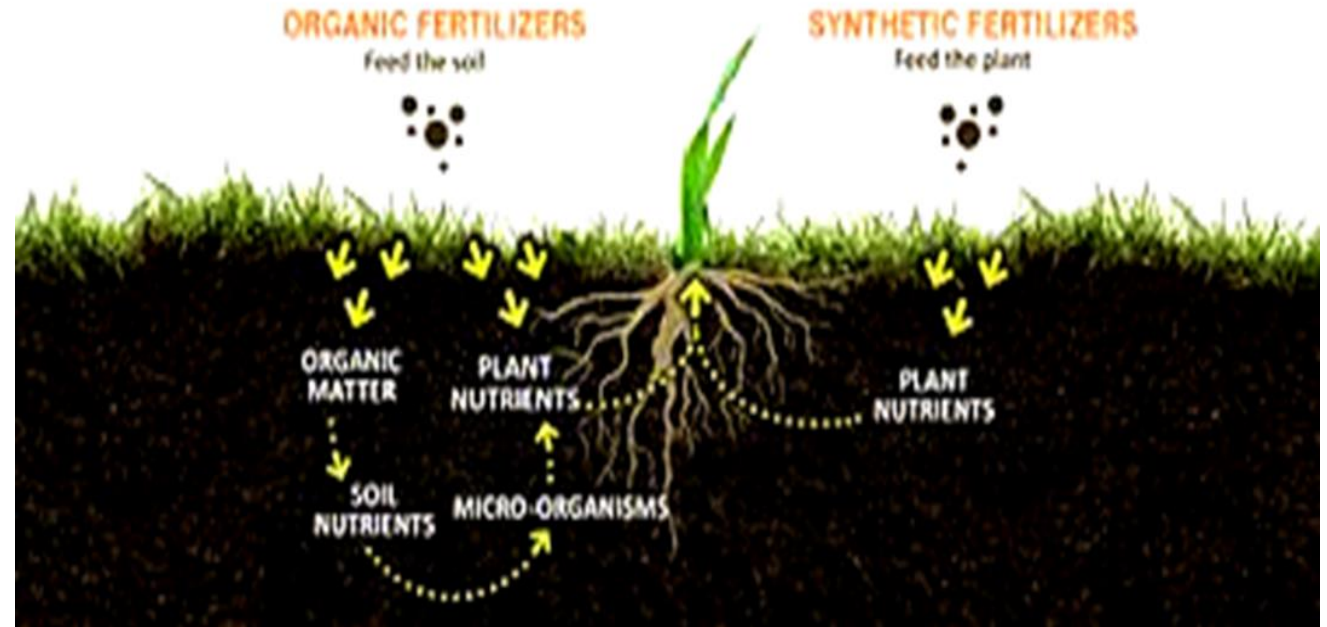




# Pesticide Pollution

The need for permanent growth of agricultural production requires the proper protection of cultivated plants and forest vegetation against pests, diseases and weeds.

From a certain insecticide or fungicide only a small part (about 6-8%) act on the pests, the rest (92-94% ) is lost, reaching the soil, the plants and other organisms of the agroecosystem, thus, hurting both the production and the fertile soil, since pesticides are absorbed by plants more easily from sandy soils. Plants grown on soils with high pesticide retention capacity are more heavily contaminated than those cultivated on soils with low retention capacity. Hopefully, non-toxic products have started to be used more often in all regions.





# Environmental Problems Affect Fauna

Humans are obviously affected by pollution, as seen by disease like asthma or cancer, but animals are victim to its effects, too. Many species have experienced pollution events that have caused death or a threat to their habitat.

Factors like undrinkable water, destruction of habitats or hunting come into play when talking about fauna pollution in Romania.





# The Danube Delta

The region is confronted with a number of environmental issues, both due to natural and man-made factors: forest degradation, marine pollution, beach erosion, pollution caused by industrial substances or pesticides and chemical fertilizers.

One of the environmental problems faced by the Danube Delta is the pollution of the river water. Also, in time, the clogging of the Delta's side branches may lead to the flooding of a large part of the Delta's land surface and the destruction of this ecosystem.

**The Black Sea Coast** is affected by coastal erosion (beaches Mamaia, Tomis Nord, Eforie, Costinesti, Olimp - Venus, Saturn) and beach pollution.





# Flooding



On 29.06.2018, torrential rain has created problems in twenty counties Bacău, Brăila, Botoșani, Buzău, Constanța, Călărași, Covasna, Dolj, Galați, Galați, Iași, Ilfov, Neamț, Prahova, Sibiu, Suceava, Tulcea, Teleorman, Vrancea și Vaslui and in Bucharest, water flooding hundreds of courtyards, houses, annexes and basements. Dozens of trees were knocked down by the wind, and the fire brigades intervened to release them.





Many homesteads were flooded in Bărăgan.



In Dâmbovița county, on 09.08.2018, 8 localities were affected by the rainfall and bridges and roads were destroyed.





**No more of these aspects!**



**We want only this! The  
environment is in our hands!  
‘We Care!’**



# **Environmental Issues in Turkey**



# What Is the Environment?

The environment is the surroundings or conditions in which a person, animal or plant lives or operates.

## What Are the Environmental Issues?

The environmental issues are harmful effects of human activity on the biophysical environment.



# Earth

*the place we call home  
is slowly dying...*





# Environmental Issues

- Acid rain
- Air pollution
- Global warming
- Water pollution



# Acid Rain

Acid rain is one of the most important environmental problems of all. It is caused by airborne acidic pollutants and it has highly destructive results.

The invisible gases that cause acid rain usually come from automobiles or coal burning power plants.

## Causes

The primary causes of acid rain are sulphur dioxide and nitrogen oxides.

Most sulphur dioxide comes from power plants that use coal as their fuels.

Automobiles produce about half of the world's nitrogen oxide.

Fires, volcanic eruptions, bacterial decomposition and lightning are also causes of acid rain.





# Solutions

- Power plants can use coal with a low sulphur content
- Power plants can remove the sulphur from smoke their plants release
- Individuals can help by conserving energy or driving their cars less.



# Air Pollution

- Air pollution is the presence or introduction of harmful or poisonous substances into the air.
- These dangerous substances can be either in the form of gases or particles.
- Air pollution can be found both outdoors and indoors.

## Causes

- Cars, trains, airplanes and buses emit harmful gases into the environment.
- Mining emits substances like methane, nitrogen oxides and carbon monoxide.
- The burning of coal or wood adds carbon monoxide and other harmful substances that we breathe in.





# Solutions

- Quit coal and replace it with clean, renewable energy.
- Tighten controls for power plant emissions.
- Energy conservation and efficiency.

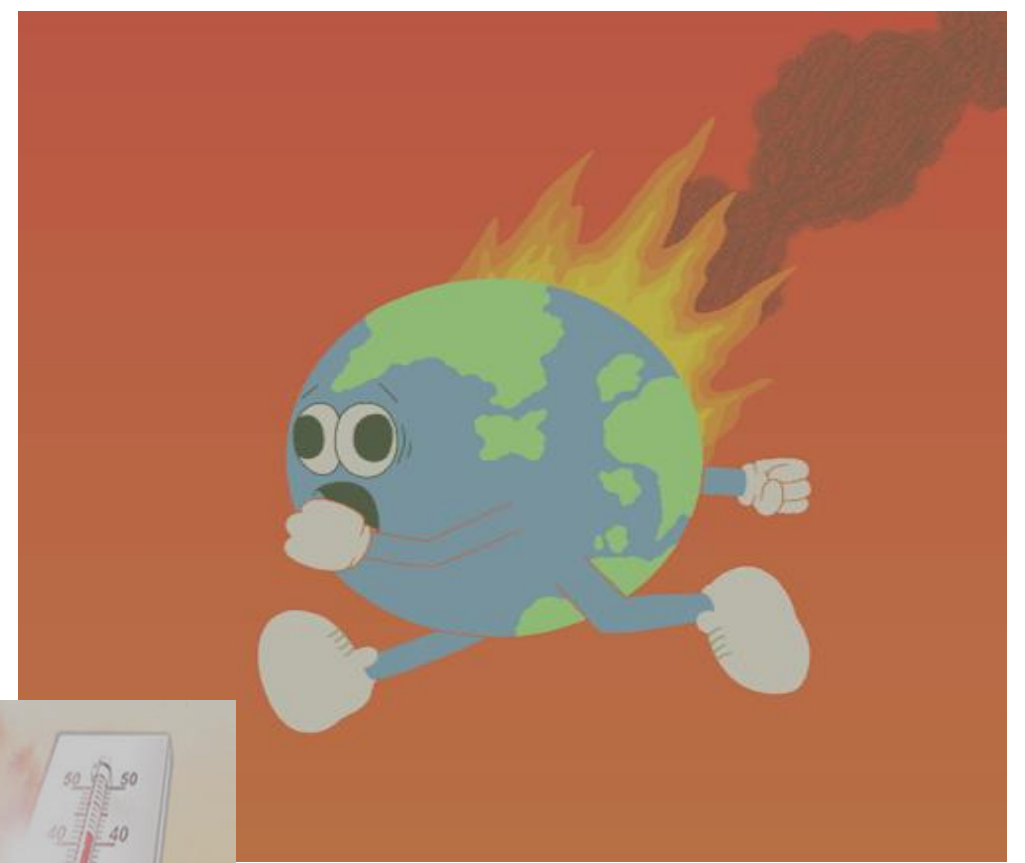


# Global Warming

- Global warming is also called “the greenhouse effect” because the gases that are gathering above the earth make the planet comparable to a greenhouse.
- The greenhouse effect is warming the planet and threatening the environment.

## Causes

- Overpopulation
- Volcanic eruptions
- Industrial revolution





Yesterday



Today



Tomorrow



**Stop** Global Warming.

You're not only helping yourself.  
You're helping others.

# Solutions

- Teach people about such things as deforestation and make them more environmental aware.
- Do recycle
- Use public transportation.





# Water Pollution

- Water pollution is the contamination of water bodies, usually as a result of human activities.

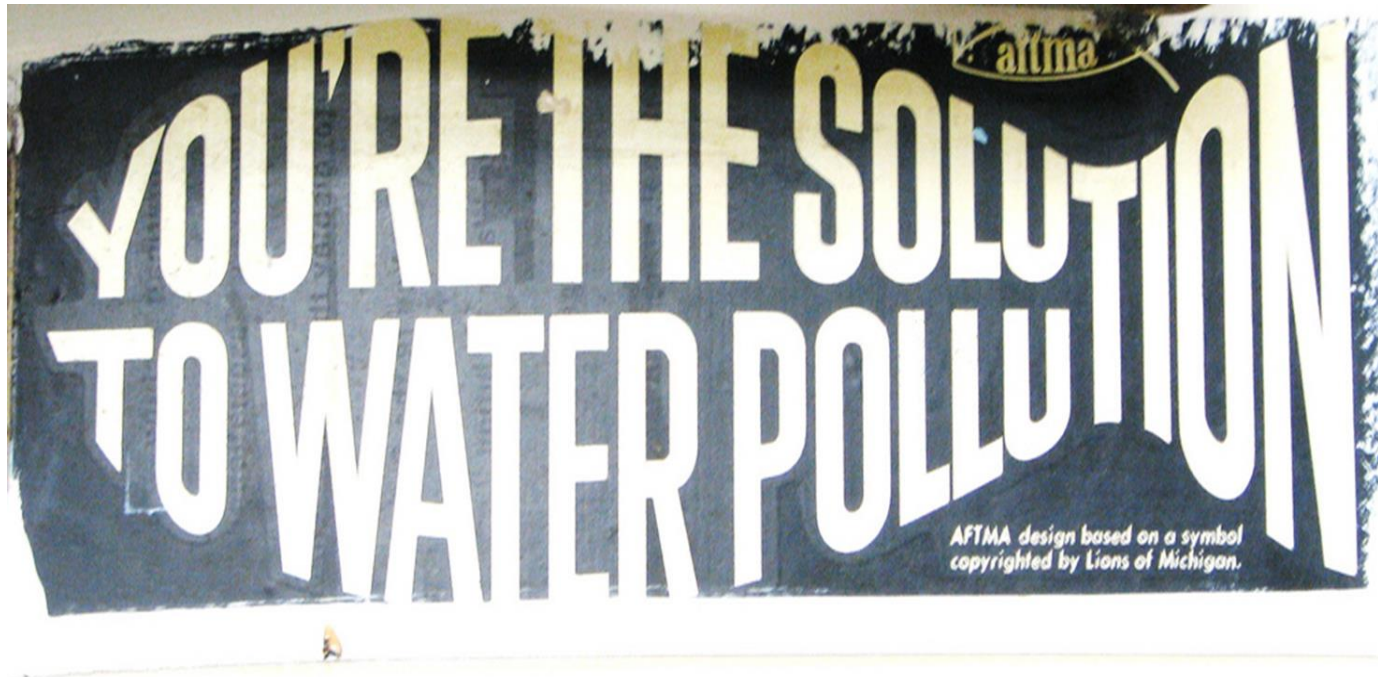
## Causes

- Sewage and waste water
- In some countries, trash like paper, food and plastic are deposited into the sea. These waste types take some time to decompose. When these end up in the sea, they harm sea animals and cause a lot of water animals' deaths.
- Each time the air is polluted with sulphur dioxide and nitrogen oxide, they mix with water particles in the air and form a toxic substance.



# Solutions

- Use water wisely. Do not keep the tap running when not in use.
- Do not throw chemicals, oils, paints and medicines down the sink drain, or the toilet.
- Buy more environmentally safe cleaning liquids for use at home and other public places. They are less dangerous to the environment.



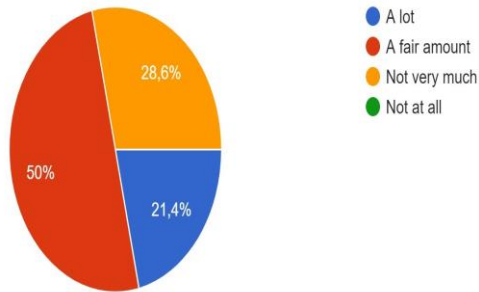


# **The Environment- Our Common Goal**

## **Part 2. The Survey on Saving Energy**

# How concerned are you about climate changes?

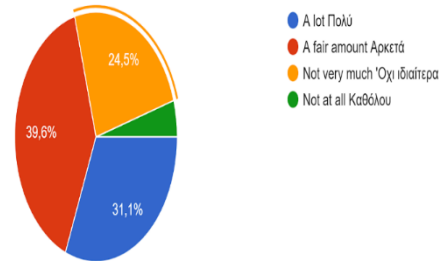
## Italy



Half of the Italian respondents are really concerned about climate changes.

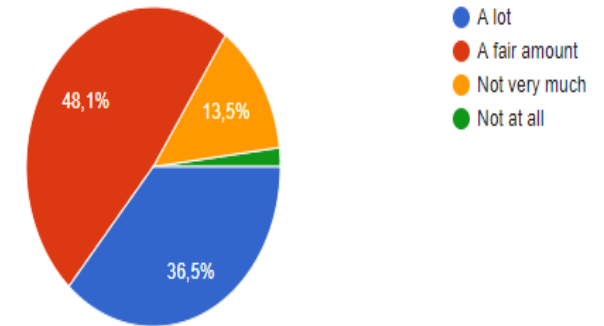
## Greece

1. How concerned are you about climate change? Πόσο σας απασχολεί η κλιματική αλλαγή;  
106 απαντήσεις



It seems that Greeks are quite concerned about climate change so as to act individually about it.

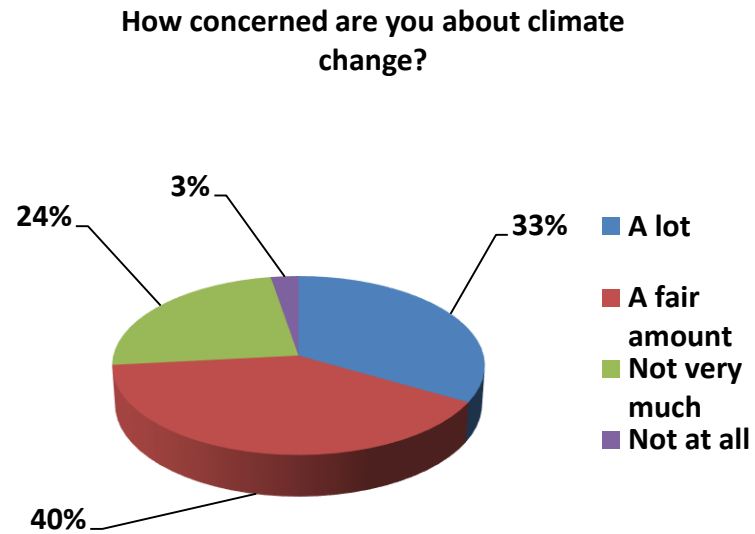
## Portugal



In Portugal, 19 students are very concerned about climate changes, 25 are concerned and 7 are not so much. Only 1 of them doesn't care at all about that.



## Romania

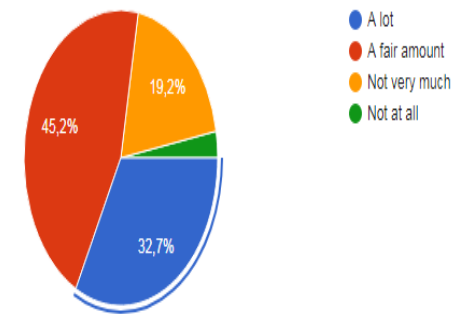


In Romania, 40% of the interviewed students show great interest in the climate change, 33% are interested enough as well, 24% do not have such a big interest in this topic and 3% are not interested at all.

## Turkey

How concerned are you about climate change?

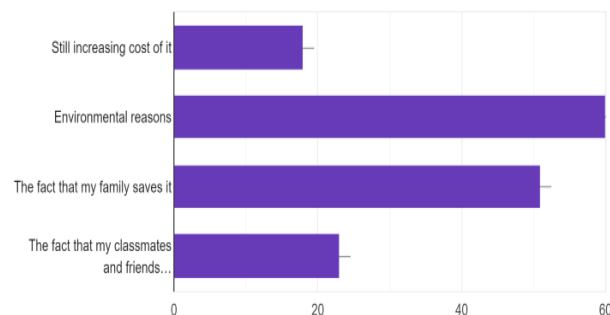
104 yanıt



It can be seen that almost half of students have said that they have a fair amount of concern with climate change. And only 2,9% said they aren't concerned.

