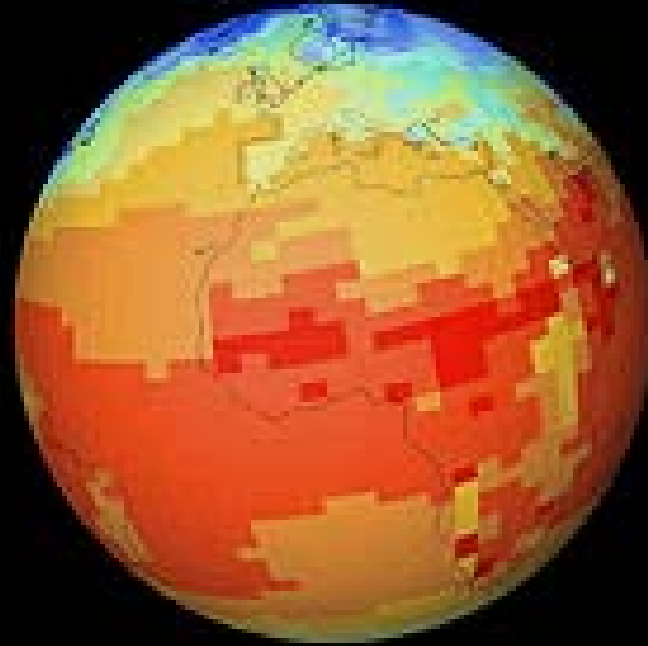


BIOLOGISTS ASSOCIATION



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The threat which will bring the world to an end



What stage are we in the Climate Change?

➤ **A GENERAL OVERLOOK TO THE CLIMATE CHANGE**

➤ **THE EFFECTS OF THE CLIMATE CHANGE AND WHAT CAN BE DONE?**



**A GENERAL
OVERLOOK TO THE
CLIMATE CHANGE**

WHAT IS GREENHOUSE EFFECT?

▶ Gasses like carbon dioxide, methane and nitro oxide lock the sun rays reflecting from the earth like a greenhouse and emit them in the form of heat into the atmosphere. This is called the greenhouse effect.

▶ If these gasses were none-existent, the overall heat of the earth would be -18 C which means no human life.

WHO IS THIS MAN?

▶ At the end of the 19th Century he has proved for the first time that human activities like using fossil fuels and deforestation increase the greenhouse gasses.

▶ In addition, he pointed out that an increase in the amount of these gasses would rise the temperatures of the earth which could reach to a level that would bring humanity to an end.