# What would motivate you to change your behaviour to reduce the energy use?

## Italy

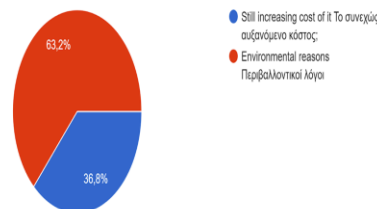


In Italy, most students said that environmental issues and the fact that their family saves energy would motivate them to change their behaviour to reduce their energy use.

## Greece

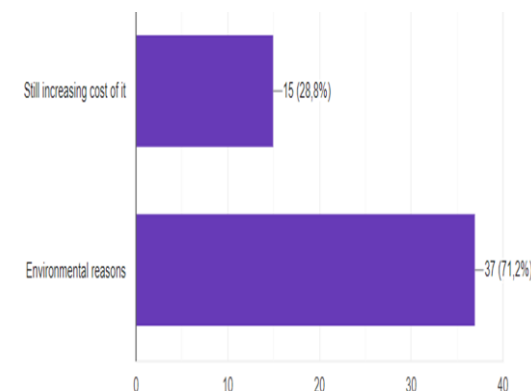
2. What would motivate you to change your behavior to reduce the energy use? Tick as many as are relevant to ...ενέργειας; Επιλέξτε όσα σας αφορούν.

106 απαντήσεις



In Greece, we have already changed behavior to reduce the energy use mostly for environmental reasons while some of us (36,8%) do it for financial reasons.

## Portugal

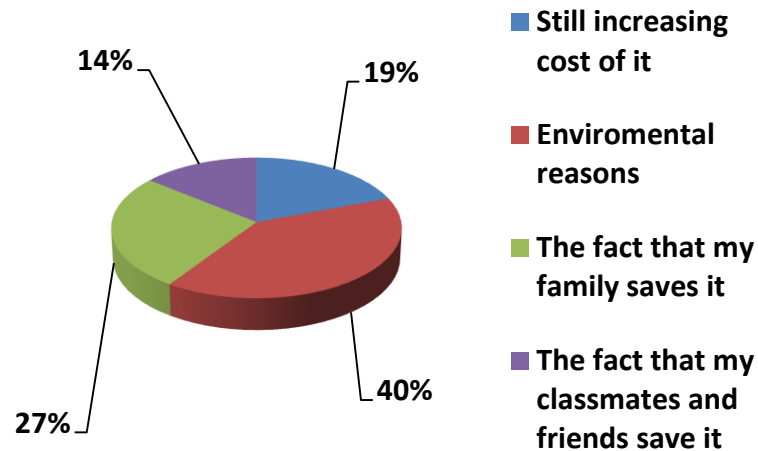


Fifteen Portuguese students said that the increasing cost of energy would motivate them to change their behaviour to reduce their energy use. The other 37 said that they would change because of environmental reasons.



## Romania

What would motivate you to change your behaviour to reduce the energy use? Tick as many as are relevant to you.

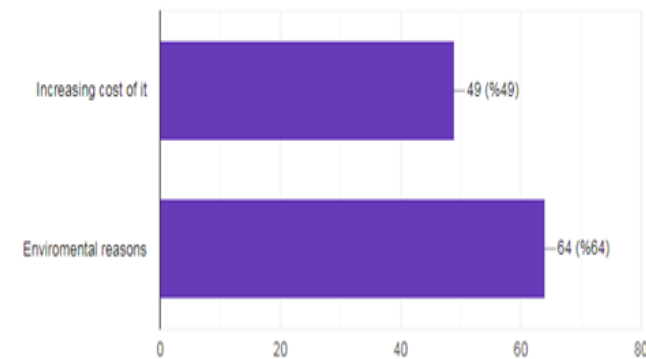


Forty percent of the respondents admit that they are motivated by environmental reasons, 27% are influenced by their family awareness to this matter, 19 % motivation is resulted from the increasing costs and 14 % would change their behaviour to reduce the energy use because their classmates and friends started doing this too.

## Turkey

What would motivate you to change your behaviour to reduce the energy use? Tick as many as are relevant to you.

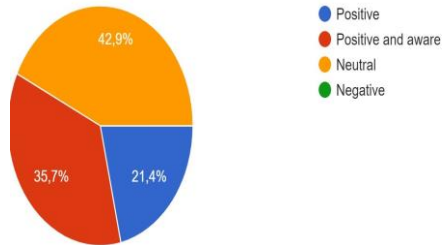
100 yanıt



In Portugal, 64% of the respondents said environmental issues would motivate them and other 49% said that the increasing cost of it is more motivative.

# What is your attitude to energy saving?

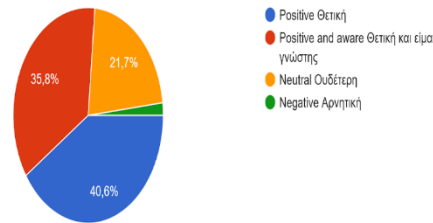
## Italy



More than half of the Italian students have a positive attitude towards saving energy .

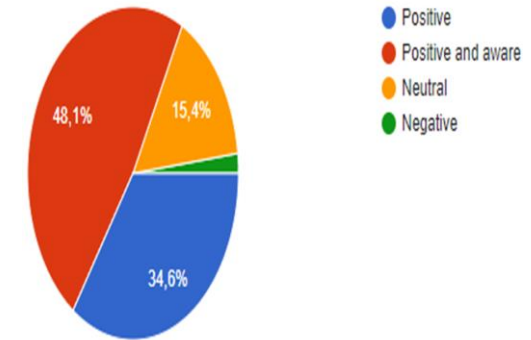
## Greece

3. What is your attitude to energy saving? Tick one possibility Ποια είναι η άποψή σας για την εξοικονόμηση ενέργειας; Επιλέξτε μια απάντηση.  
106 απαντήσεις



A quite great percentage of Greeks (40,6%) have a positive attitude to energy saving while a high percentage (35,8%) are also aware of it. However, it's quite worrying that 21,7% of people are still neutral!!!

## Portugal

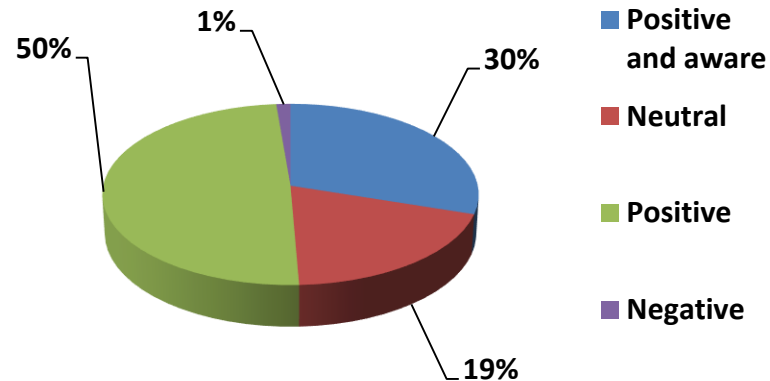


Twenty-five students have a positive attitude and are aware about the energy saving, 18 have a positive attitude, 8 of them have a neutral attitude about it and 1 doesn't do anything for it.



## Romania

What is your attitude to enery saving?

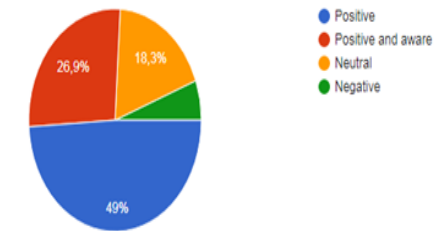


In Romania, 50% students have a positive attitude towards energy saving, 30% are both positive and aware, 19% feel neutral about this and 1% are negative.

## Turkey

What is your attitude to energy saving?

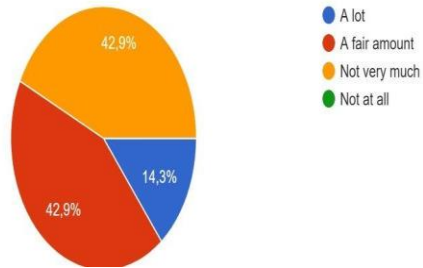
104 yanıt



Almost half of the students are positive towards their attitude to saving energy, 18,3% percent are neutral and only 5% are negative to energy saving.

# How much thought do you give to saving energy in your home?

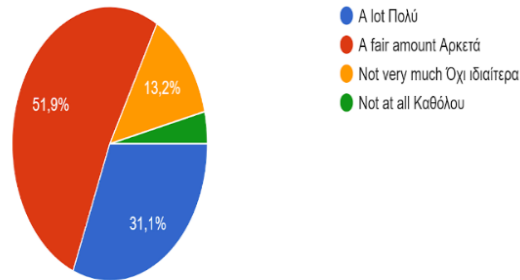
## Italy



In Italy, almost 57% of the respondents think about saving energy in their home.

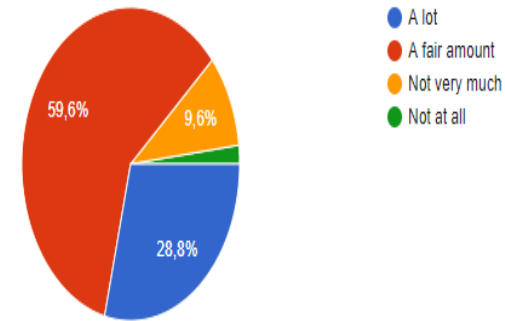
## Greece

4. How much thought do you give to saving energy in your home? Πόσο σας ενδιαφέρει να εξοικονομήτε ενέργεια στο σπίτι;  
106 απαντήσεις



In Greece, 51,9% of the people think a lot about saving energy in their home while 31,1% think about it a fair amount.

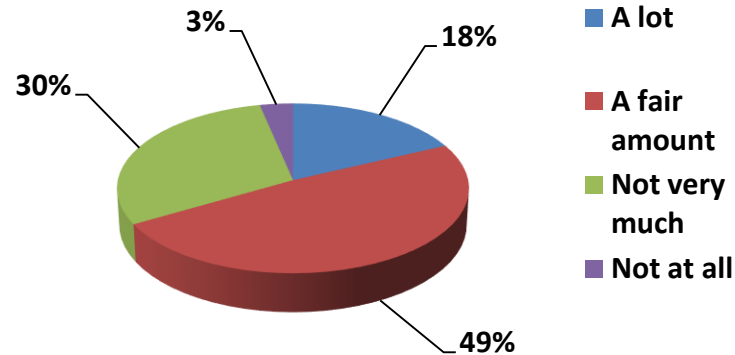
## Portugal



In Portugal, 90% of the students give a lot of thought to saving energy in their homes and only about 10% of the students don't give much thought to it.

## Romania

How much thought do you give to saving energy in your home?

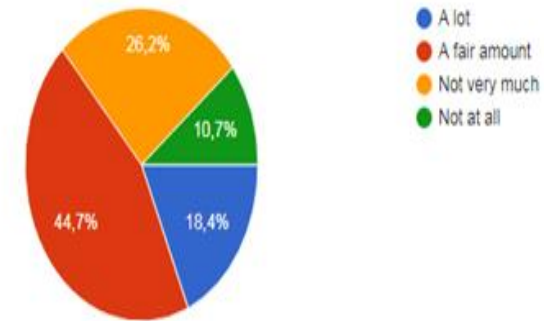


In Romania, 49% of the children think really much about saving energy in their home, 30% not very much, 18% consider this a lot and 3% do not take it into account at all.

## Turkey

How much thought do you give to saving energy in your home?

103 yanıt

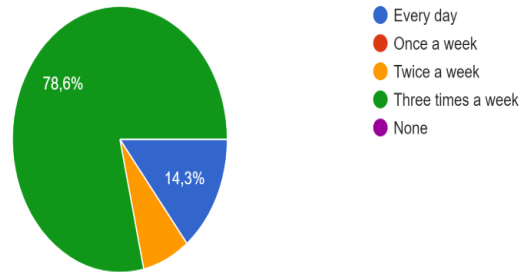


It can be seen that 36,9% don't give much thought to saving energy in their home. But other 63,4% give a lot of thought to saving energy in their home.



# How many times do you take a shower instead of a bath?

## Italy

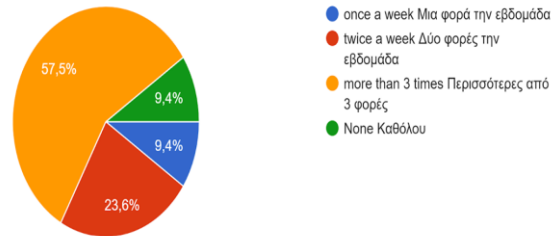


It appears that most of the Italian respondents (78.6%) take a shower instead of a bath.

## Greece

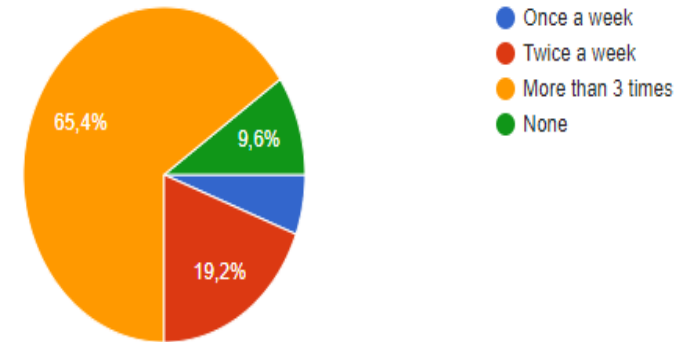
5. How many times do you take a shower instead of a bath? Πόσες φορές κάνετε ντουζ αντί για μπάνιο;

106 απαντήσεις



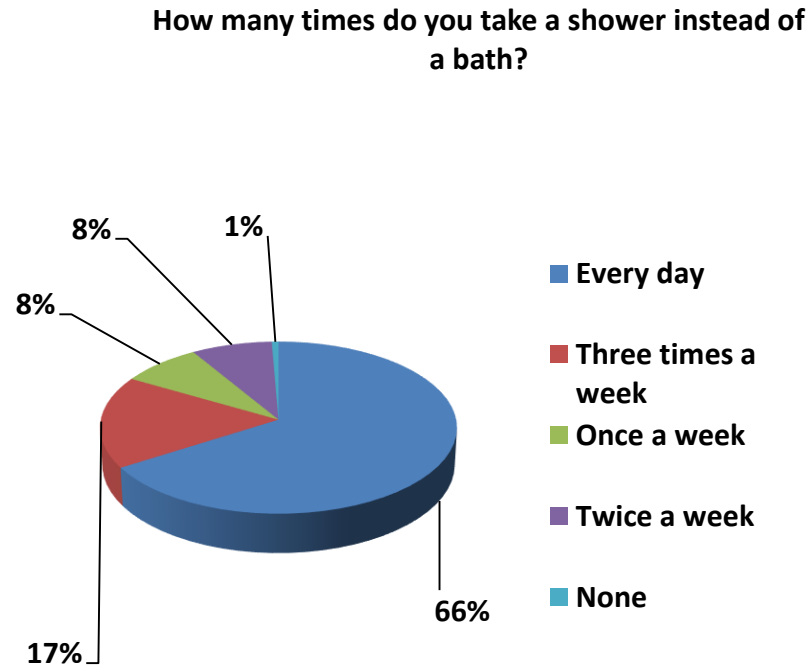
It seems that most of us (57,5%) prefer taking a shower instead of bath most of the times in a week.

## Portugal



In Portugal, 34 students have said they take a shower instead of a bath more than 3 times a week, 10 said that they do it twice, 3 said that they do it once a week and 5 don't do that.

## Romania

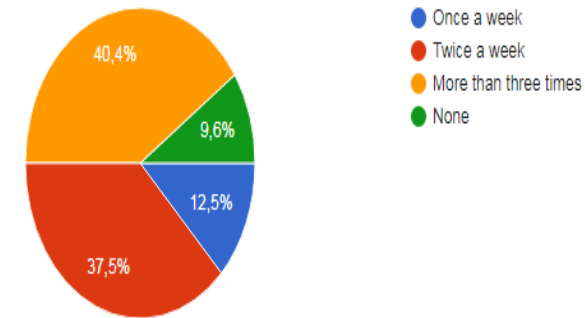


In Romania, 66% of the respondents have a shower instead of a bath every day, 17% do this three times a week, 8% take a shower both once and twice a week and 1 % never.

## Turkey

How many times do you take a shower instead of a bath?

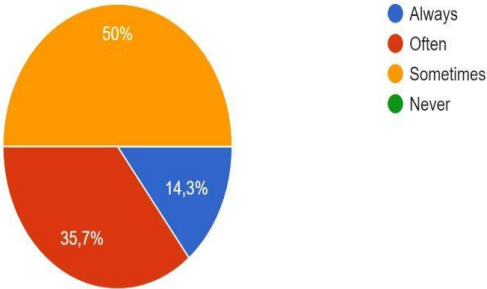
104 yanıt



We all know that taking a shower instead of bath is really important and helpful to save energy in our homes. And only 9,6% of students have said they never take shower instead of bath.

# Do you turn off the tap while taking a shower or brushing your teeth?

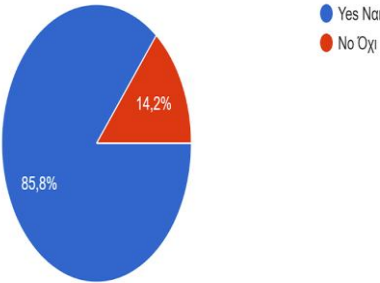
## Italy



We can see that the Italian respondents try to save water.

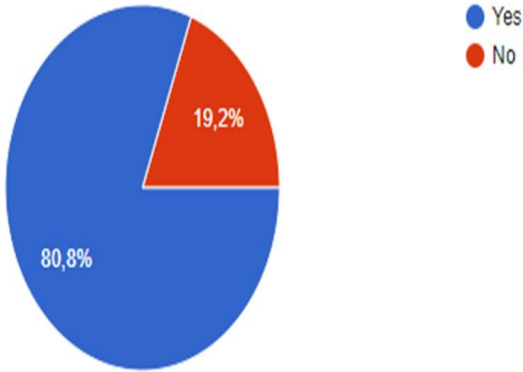
## Greece

6. Do you turn off the tap while taking a shower or brushing your teeth?  
Κλείνετε τη βρύση ενώ κάνετε ντουζ ή βουρτσίζετε τα δόντια;  
106 απαντήσεις



It can be seen that 85,8% of the Greeks save water by turning of the tap while taking a shower or brushing their teeth

## Portugal

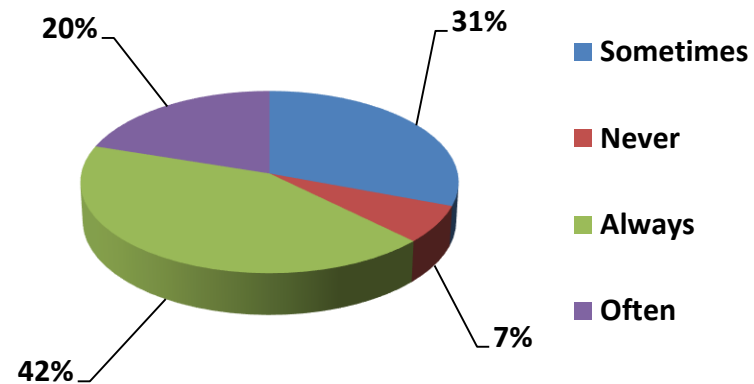


In Portugal, 42 of the 52 students turn off the tap while taking a shower or brushing their teeth whereas 10 of them don't turn off the tap.



## Romania

Do you turn off the tap while taking a shower or brushing your teeth?

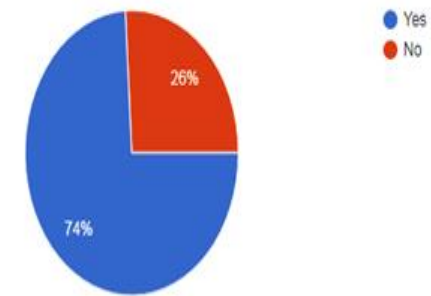


The Romanian respondents have stated that almost half of them do this, so 42% are always for doing so, 31% only sometimes, 20% claim they do this often and 7% never turn it off.

## Turkey

Do you turn off the tap while taking a shower or brushing your teeth?

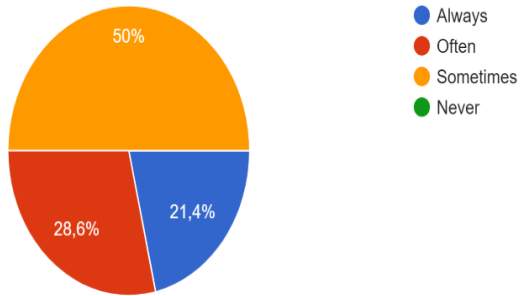
104 yanıt



It can be seen that large majority of students have said they turn off the tap.

# Do you turn off the lights when you leave a room?

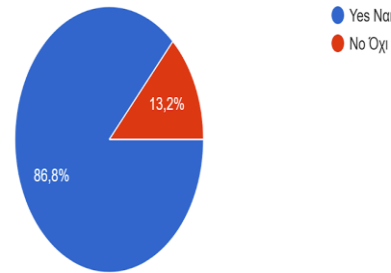
## Italy



Half of the students always or often turn the lights off when leaving a room.

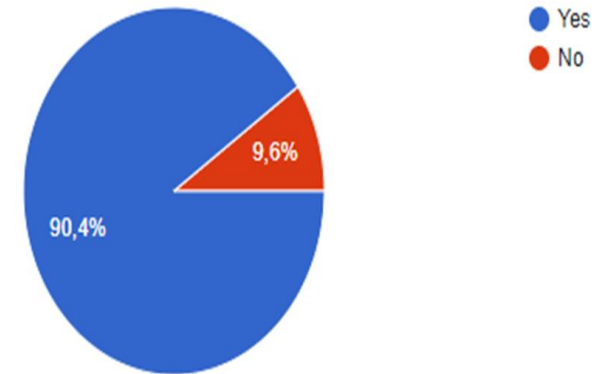
## Greece

7. Do you turn off the lights when you leave a room? Σβήνετε τα φώτα όταν φεύγετε από το δωμάτιο;  
106 απαντήσεις



A high percentage of us (86,8%) turn the lights off when leaving a room.

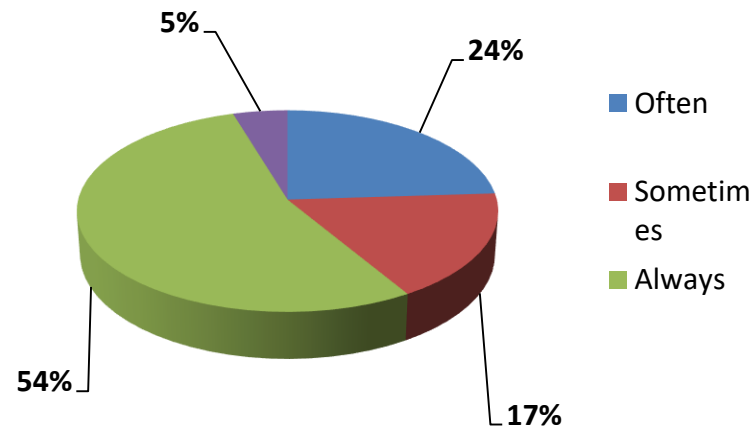
## Portugal



In the survey, 47 students turn off the lights when they leave a room. Only 5 students answered that they don't do that.

## Romania

Do you turn off the lights when you leave a room?

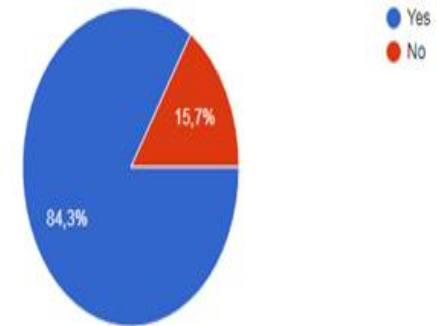


In Romania, 54% always go for the turning off the lights whenever they leave a room, 24% act like this often, 17% just a few times and 5% not at all.

## Turkey

Do you turn off the lights when you leave a room?

102 yanıt

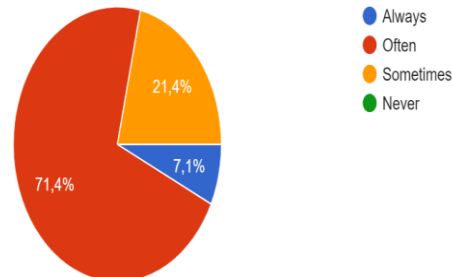


It can be seen that only 15,7% don't turn off the lights when they leave a room.



# Do you switch off the electrical appliances when you do not use them and not leave them on standby?

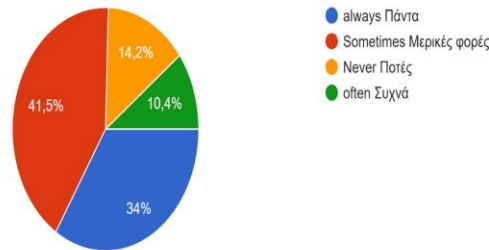
## Italy



In Italy, 71,4% of the respondents often switch off electrical appliances when not using them while 21,4% always do so.

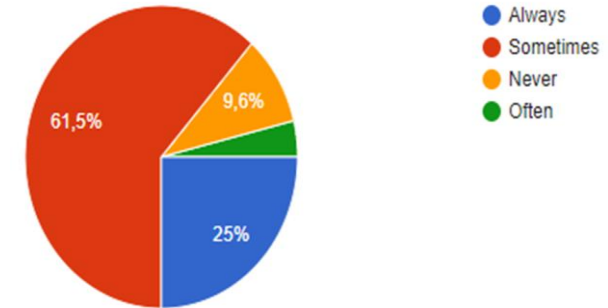
## Greece

8. Do you switch off the electrical appliances when you do not use them and not leave them on standby? Απεν...τε αντί να τις αφήνετε στην αναμονή;  
106 απαντήσεις



Surprisingly, a quite great percentage (41,5%) of us sometimes switch off electrical appliances when not using them while a big amount of people (34%) always do so.

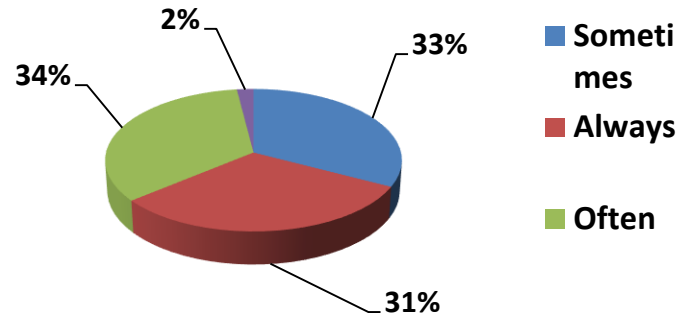
## Portugal



Only a quarter of the students sometimes switch off the electrical appliances when they do not use them and 61,5% always do that.

## Romania

Do you switch off the electrical appliances when you do not use them and not leave them on standby?



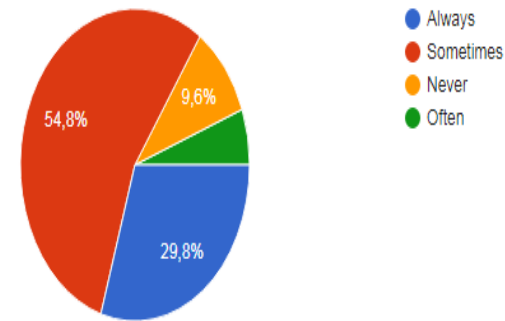
In Romania, 34% of the respondents have answered that they do that often, 33 % switch them off only sometimes, only 31% of the students do this all the time and 2% never.

## Turkey

Do you switch off the electrical appliances when you do not use them and not leave them on standby?



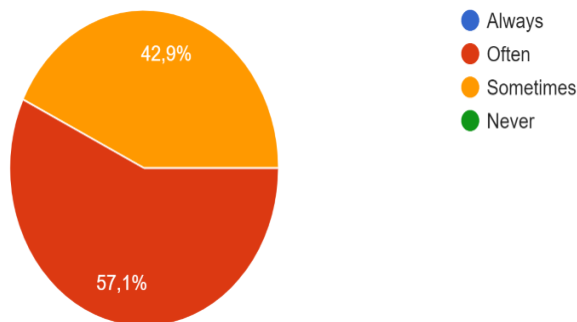
104 yanıt



A large majority of students switch off the electrical appliances when they do not use them and only 9,6% of students never switch them off.

## Do you shut the doors for the areas you do not use?

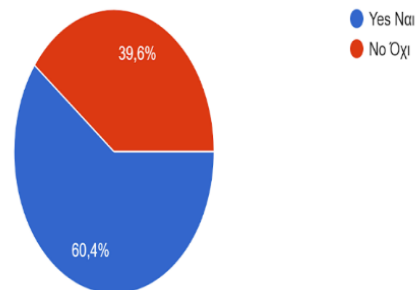
### Italy



In Italy, 57,1% of us often think of shutting the doors when leaving a place for saving energy whereas the rest sometimes do this.

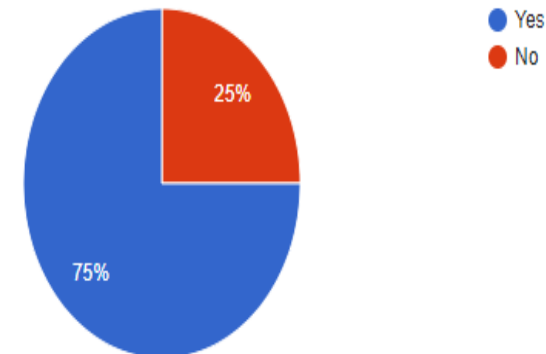
### Greece

9. Do you shut the doors for the areas you do not use? Κλείνετε τις πόρτες στους χώρους που δεν χρησιμοποιείτε;  
106 απαντήσεις



In Greece, 60,4% of us think of shutting the doors when leaving a place for saving energy reasons while 39,6% do not really care!

### Portugal

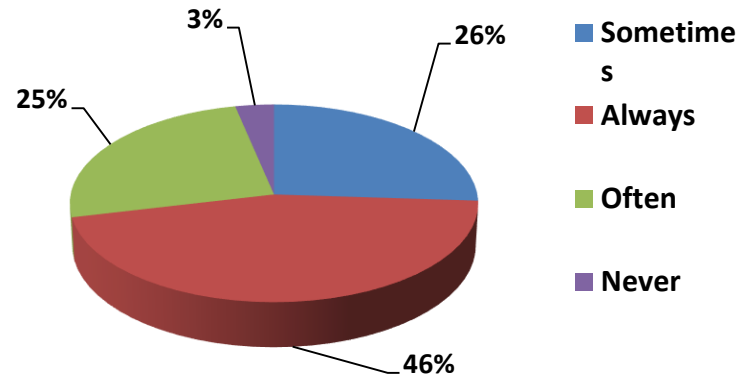


In Portugal, 75% of the students, that is 39 of them, shut the doors for the areas they don't use and 25% of them don't do that.



## Romania

Do you shut the doors for the areas you do not use?

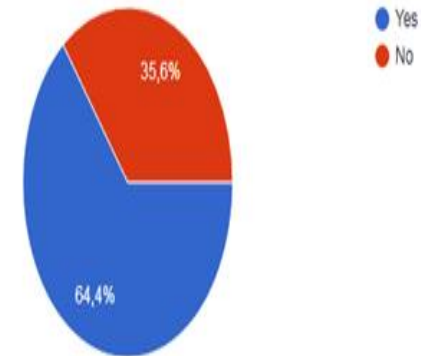


In Romania, 46% of the respondents always shut the doors when they do not use an area, 26% do this sometimes, 25% do this almost all the time and 3% never.

## Turkey

Do you shut the doors for the areas you do not use?

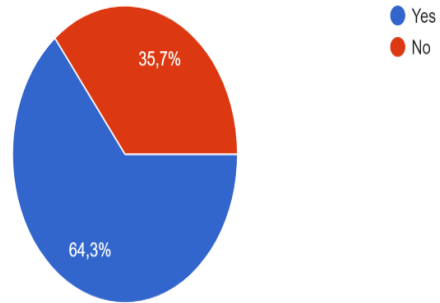
104 yanıt



In Turkey, 64,4% have said that they shut the doors for the areas they do not use but other 35,6% have stated they do not.

# Do you select the appropriate shortest washing cycle for the washing machine?

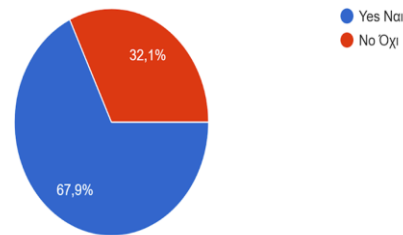
## Italy



In Italy, 64,3% of the respondents select the shortest washing cycle when using the washing machine.

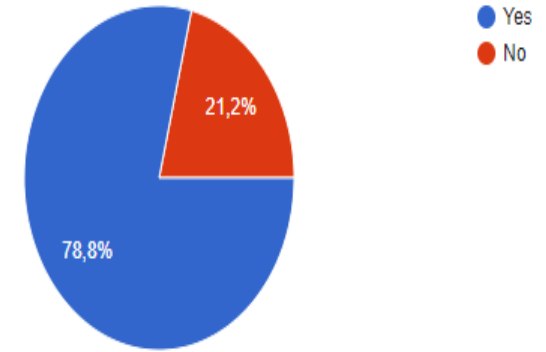
## Greece

10. Do you select the appropriate shortest washing cycle for the washing machine? Επιλέγετε τον συντομότερο κύκλο πλύσης για το πλυντήριο;  
106 απαντήσεις



In Greece, 67,9% of us select the shortest washing cycle when using the washing machine while a 32,1% do not really pay attention to it.

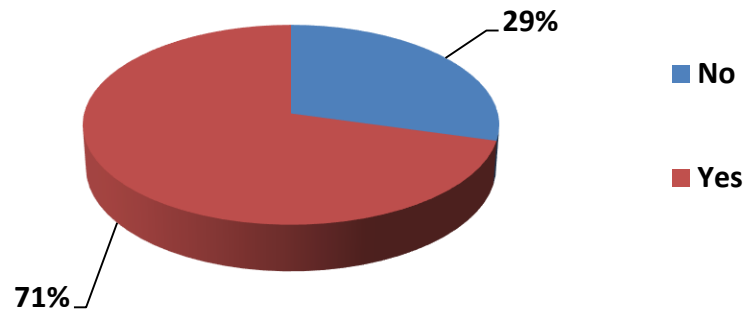
## Portugal



In Portugal, 41 students choose the appropriate shortest washing cycle for the washing machine and 11 of them don't do that.

## Romania

Do you select the appropriate shortest washing cycle for the washing machine?

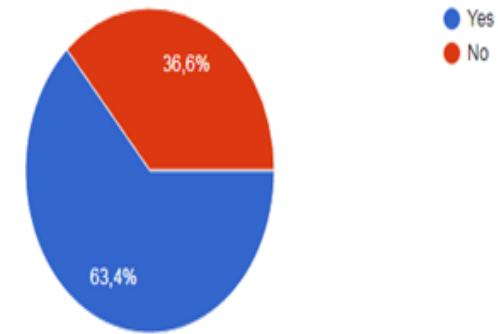


In Romania, 71% of the responses were affirmative to this question and the rest of 29% of the replies were negative.

## Turkey

Do you select the appropriate shortest washing cycle for the washing machine?

101 yanıt

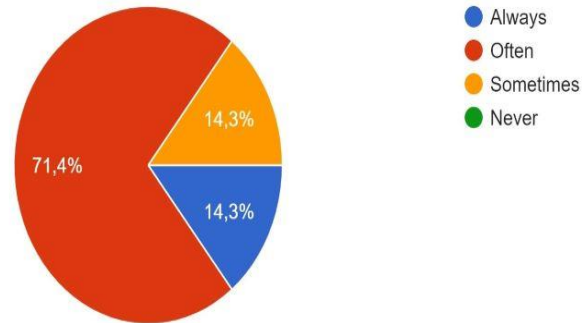


It can be seen that more than half of the students select the shortest cycle for the washing machine.



## Do you open the curtains facing the sun?

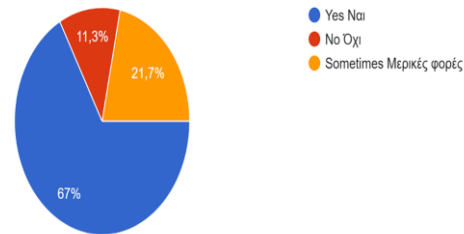
### Italy



In Italy, 71,4% of the respondents often open the curtains facing the sun while 14,3% always do this.