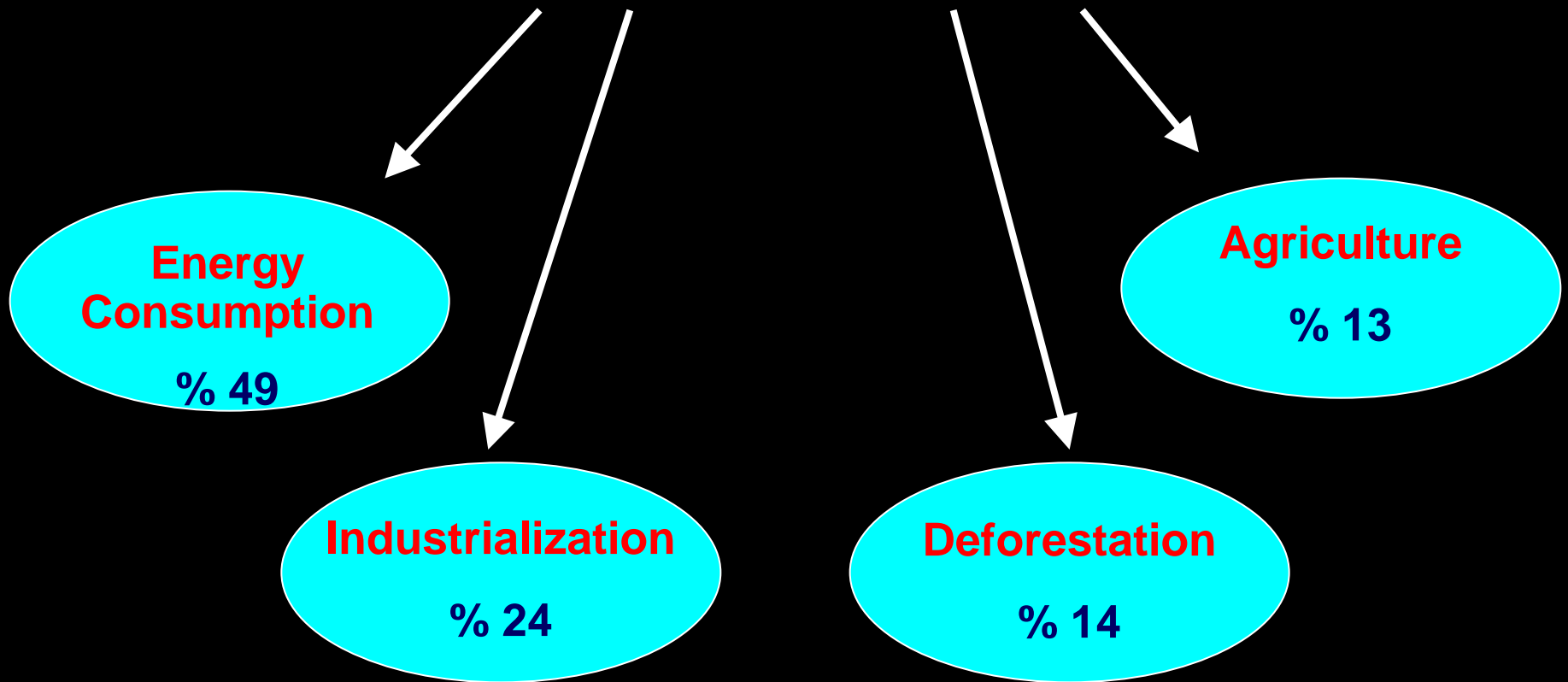
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The recent studies show that, compared to 50 years ago; amount of CO₂ and Methane **have increased by 31% and 151% respectively.**

THE REALITY OF GLOBAL WARMING...

- ▶ As a result, global warming means, in parallel with the increase in the amount of the greenhouse gasses caused by human activities, the temperature of the earth is increasing artificially.

The various activities of the human beings that have contributed to the global warming are calculated as:



What has global warming brought about?

It's enough to look what has happened in the 20th Century to understand the effects of the climate change to our world.

- 1- 240 km² ice has melted in Greenland only in 2005 which possess the 10% of the world's glacier.
- 2- Because of global warming 1700 plant and animal species have become extinct.
- 3- In the Bengal Bay of India, an island inhabited by 10,000 people for thousands of years have been relocated. This island doesn't exist now.
- 4- With global warming, epidemic diseases have increased (like the bird flu).
- 5- Warm water waves, floods, intense rainfalls, hurricanes and the intensity of the tropical hurricanes have increased. (especially in the Atlantic Ocean)

What will global warming bring about?

According to the scientists, if necessary measures are not taken, the global warming will bring exacerbated worse results.

- 1) It is foreseen that the world's temperature will increase by 1.4-5.8 C.
- 2) It is foreseen that the glaciers of the North Pole will melt totally within 35 years.
- 3) The sea levels will rise up to 11 m.
- 4) The seas will go back to the living conditions of million years ago by 2100.
- 5) In specific places of the world, in accordance with the warm air waves, the mortality rate of the world will double in 2020 and only in Africa 184 million people will die.



The effects of global warming in our country and what should be done?

In comparison to the world's scale, the effect of Cyprus to the climate change could be minimum...

...we should combat against global warming for two reasons.

1- As the citizens of this world, We should not remain indifferent to a worldly problem which effects the whole humanity.

...we should combat against the climate change for two reasons.

2) Since Cyprus is a country in the Mediterranean, we will be highly affected by this disaster, thus we should take necessary precautions.

Effects of the climate change to our country

The most important impacts of the climate change to our country during the last few years were:

- A considerable decrease rainfall levels
- Decrease in the level of water in the ponds
- Fall in the agricultural production
- Change in the biological diversity.