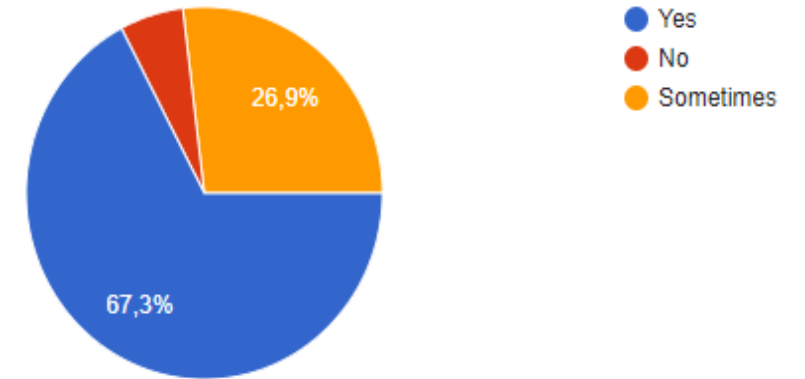
### Greece

11. Do you open the curtains facing the sun? Αφήνετε τις κουρτίνες ανοιχτές όταν έχει ηλιοφάνεια;  
106 απαντήσεις



In Greece, 67% care about saving energy by opening the curtains facing the sun.

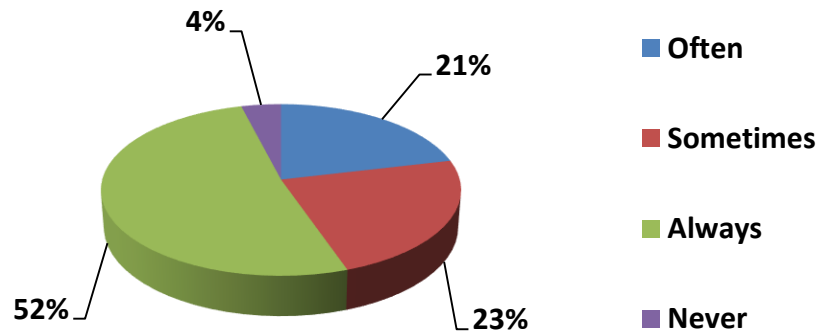
### Portugal



The majority of the students open the curtains facing the sun on a regular basis.

## Romania

Do you open the curtains facing the sun?

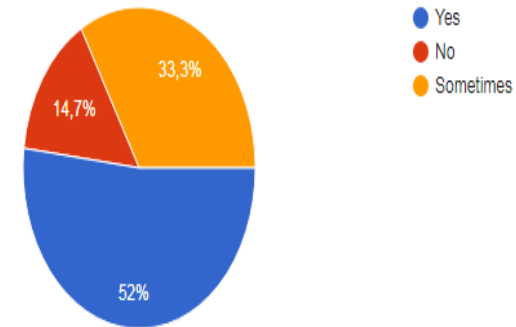


In Romania, 52% of the respondents always have this habit in the mornings, 23% open them sometimes, 21% tend to do this often and 4% never behave this way.

## Turkey

Do you open curtains facing the sun?

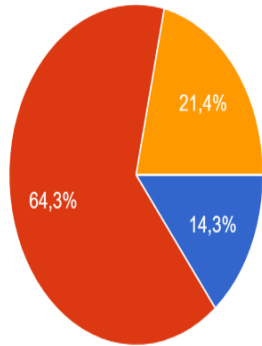
102 yanıt



The sun is a natural light source and if we benefit from the sun light as much as possible, we can save much energy. And it can be seen that 52% of students open their curtains and only 14,7% do not.

## Do you close the curtains/blinds at night?

### Italy

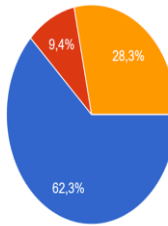


In Italy, 64,3% of the students often close the curtains/blinds at night while 14,3% always do this.

### Greece

● Always  
● Often  
● Sometimes  
● Never

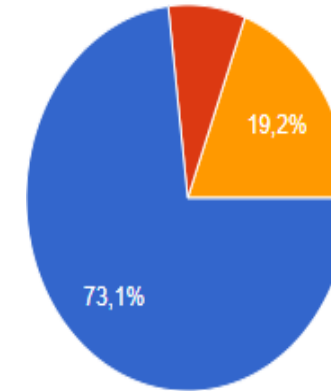
2. Do you close the curtains/blinds at night? Κλείνετε τις κουρτίνες/τα पर्तρία το βράδυ;  
06 απαντήσεις



In Greece, 62,3% of the people take care of closing the curtains/blinds at night.

### Portugal

● Always  
● Never  
● Sometimes

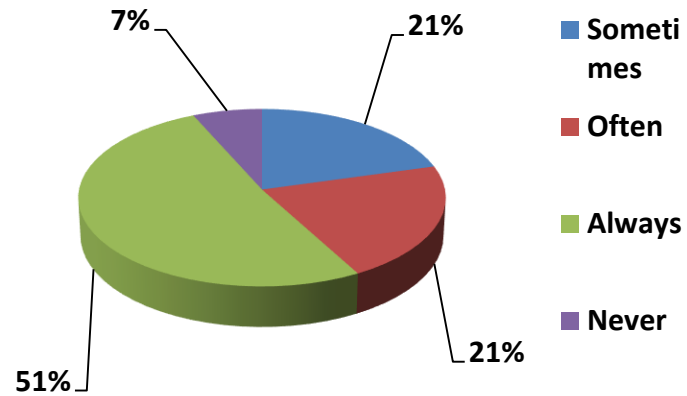


In Portugal, 38 of the answers were positive when we asked if they close the curtains at night whereas 10 students just do it sometimes and 4 never do that.



## Romania

Do you close the curtains/blinds at night?

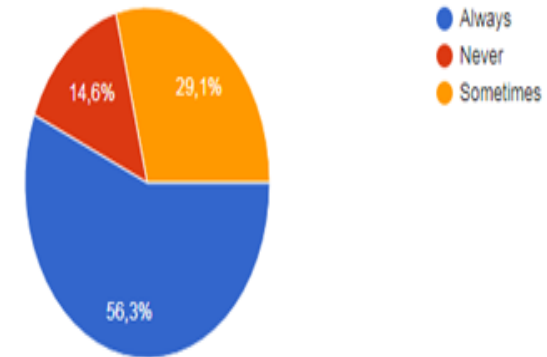


In Romania, 51% of the students have answered by "always" option, 21% of the choices are for both sometimes and often and 7% of the respondents never close the curtains / blinds at night.

## Turkey

Do you close the curtains/blinds at night?

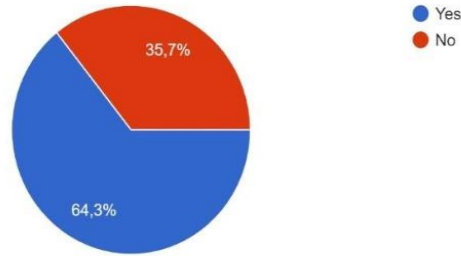
103 yanıt



More than half of the students close their curtains/blinds at night.

# Do you wash only full loads of dishes/clothes?

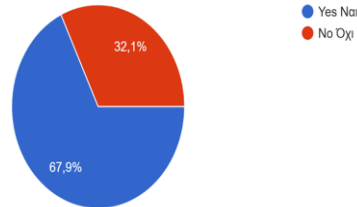
## Italy



In Italy, 64,3% of the respondents save energy when washing their clothes/dishes.

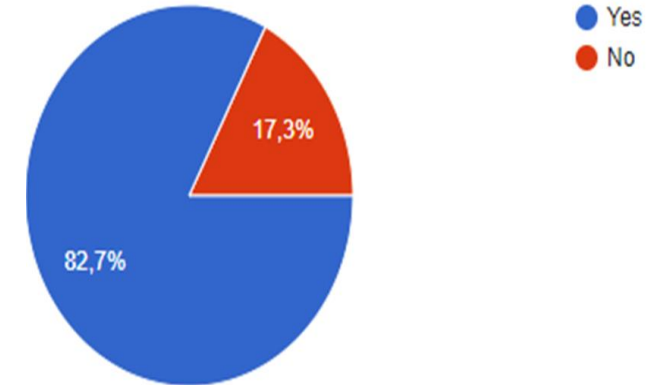
## Greece

13. Do you wash only full loads of dishes/clothes? Βάζετε πλύση μόνο όταν έχετε πολλά ρούχα;  
106 απαντήσεις



In Greece, 67,9% of the respondents care about not spending much water and energy when washing their clothes/dishes.

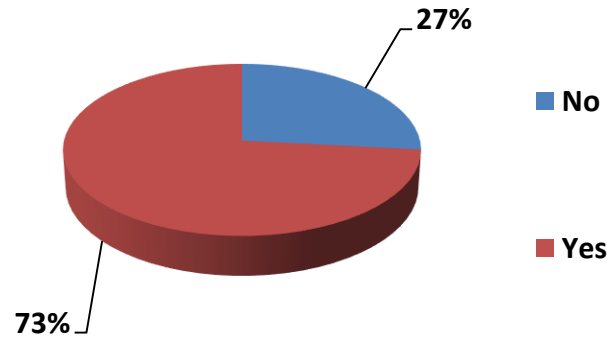
## Portugal



In Portugal, 43 students only wash full loads of dishes and clothes. 9 students don't do it.

## Romania

Do you wash only full loads of clothes when using your washing machine?

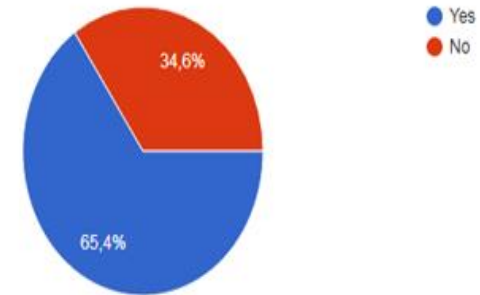


In Romania, 73% of the students confirm the idea of washing only full loads of clothes when using the washing machine, whereas 27% do not approve of this.

## Turkey

Do you wash only full loads of dishes/clothes?

104 yanıt

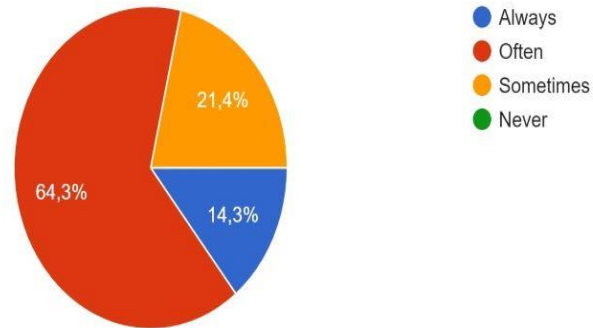


Surprisingly, 36,6% of students said that they do not wash only full loads of dishes/clothes. But other 65,4% said they do.



## Do you dry clothes naturally?

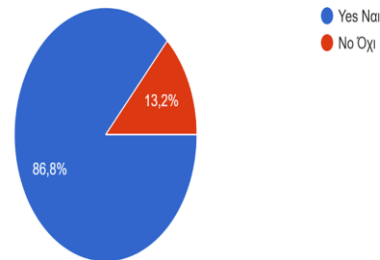
### Italy



It seems that 64,3% of the respondents often dry their clothes naturally.

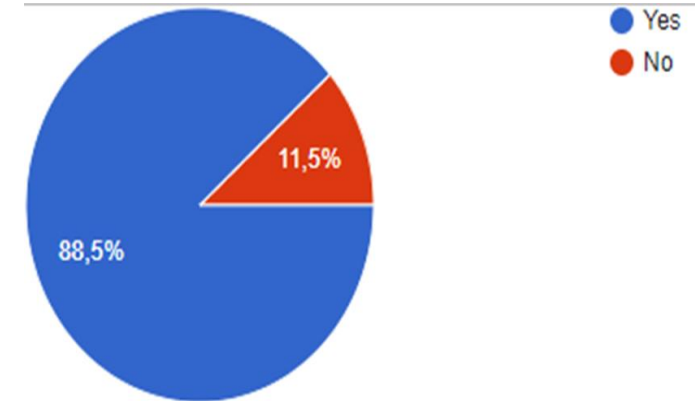
### Greece

14. Do you dry clothes naturally? Στεγνώνετε τα ρούχα με φυσικό τρόπο;  
106 απαντήσεις



For the same reason, 86,8% of us prefer drying our clothes naturally rather than using the drying machine.

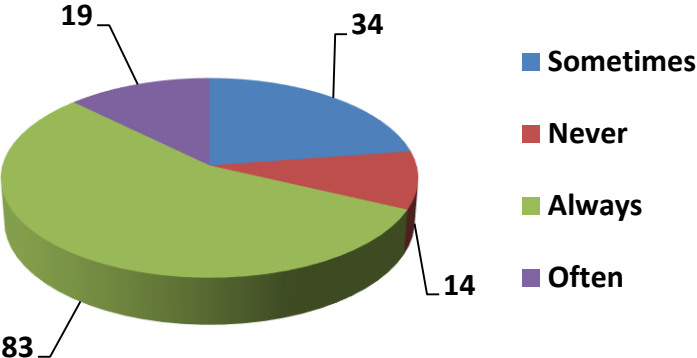
### Portugal



It seems that 88,5% of the respondents dry their clothes naturally.

# Romania

Do you dry clothes naturally?

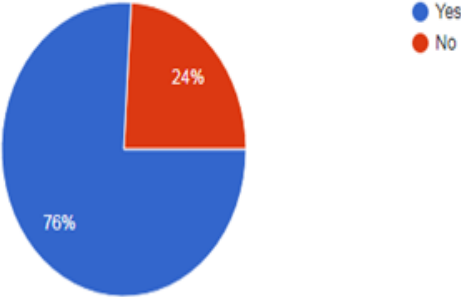


More than half of the respondents always dry their clothes naturally.

# Turkey

Do you dry clothes naturally?

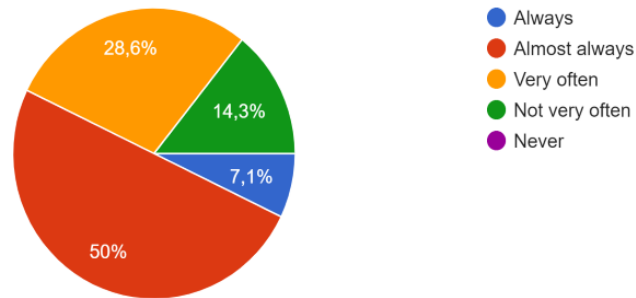
104 yanit



A large majority of students said that they dry clothes naturally.

## How often do you turn the heating down or off when you go out for a few hours or when you go to bed at night?

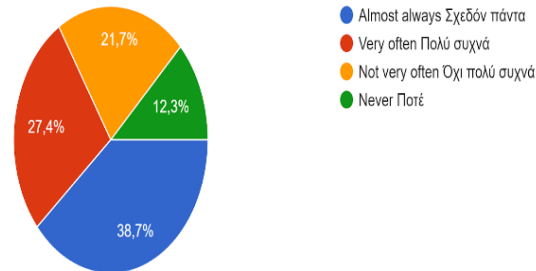
### Italy



In Italy, 67,1% of the students always or almost always turn the heating down or off when they go out for a few hours or when they go to bed at night.

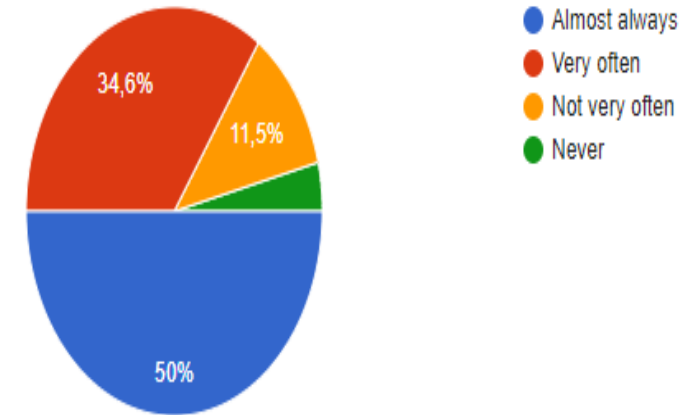
### Greece

15. How often do you turn the heating down or off when you go out for a few hours or when you go to bed at ni...τε από το σπίτι ή όταν πάτε για ύπνο;  
106 απαντήσεις



As for the wise use of heating, 38,7% answered that they turn the heating down or off almost always while 27,4% of them do so very often.

### Portugal

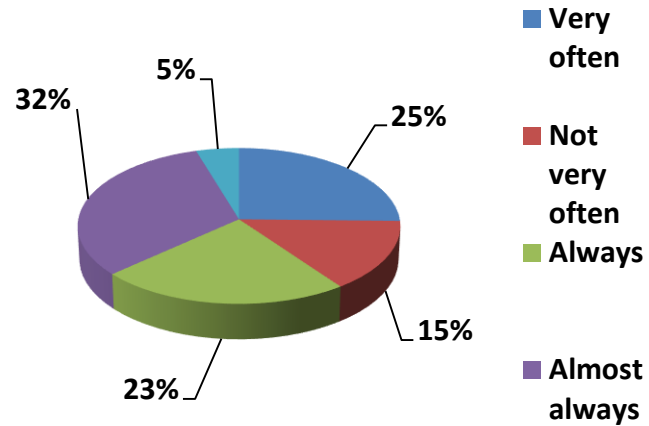


In Portugal, 85% of the students usually turn the heating down or off when they go out for a few hours or when they go to bed at night.



## Romania

How often do you turn the heating down or off when you go out for a few hours or when you go to bed at night?

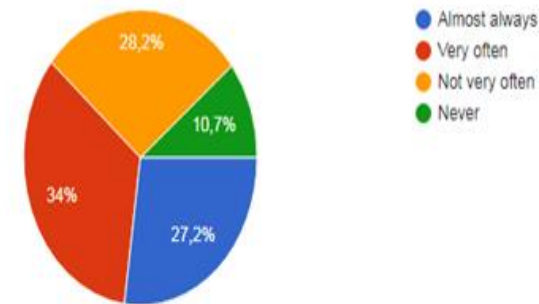


It can be seen that 32% almost always proceed according to the question, 25 % turn it very often, 23 % do always the same way and 5 % never act by this manner.

## Turkey

How often do you turn the heating down or off when you go out for a few hours or when you go to bed at night?

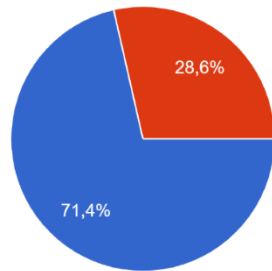
103 yanıt



A large majority of students said that they generally turn the heating down or off but 10,7% of students said they never turn the heating down or off when they go out or when go to bed at night.

# Are your light bulbs low energy?

## Italy



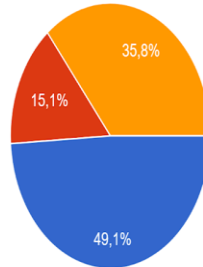
In Italy, 71,4 % of the respondents have low energy bulbs at home.

## Greece

16. Are your light bulbs low energy? Είναι οι λαμπτήρες που χρησιμοποιείτε χαμηλής κατανάλωσης;

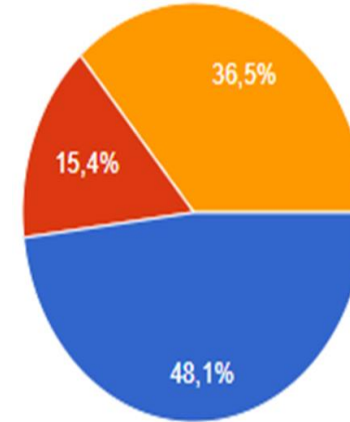
106 απαντήσεις

● Yes  
● No



In Greece, 49,1% have low energy bulbs at home while 35,8% haven't yet changed all the bulbs into low energy ones.

## Portugal

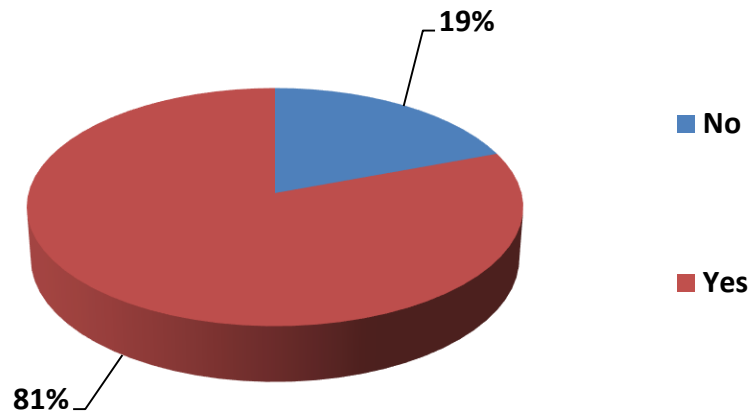


In Portugal, most respondents have low energy bulbs.

● Yes  
● No  
● Not all of them

## Romania

Are your light bulbs low energy?

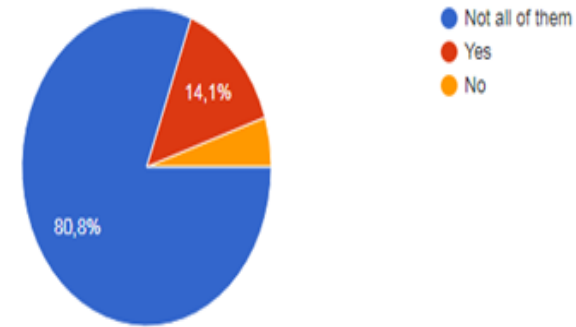


In Romania, 81 % of the respondents use light bulbs with low energy, while 19 % do not have light bulbs low energy.

## Turkey

Are your light bulbs low energy?

99 yanıt



Surprisingly, 80,8% of students have said that not all their bulbs are low energy. And only 14,1% of them said yes.



The background of the slide is a light blue gradient. It is decorated with several realistic water droplets of various sizes. Some droplets are at the top left, some are at the bottom right, and others are scattered in the center. Each droplet has a highlight and a shadow, giving it a three-dimensional appearance.

# **The Environment- Our Common Goal**

## **Part 3. Challenge: Saving Energy for One Month**

# Italy

**Energy and Water Saving Trial for a Month  
01-28 February 2019**

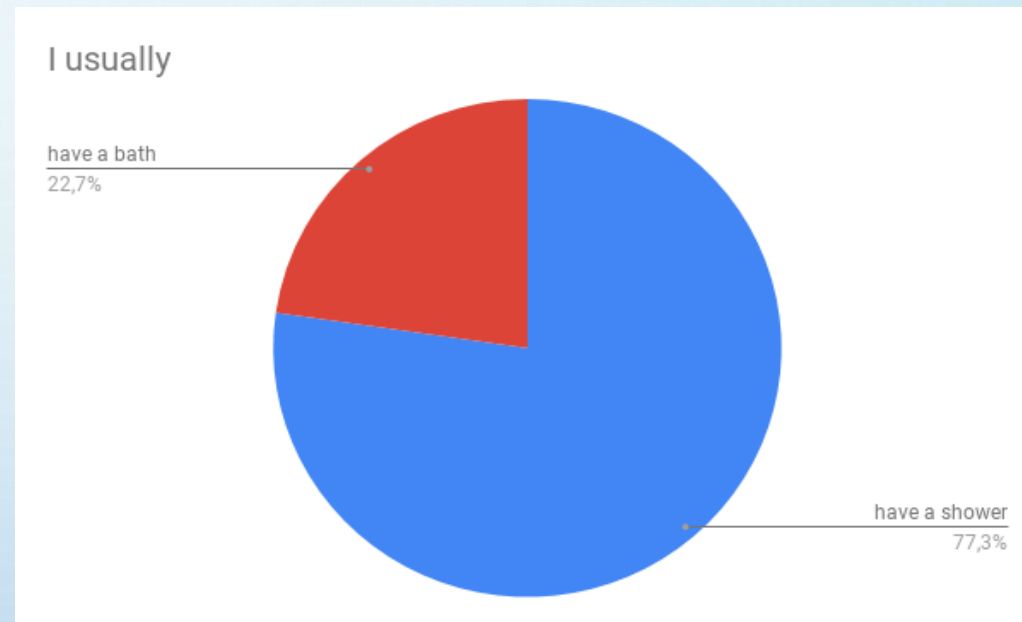
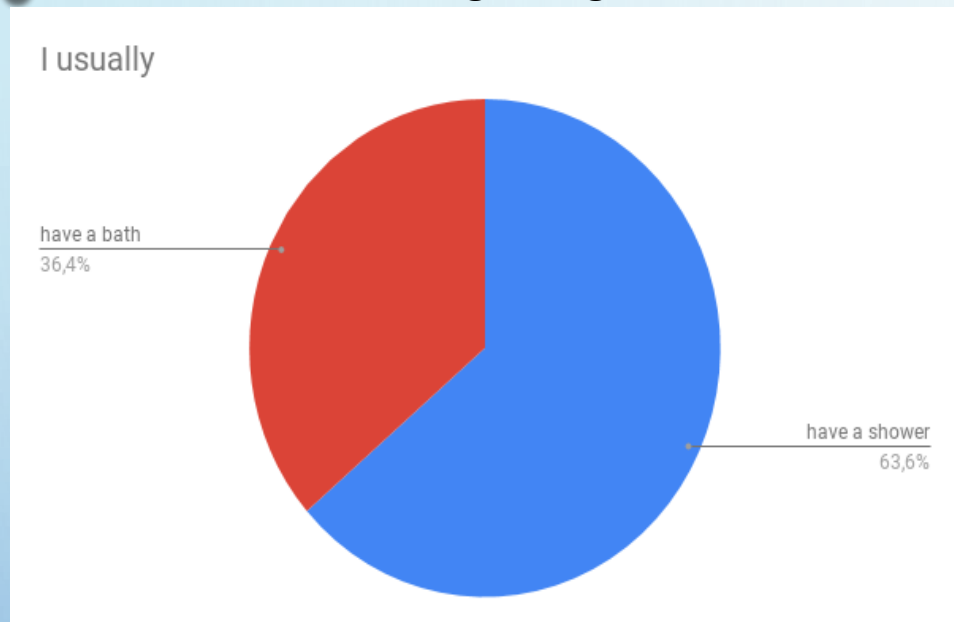
**A Trial for Energy and Water Efficiency**



# I usually...

- at the beginning

- one month later



There has been a significant improvement!

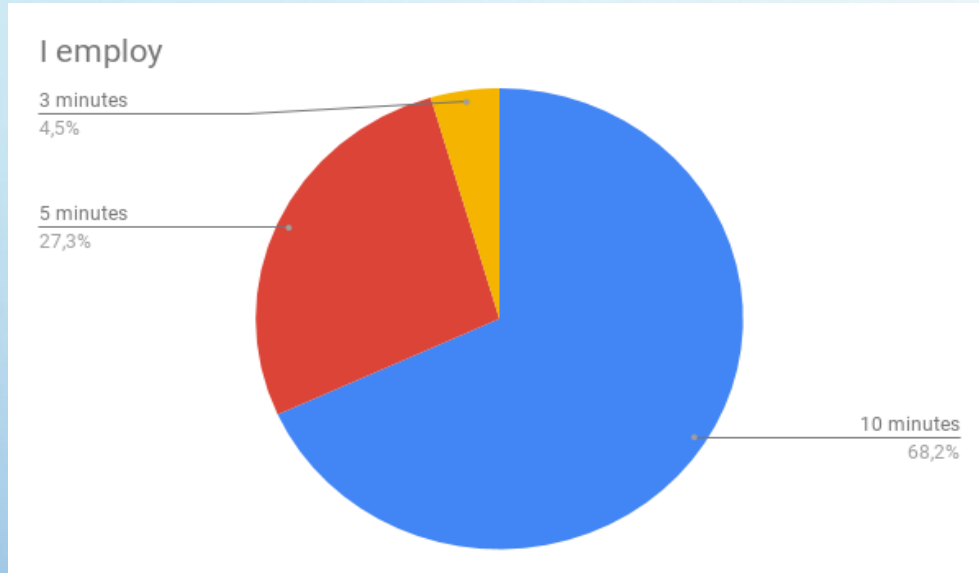


Save water! Take a shower!

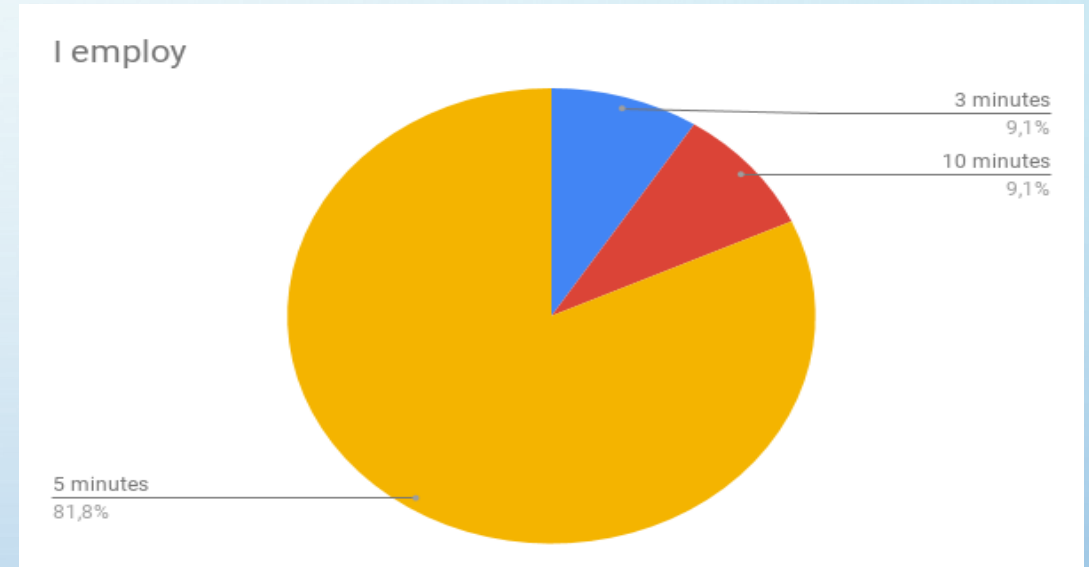


# I employ...

- at the beginning



- one month later



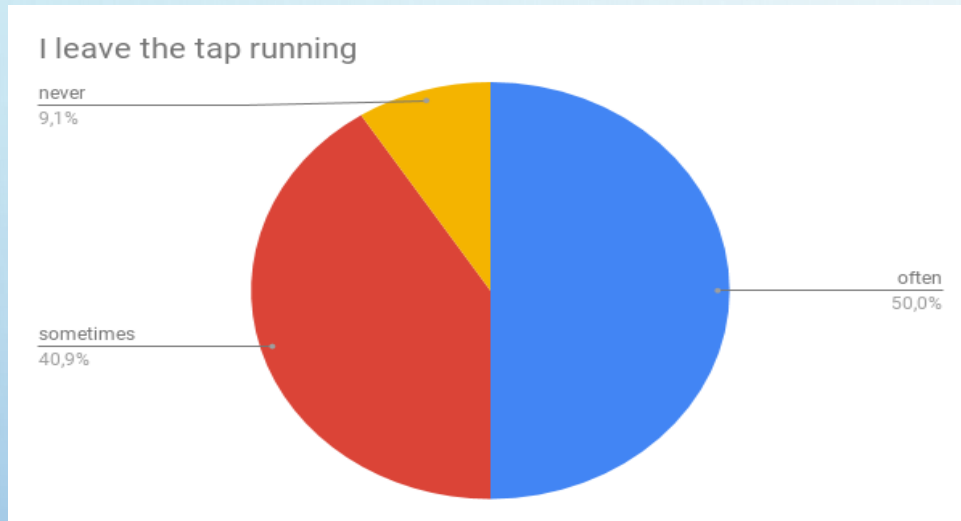
There has been a considerable reduction in the time taken!



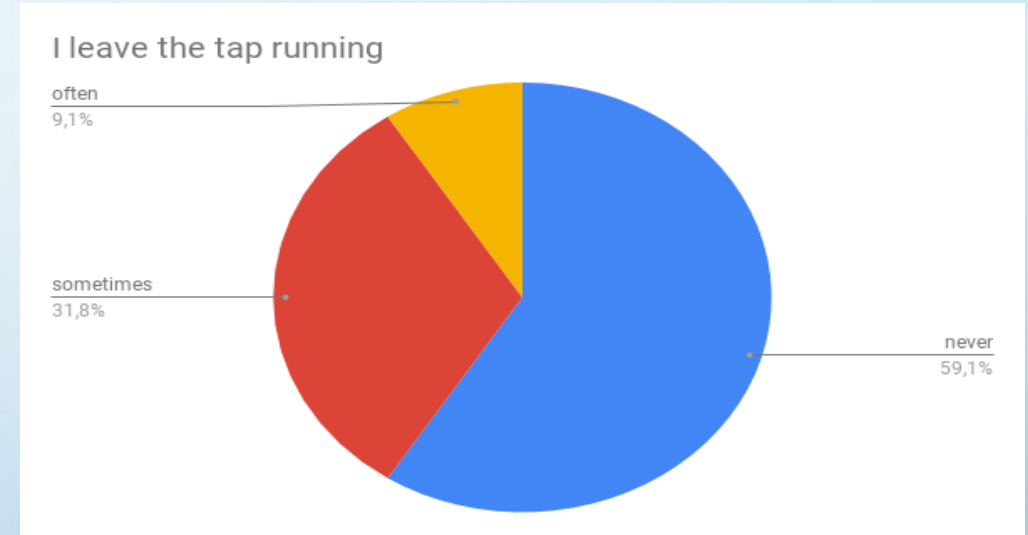
unless we sing.....

# I leave the tap running...

- at the beginning



- one month later



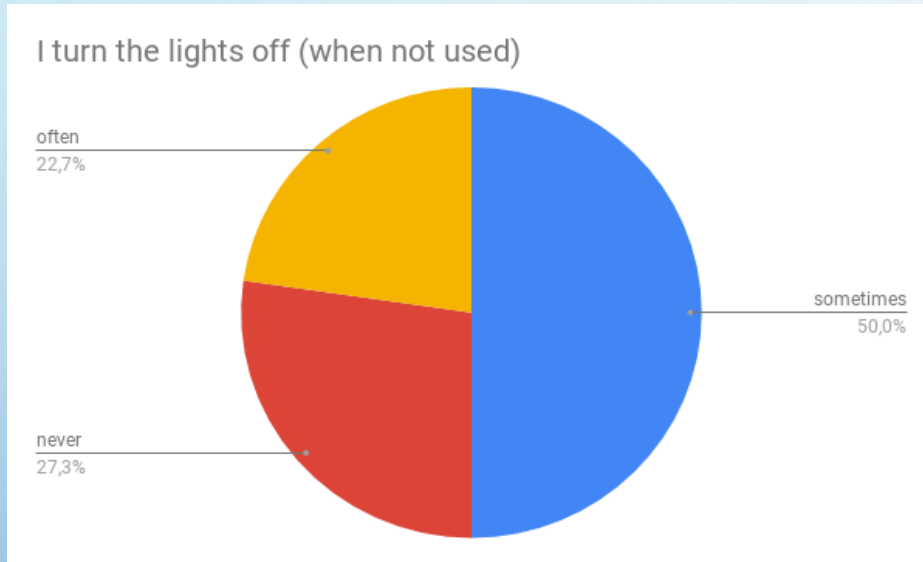
There has been some improvement



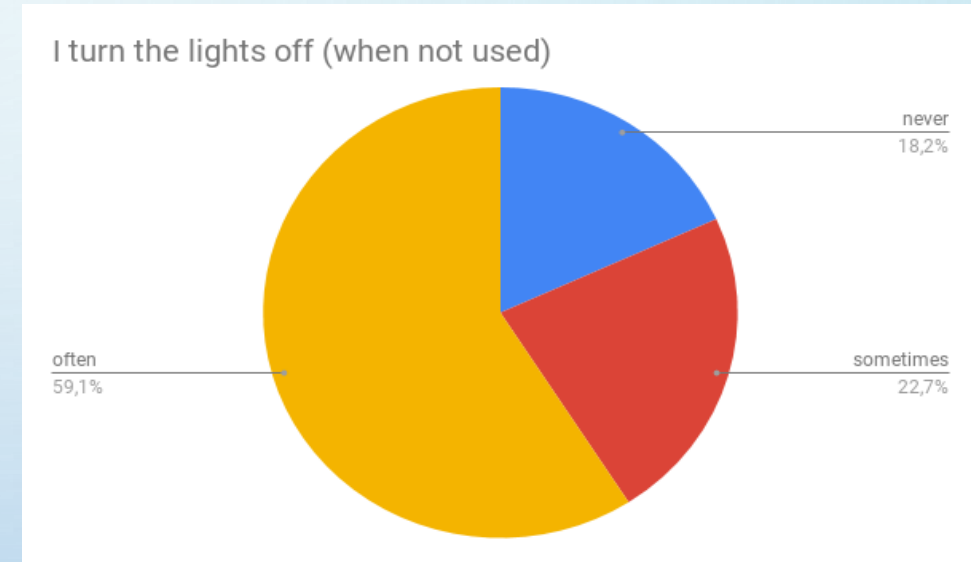
but not so radical...

# I turn the lights off (when not used)...

- at the beginning



- one month later



A fundamental change in practices can be reported

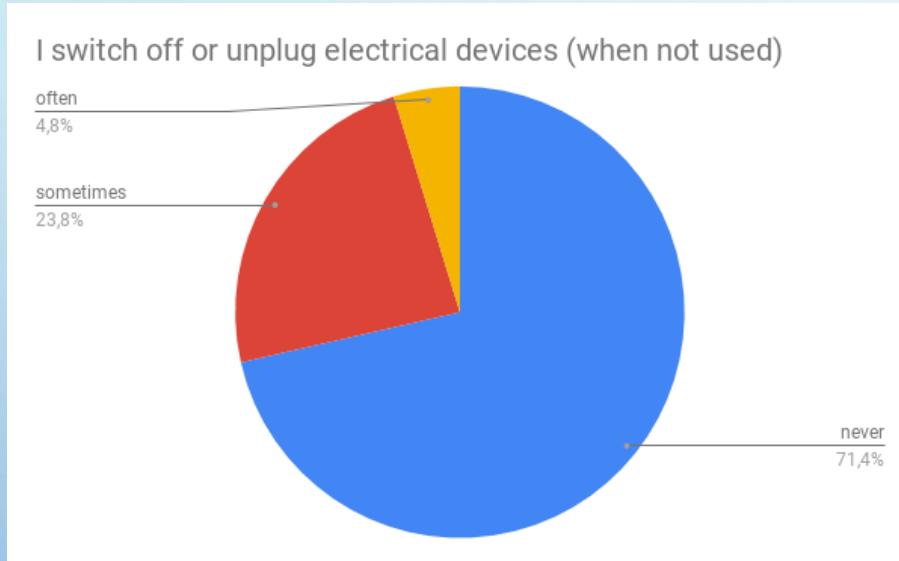
maybe too drastic...



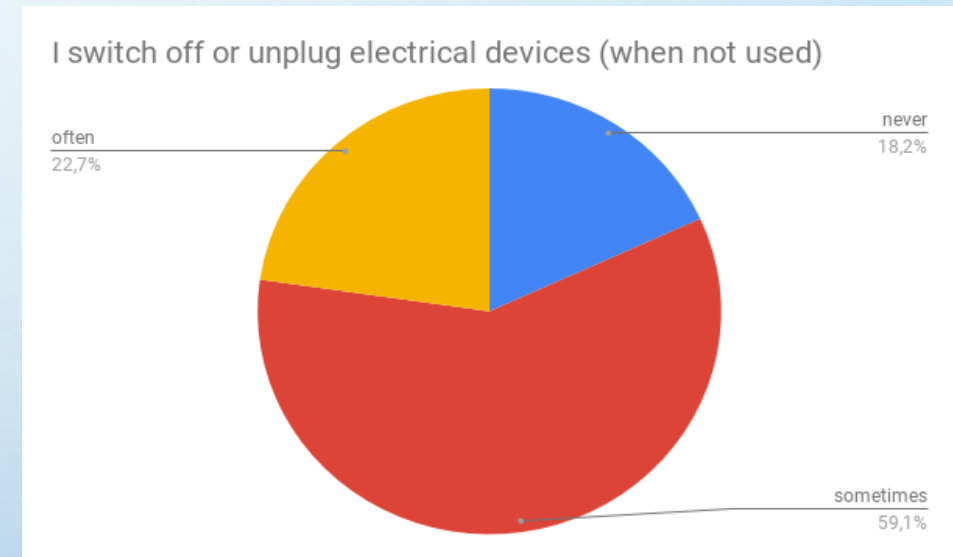


# I switch off or unplug electrical devices (when not used)...

- at the beginning



- one month later



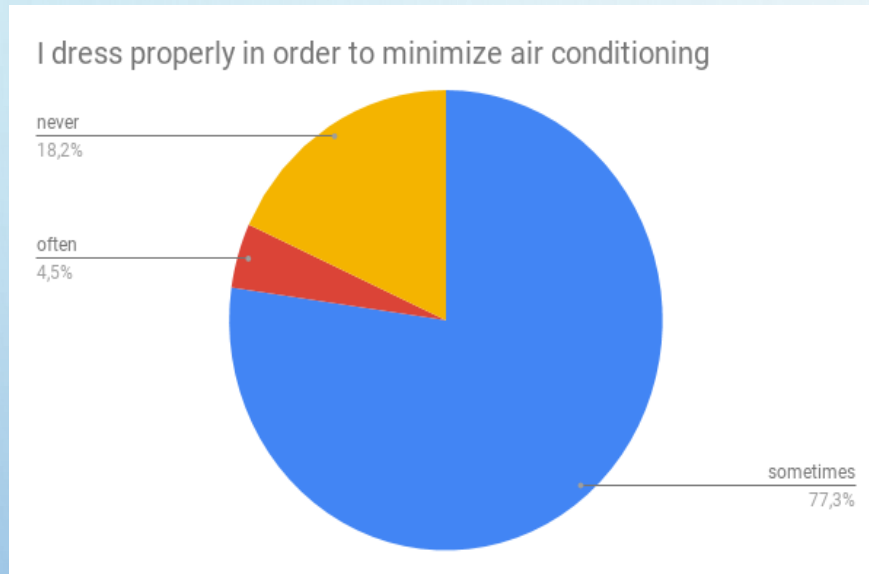
Our habits are changing☺))))))



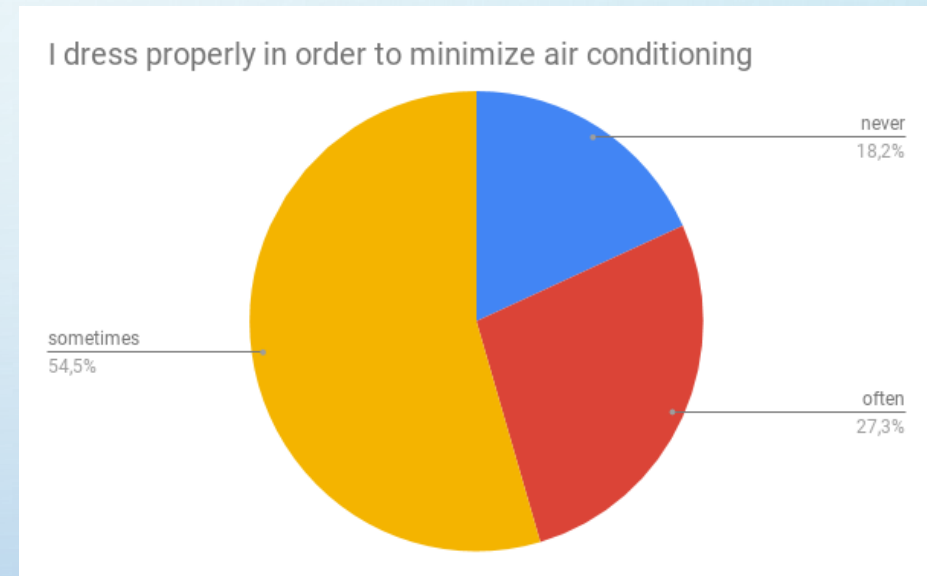
even to prevent likely disasters...

# I dress properly in order to minimize air conditioning...

- at the beginning



- one month later



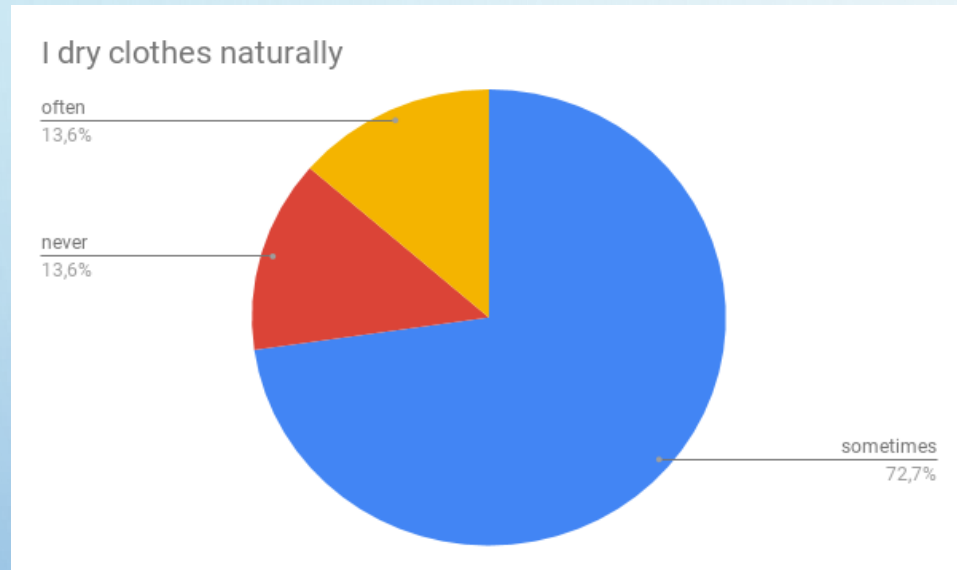
We have realized that it implies a minimal effort



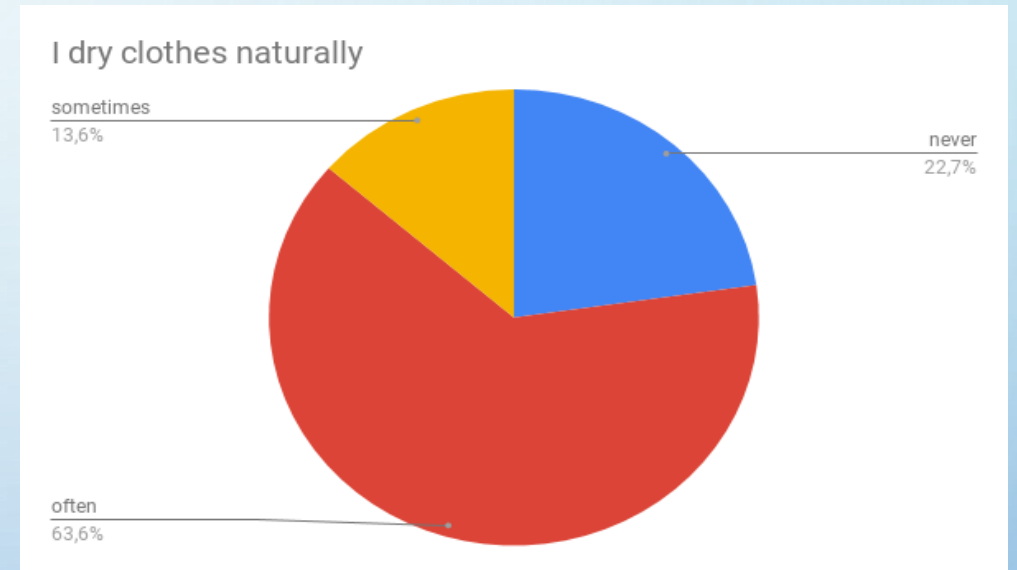
....and it can even avoid an awkward situation!

# I dry clothes naturally...

- at the beginning



- one month later



It worked out!

maybe we took it too seriously...

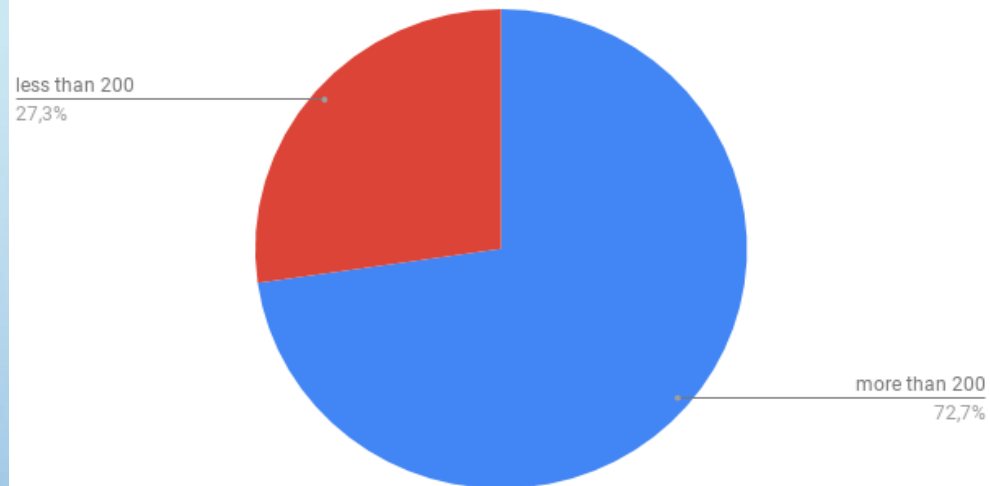




# My family's energy consumption in a month is...

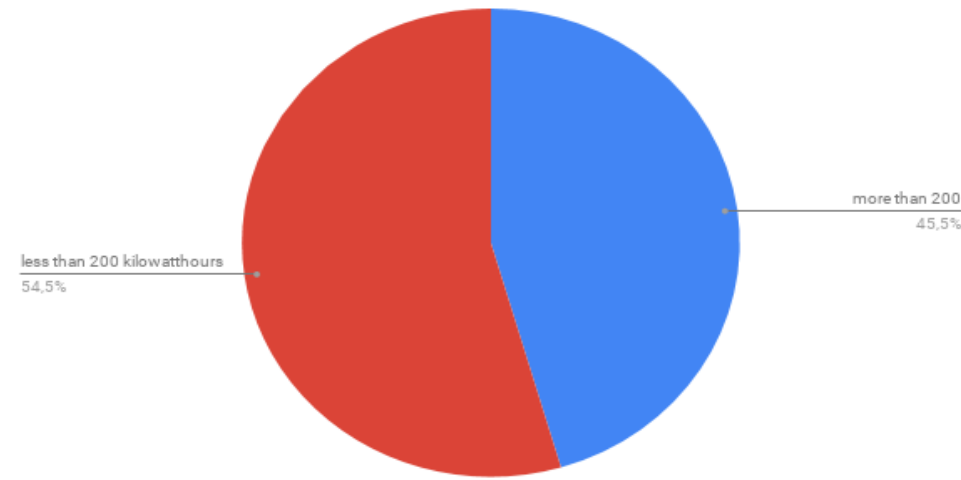
- at the beginning

My family's energy consumption in a month is



- one month later

My family's energy consumption in a month is



There has been a remarkable decrease!

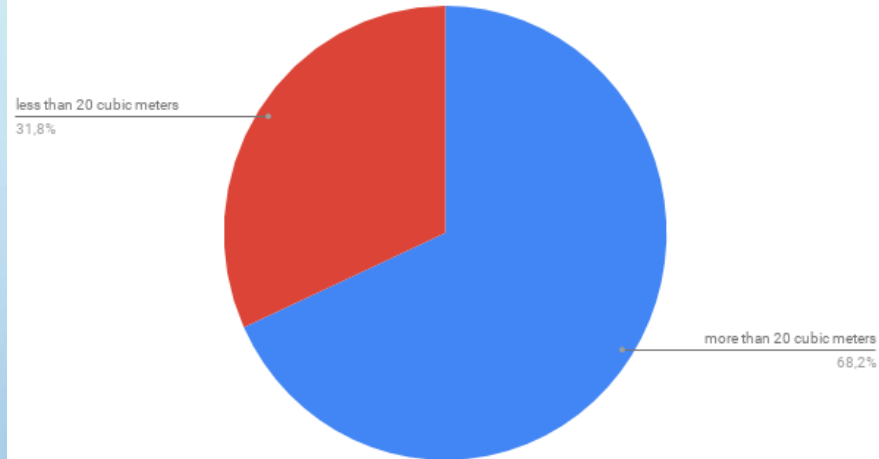


we just need not to overreact...

# My family's water consumption in a month is...

- at the beginning

My family's water consumption in a month is



- one month later

My family's water consumption in a month is



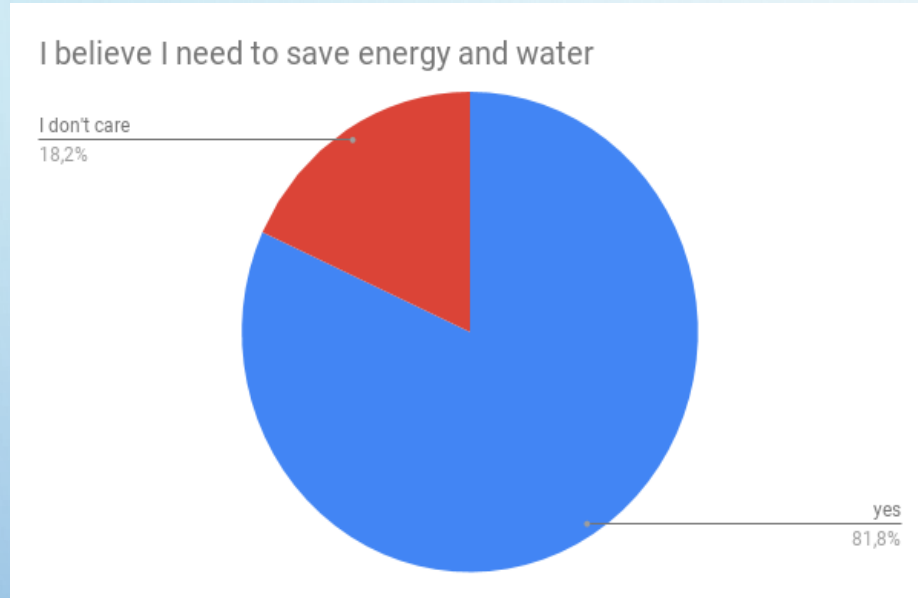
A great achievement!!!

And we are clean!! ..

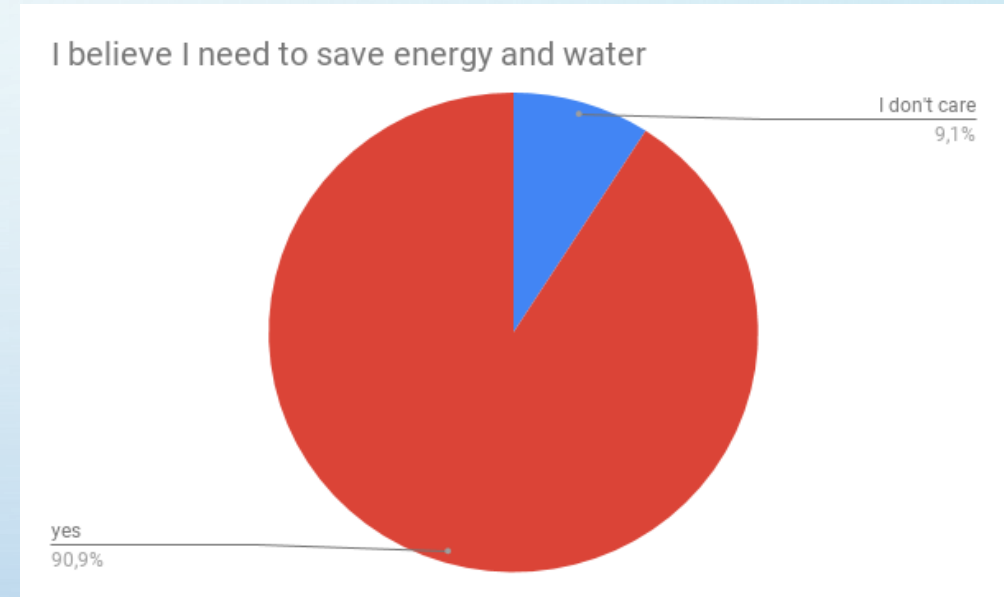


# I believe I need to save energy and water...

- at the beginning



- one month later



We managed to more or less smuggle ourselves through the trial, we realized efforts have to be made by individuals!



source: <https://www.cartoonstock.com/cartoonview.asp?catref=mfln7464>

without overdoing it...virtue lies somewhere in between!



The background is a light blue gradient with several realistic water droplets of various sizes scattered across the surface. The droplets have highlights and shadows, giving them a three-dimensional appearance.

**Greece**

**Save Energy Month**

**The Greek students' and their families' trial!**

The Greek project team participated in a Saving Energy Trial month. We, the students and our families agreed to change our daily habits and try to follow a Saving Energy schedule for a month.

So, we wrote down what changes we made in the field of energy in a daily calendar.

December						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 I take Shower Rather than Bath
2 I switch off the Electrical appliances When I do not use them	3 I decrease the number of mintes for taking a shower	4	5 I don't leave the Lap running while I am Brushing My teeth	6	7 I am careful to turn off the light if I exit the room	8
9	10	11 I shut the doors for the areas I do not use	12	13 I open Curtains Facing the sun	14	15 In a dry day dishes instead of using dishwasher drying cycle
16	17	18 MOM was Only full loads of dishes & clothes	19	20 My mom DRY clothes NATURALLY	21	22 I use the ideal fridge Temperature
23 I am careful to turn the light off if I exit the room	24	25	26 I take Shower Rather than Bath	27	28 I use Lids on pots to reduce the cooking time	29
30	31					

# According to the students and their Saving Energy Calendars, we...

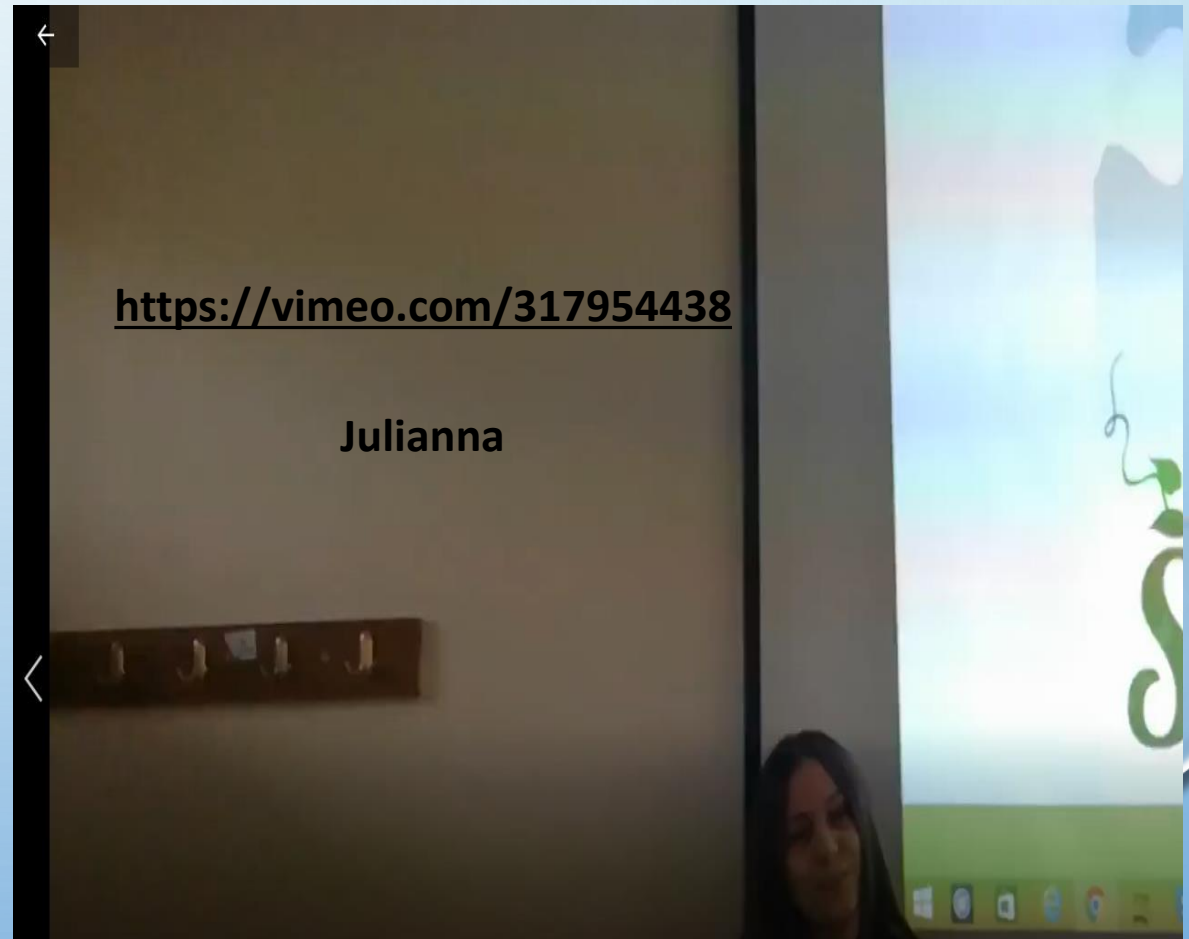
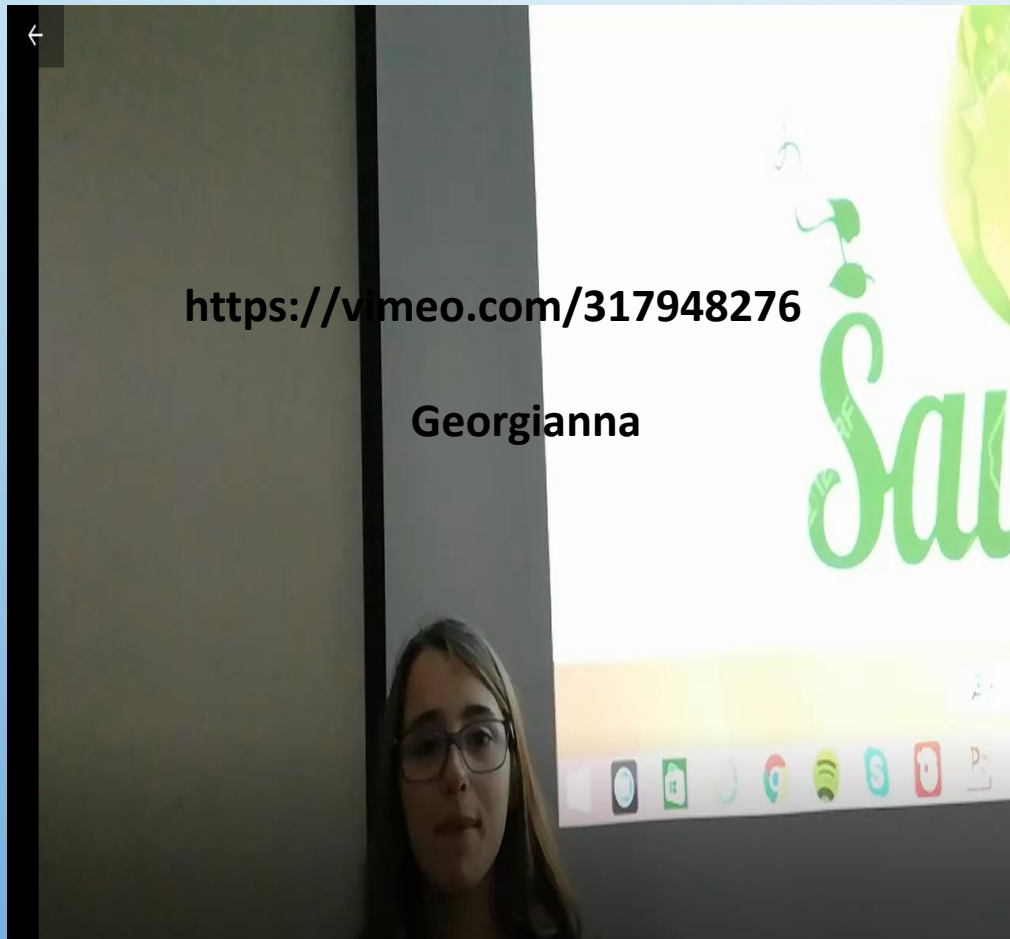
- switched off the electrical appliances when we did not use them
- We were careful not to forget to turn off the lights when leaving a room
- We took showers rather than baths
- We decreased the number of minutes for taking a shower
- We shut the doors of the rooms we did not use
- We did not leave the tap running while brushing our teeth

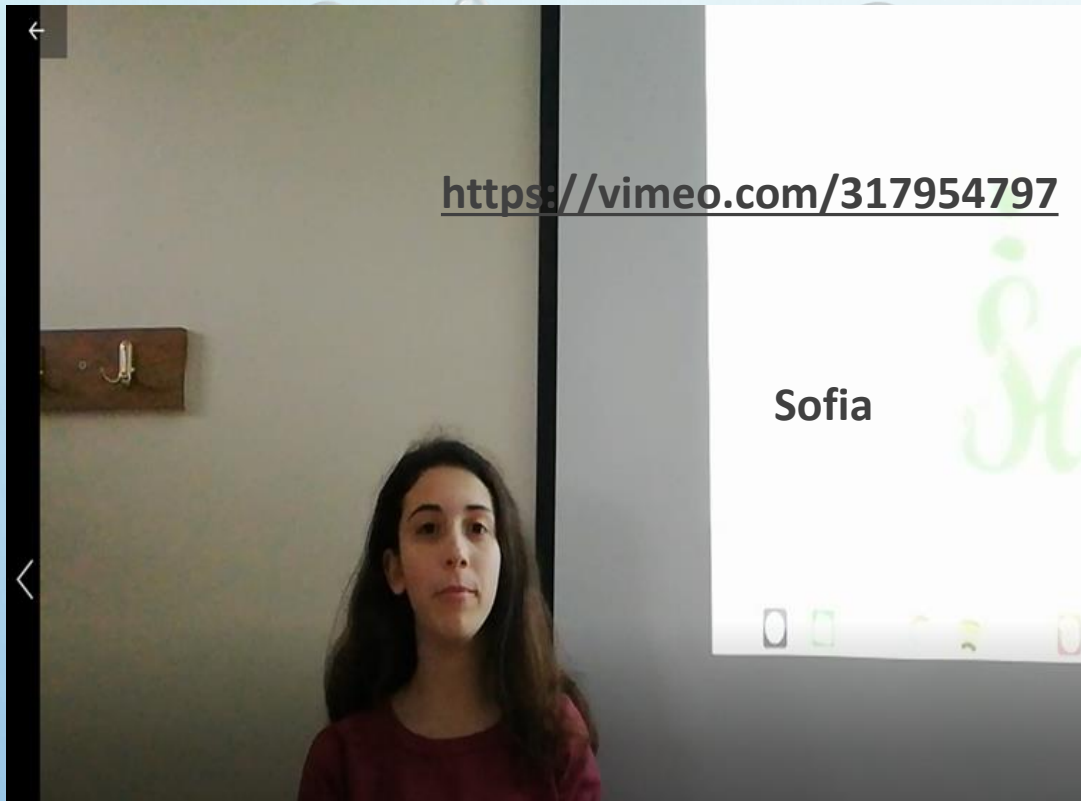
Our family followed the same energy schedule and more specifically our mothers:

- Dried the clothes and dishes naturally
- Avoided using the drying machine
- Opened the curtains in the rooms facing the sun
- Used the ideal fridge temperature
- Used lids on pots to reduce the cooking time



To make the telling point...  
watch us, the students, talking about our efforts





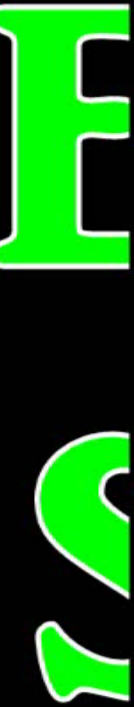
The Save Energy trial week we participated in, did not, of course, change the world. However, we realized that it is not that difficult to pay attention to some daily habits and adopt new, Saving Energy ones, for the good of ourselves, our family's, our country's and our planet's.

# Energy Saving in Portugal

- A video made by the Portuguese team and which is incorporated in the Power Point presentation.

You can also watch it on:

<https://www.facebook.com/mpalerasmus/videos/492897311443627/>





The background is a light blue gradient with several realistic water droplets of various sizes scattered across the surface. The droplets have highlights and shadows, giving them a three-dimensional appearance.

# **Romania**

**Challenge: Saving Energy for One Month**

**The Romanian Team's Experiment**

The Romanian team has taken on "The saving energy for 1 month" challenge and completed it . The members of the team were impressed with the results that they had obtained and wanted to share them with you . Hopefully, they've learned something from this and they challenge you to do the same !!!

## **Dragos C. 's Results for the 1 Month "Saving Energy" Challenge**

Last month I told my family that we were going to start a challenge. We wanted to see if we could live with less electricity and water (and with less I mean not to waste it). My father, mother and I did the following in that month : When we brushed our teeth we turned the water tap off , we opened the curtains more and turned off the light, we unplugged unused electronics and we dried our clothes out, naturally.

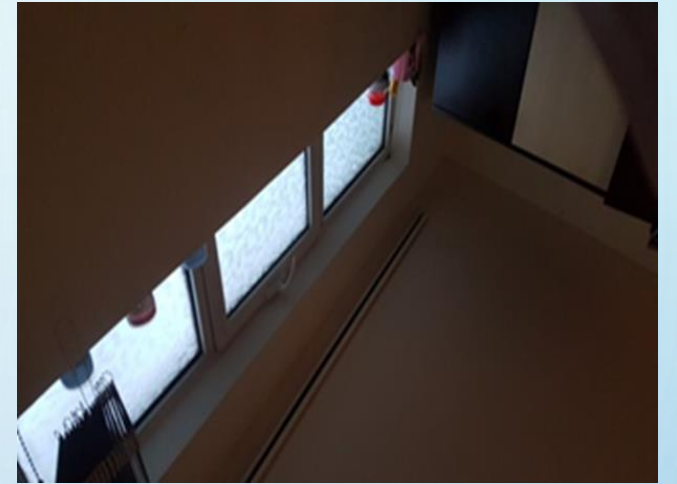
After just one month we have realized that we overuse a lot of things and waste a lot of water and energy . For example it wasn't long until our electricity bill was a lot cheaper and that shocked us because we didn't expect to save money in the process.

With just a little bit of research I have found out that the little things we did helped the planet a lot and if we all do them on a daily basis, our mother nature will thank and help us even more. I'm happy that we completed the challenge and I'm sure that we will continue with it for quite some time to see the good impact that it has .

My family is challenging you to do the same for at least one month to see how much you can help the mother nature

# How I saved energy in one month

- For me, this month wasn't too hard to accomplish the challenge but it wasn't that easy either. I realized how much useless energy I was using daily. At the end of the month me and my family saved about 15% from the energy bill.
- First of all, I started to always turn the lights down when I'm leaving a room even if it's a small one. Also, we replaced some light bulbs in the house for some that consume less energy.
- I always left the curtains open during daytime and tried to use natural light as much as possible
- I tried to keep the doors and windows closed as much as I could so I could keep the rooms warm for longer.
- I turned off the tap if I didn't use it . And that made a big difference in the amount of water we used in one month.



Mihaela



# How Emma took the challenge

## Means of saving energy

- The challenge I had to deal with during one month “ saving energy at your own home” was not only a mandatory task I was supposed to accomplish, but also more as a self-awareness stimulus towards how simple and efficient means of suppressing energy at my home exist.
- I handled this by some easy actions, such as: always turning off the lights whenever I left a room, closing the water tap when I was brushing my teeth, using an economic bulb, disconnecting the chargers devices when I did not use them on purpose in order to save electricity, deploying a water saver.
- These really proved productive and useful, since the results did not appear slow.
- Therefore, I would definitely recommend this ‘challenge’ to anyone willing to make a beneficial change related to both environmental point of view and financial



# Dragos H. "1 month Saving Energy Challenge"

In the last month, my family and I have been trying to save energy through several methods. It was not difficult at all. Without effort we managed to save energy and to reduce pollution.

## **The methods we used were:**

- When we were not at home, we turn off the lights. We did this to save energy. Another way to save energy was to change the conventional bulbs to economical lightbulbs.
- For saving water we turned off the tap when we brushed our teeth. The second thing we did to save water was that we took showers instead of baths.
- When washing clothes my family and I selected the shortest washing cycle for the washing machine and we turned on the washing machine only when it was full to save energy and water. When it come to drying we dried the washed clothes outside naturally.
- To save energy when the weather permitted us we opened the curtain facing the sun to let the natural light enter. With this method we save energy and we also protect the planet because we save the electricity that lightbulbs use. This is how I saved energy and it is not difficult at all , anyone can do it.





# How Cristina and her mother saved energy

- My mom and I took on the challenge and decided that we wanted to reduce the cost of our bills and also to see if we could save energy in a pleasant way, so we made a plan.
- First of all, we started with something easy to do. We put lids on our pots while we cooked, we open the curtains in the morning to use the natural light instead of using the lightbulb.
- We unplugged all the devices that we didn't use and that was really challenging for us, because we hadn't done it before.
- After that, we moved on to something more efficient. I replaced all of the old bulbs with some LEDs. My mom changed the shower head with a low-flow one and she was so motivated to save as much energy as she could, that she defrost all the food that we needed naturally, without using the microwave.
- At the end of this month we save almost 25€, which I think is impressive if we think about the effort that we had made.





# How I accepted and finished the 1 month's challenge

Saving energy is something we should all do, for the sake of the environment. This period was a bit difficult for my family, as we are not used to saving much energy, but we managed to get through it.

We turned off the lights every time we left a room, which helped with saving electricity.

By closing the tap water while brushing our teeth and instead of taking long baths, we had short showers.

We also saved electricity by turning off the extension cord every time we didn't use it.

We avoided leaving the computers or TVs on stand by, and turned them off anytime we didn't use them for a long time.

**Andra**



# Saving Energy

The task itself was quite difficult, as we were not used to saving energy at all, but we managed to fulfill it without too much trouble and it turned out to be fun, while also beneficial.

The first thing me and my family did was trying to keep the curtains opened in order to get more energy from outside, instead of using the lightbulbs.

Water usage significantly decreased, as we started closing the tap water when we brushed our teeth and during baths.

We also took showers, not long baths, in order to reduce the amount of water we used.

The windows were closed all the time, in order to save heat and to reduce the time the heating machine was used.

Electricity was saved as well, as we closed the lights all the time we left a room and avoided leaving the Computer/TV on all the time.

**Eduard**

# How Danina finished the 1 month's challenge

During a whole month, my parents and I decided to accept this challenge and try to save energy as much as we can. In order to do that we turned off all the lights from rooms in which we were not staying, we started unplugging the chargers from the plugs when we were not using them and I gave up my night lamp and turned off our TV when we were sleeping. We always shut them off before going to sleep. We also changed the basic lightbulbs into ones that are saving more energy. During day time we tried using natural light instead of using artificial light from lightbulbs.

When it comes to reducing water consumption, we began turning off the water when we were brushing our teeth, doing the dishes and we started taking showers more often instead of baths. In this way we managed to reduce the water consumption with 20% percent. To reduce the gas consumption we started reducing the temperature with 1° Celsius while sleeping because it is warm enough, we put lids on pots while cooking, we closed the doors in the rooms when we left them and by doing this we did actually reduce the gas usage by 5 % in the last month.



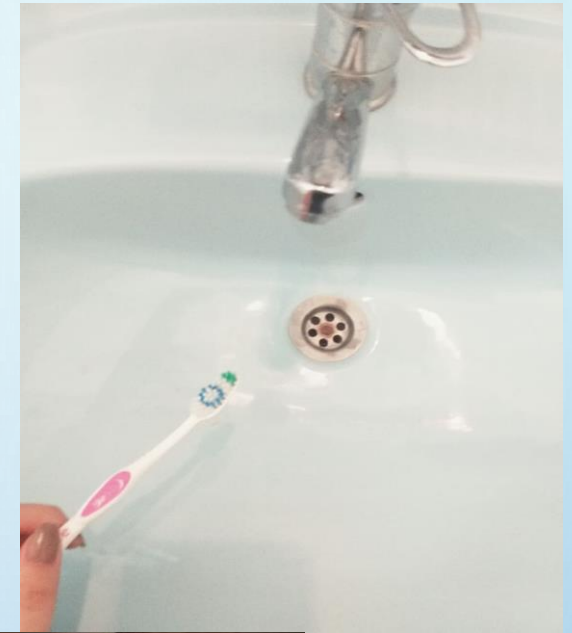


# How Ana Maria finished the challenge

## Saving energy "Challenge"

For about a month, my family and I tried this experiment in which we were more careful about how much energy we were using at home and if we used energy in excess.

At first, it seemed difficult because we always forgot to turn off the light or to stop the valve when we brushed our teeth, but as time passed we finally succeeded in getting our job done: Now it became a habit to stop the valve when we do not need water and to remove the cables from the socket. We also love to use natural lighting now when it is daytime.



# This is how Simona saved energy

- The task was an interesting one, I was not used to saving energy and water. It was a great experience and I hope that I'll continue doing that for a long, long time.
- First of all, I used the natural light as much as possible.
- Then, even if it doesn't make a big difference, after I charge my phone I always pull out the charger from the electrical outlet.
- My mom put lids on pots when she cooked.
- We changed the lightbulbs with economic ones.
- Last but not least, when I wash my hair, I stop the water while I'm using shampoo. You'd be surprised how much water you save by just doing this little thing.



# How Daniel used less energy and saved water

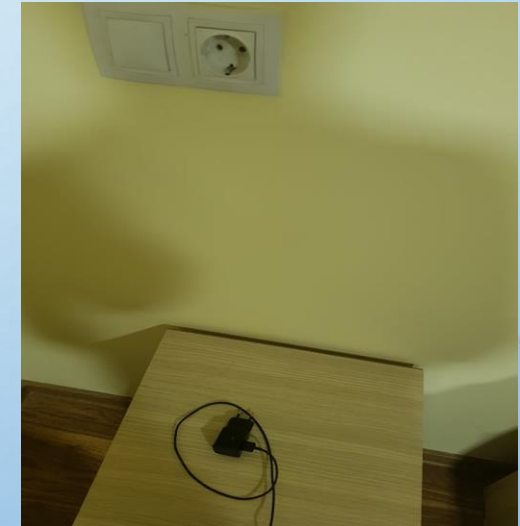
In the last month, we have done our best in order to stop wasting energy. The first couple days were the hardest, since my family and I had to keep reminding ourselves things like "turn off the light" or 'leave the window open', but after a while we got used to it.

The first ( and the easiest) thing we did was giving up the night lamps. Our house is really dark during the night, so we use them in order to move around at midnight.

Another thing we did was closing the sink tap when we do not use the water. In order to do so, we placed a sign above it until we got used to it. This made a huge difference in energy usage.

We also took showers instead of baths.

And finally, the last thing we did was taking the charger out of the plug when we did not use it. This was my father's idea, since he believes that 'everything that stays plugged in uses energy. This also made us use our phones less.





# How Ioana and her family saved energy for a month

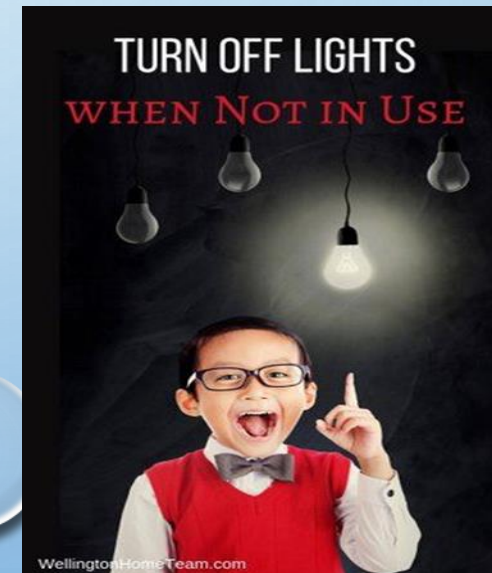
First of all, I tried to take shorter showers as I had been told that showering accounts for 50% of an average household's hot water use and it was my family's case, too. My father switched to an energy-efficient showerhead and this was very useful.

Fortunately, my washing machine is a front loader and these types of washing machines use up to 60% less energy and water than top loaders. We only washed full loads. We also dried the washed clothes naturally, outside.

Something very important about saving the energy that my family and I did was that we never let the light on if you didn't need it.

We also turned down the heat with two grades when we left home.

In this way, we have seen that saving energy is the best way to spend less money on the bills and we also managed to take a little step to protect the environment



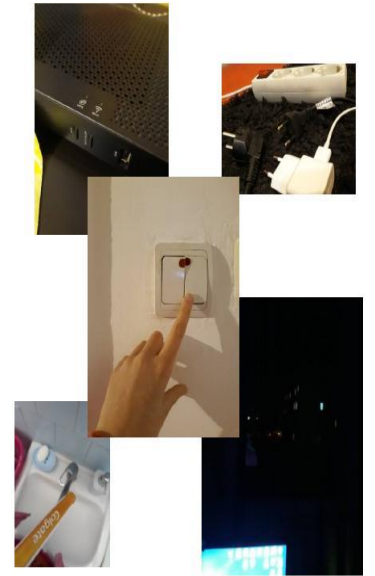
# Giulia accepted and completed the 1 month's "Saving Energy" Challenge

I want to start by saying that saving energy is one of the most important and easy activities to help improving the environment. I accepted this challenge to see if I see the difference. This challenge was also attended by my parents, who changed some normal bulbs through the house, with some economic ones, set the washing machine to quick wash programs, and have water turned off during washing dishes.

We used showers more than baths and we saw that it was possible to save water in this way, and also gas.

Personally, I tried to use my computer and phone less, choosing to participate in other activities like dancing and painting.

I would say that this challenge should be taken into consideration by more people, and I will personally continue trying all of the above.





# **“How I saved energy for one month” by Denisa**

Last month me and my family tried to save energy during the challenge that we took on through this project and we saw that we reduced the cost of our bills.

It was not very difficult for us because we were motivated by environmental issues and the challenge to do this .At first we started to take showers instead of baths when we could, we tried to turn off the tap whenever we were brushing our teeth or taking a shower or a bath. Then we wanted to use more natural light rather than artificial one so we weren't using the lights very often and they were almost always turned off during the day and for the shortest period of time when they were on, we changed the light bulbs to be economical ones.

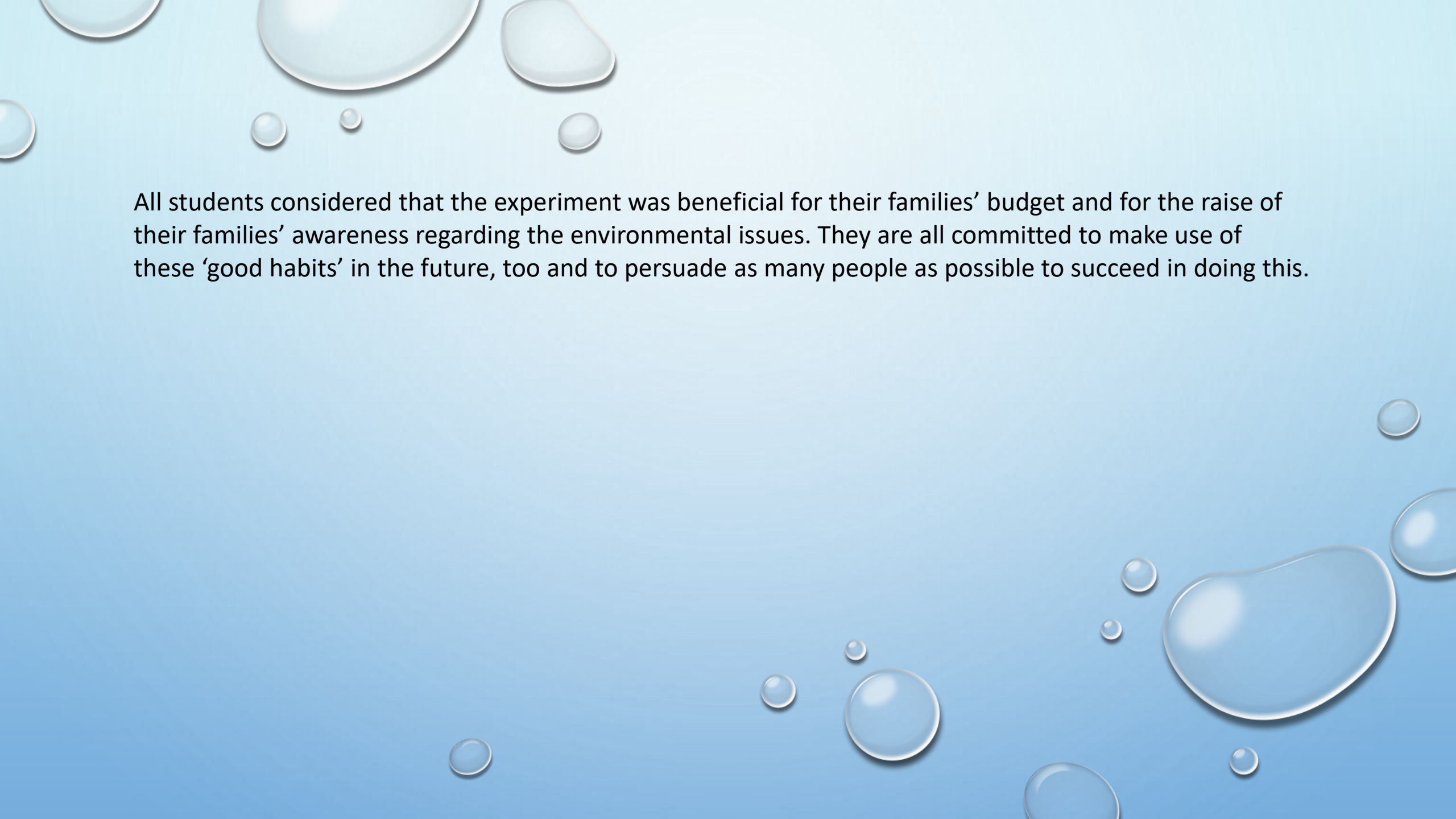
After 1 week, we were using only the shortest washing cycle for the washing machine and washing only full loads of clothes. After they were washed, we dried the clothes naturally.

We would shut the doors for the areas we did not use and turn the heating down when we went out for a few hours.

At the end of the month the differences were very obvious and the bills surely approved that we saved energy for one month.





The background of the slide is a light blue gradient. It is decorated with numerous water droplets of various sizes. Some droplets are large and prominent, while others are small and subtle. They are scattered across the slide, with a higher concentration in the top-left and bottom-right corners. Each droplet has a realistic 3D appearance with highlights and shadows, giving them a sense of depth and volume.

All students considered that the experiment was beneficial for their families' budget and for the raise of their families' awareness regarding the environmental issues. They are all committed to make use of these 'good habits' in the future, too and to persuade as many people as possible to succeed in doing this.

**Turkey**

## **The Turkish Team's Energy Efficiency**



**Let's Save Energy!**





Using energy wisely means being efficient. We use energy everyday at home, at school, at work, and even when you're playing.



By saving energy you're helping to save the world's energy resources like natural gas, oil and water and you're also saving money on your utility bills. Best of all, by using energy wisely we can cut down on pollutants in the air and water, making a better environment for everyone.



- Think about what would happen if there wasn't enough energy
  - ... there would be no light to turn on when it got dark
  - ... there would not be any hot water for the shower or heat for your house in the winter
  - ... no gas or oil to drive the car
  - ... so there are lots of reasons we should save energy.



## Here are a few things we did for a month to start saving more energy:

- The lights and television use electrical energy, so when we left the room, we shut them off.
- We didn't leave windows or outside doors open when the heat or air conditioning was on. If we leave them open, this makes the furnace and AC have to work harder to heat and cool the house.



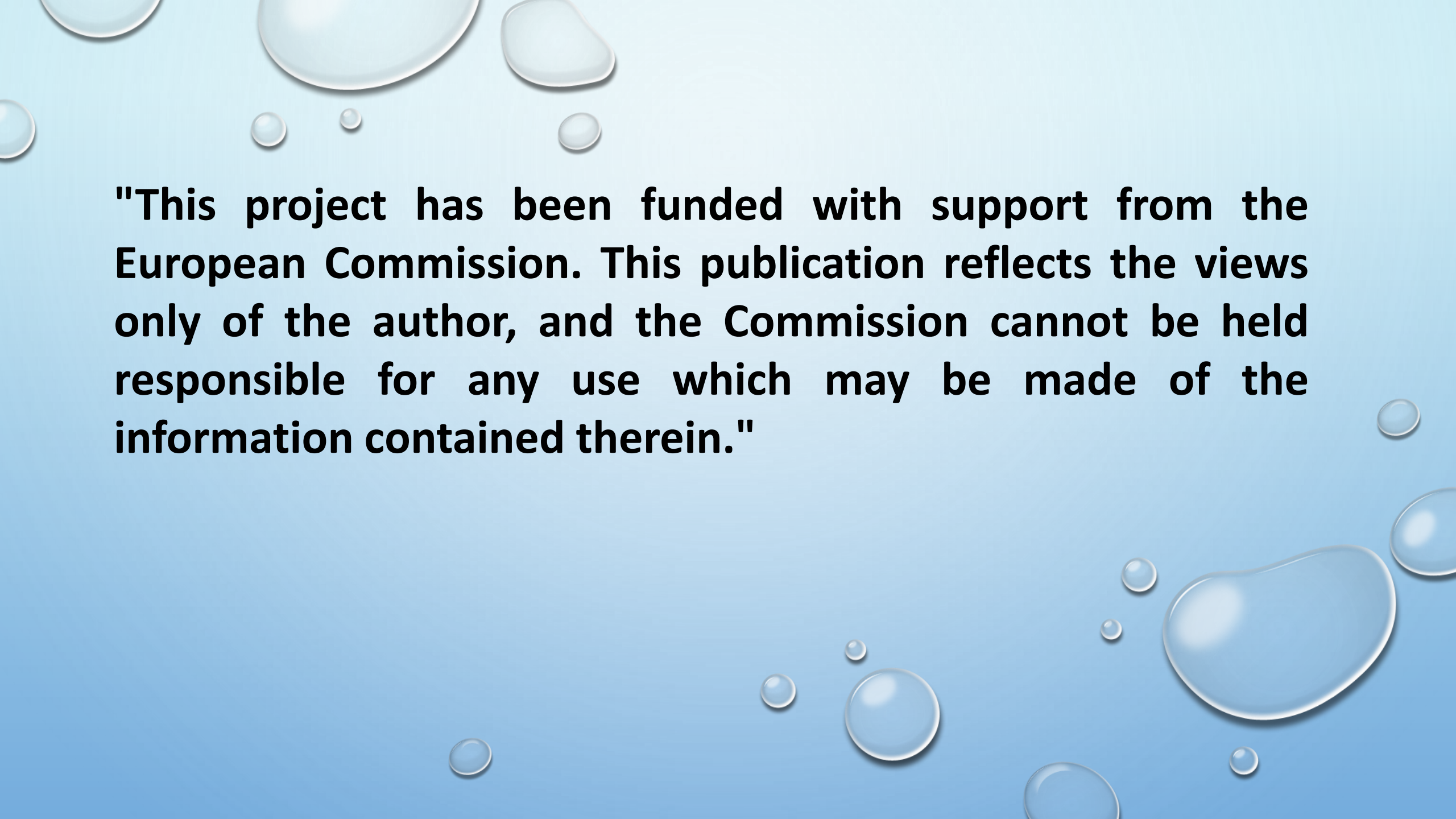
- We turned thermostats to 68° to 70°F range in the winter, 78° to 80°F in the summer.
- When we had a sunny day, it helped to hang the clothes outside instead of using the dryer.
- We did not leave the water dripping in the faucet.
- We turned off the dishwasher right before the drying cycle and let the dishes air dry.
- We did not leave the refrigerator door open. We decided what we wanted before we opened the door.





- Instead of cooking, once a week. we had a sandwich night. Not cooking saves gas and electricity.
- We planted trees and shrubs. Deciduous trees (trees that lose their leaves) are best to block the sun in the summer and, when the leaves fall, they let the sun shine through and in the winter, this helps to warm our house.
- We replaced conventional light bulbs with the compact fluorescent light bulbs.
- We used energy saving appliances.
- During the day, when it was brighter outside, we opened the curtains and used the sunlight instead of turning on the lights.





**"This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein."**