1. A serious decrease rainfall levels

- ▶ **Beşparmak** (Pentadaktilos) aquifer is the most important water resource of our water deprived country
- ▶ Nonetheless; aquifers are not full, which means we, as a whole country are facing a serious water scarcity because of the 30% decrease in the rainfall levels caused by global warming.

2. Decrease in the water levels of the ponds

Last two years, 33 ponds in our country have only stored up to 1/3 of their water capacity and total amount of water stored have decreased under 36% for the first time.

3. Regress in agricultural production

- ▶ **60% of our agricultural production is Barley.**
- ▶ **However, decreased water resources have affected the production of this product greatly.**

4. Change in the biological diversity

- ▶ **Jellyfish originally come from oceans.**
- ▶ **However, these creatures are seen in our coastal areas more frequently than before which indicates to the significant changes occurring to our biological diversity.**

What can we do?



- ▶ We, as the Biologists Association, have sent a recommendation package with 12 articles in a letter to all members of the parliament indicating “what should be done to reduce the global warming effects?”

1- Prevent Deforestation

- ▶ The trees, which are the only living things that can hold CO₂ while alive, emit CO₂ after they die.

▶ Unfortunately, destruction of the trees is taking place daily in our country.

▶ **The government itself has destroyed 78 date trees and 38 olive trees in the area in two days while constructing the Northern coastal road.**

▶ 30% of a country needs to be covered by trees to be considered as rich in forests. Even after years long forestation activities, our country's forests are less than 20%.

2- PREVENTION OF CONSTRUCTIONS IN COASTAL AREAS

- ▶ **North Cyprus is one of the luckiest countries in the world with its over 200 kms long coastal line. Despite the existence of clear statements in article 38 of our Constitution, concretion is growing very rapidly.**

▶ In the long term, most of the buildings in these areas will be affected by the rise in the sea levels.

▶ Despite the fact that concretion should be prevented in the coastal areas to prevent loss of lives, most of the construction is still taking place on the coastal areas in our country.

3- EXHAUST GASSES SHOULD BE CONTROLLED

- ▶ exhaust gasses from the vehicles, which are not being adequately inspected in our country, are the biggest sources of air pollution and the emission of greenhouse gasses into the atmosphere, which in turn exacerbates the problem even further.

4- PUBLIC TRANSPORTATION

- ▶ Despite we are one of those countries who can implement public transportation very easily, the number of the private cars are increasing day by day while public transport is decreasing.

5- FILTERS TO THE THERMAL POWER PLANTS

▶ The electricity in Northern Cyprus is completely provided by thermal power plants.

▶ The filter on Kalecik electricity power plant can not be operated and Tekneçik electricity power plant doesn't have a filter at all.

▶ Even though, wind power for the north east coasts and solar power for Mesaria region seems very convenient as an alternative energy, there are no studies done in these areas.

SOLAR POWER

- Solar power is an unlimited and a clean energy source.
- However, sun panels are very expensive.
- Solar energy is becoming more widely used and cheaper nowadays.
- Today it corresponds to 0.4% of the world's total energy need.

WIND POWER

- One of the rapid growing energy resources.
- The use of wind energy is increasing 25% per year.
- Today it has reached a level of competition with fossil fuel.
- We know that there are preparations as such in the Republic of Cyprus.

► Why instead of bringing up to 11,000 v energy transmission line to Zafer Burnu (Cape Apostolos Andreas) in Karpaz where there is no settlement, nobody considers alternative energy sources ?

Karpaz

1- Special Protection Area in 2007,

2- Natural and Archeological Antique Monuments Area in 2004,

3- National Park since 1978.

6- REFORM IN GARBAGE

- ▶ Our country has more than 70 big and small rubbish dumps. These dumps produce significant amounts of methane which is one of the most dangerous greenhouse gasses.

▶ Regular storing and recycling should be provided in all rubbish dumps especially in Dikmen dump, to prevent the emission of the greenhouse gasses into the atmosphere.

7- Dust reduction systems should be made widespread in stone quarries.

▪It's scientifically proven that stone quarries and the stone breaking plants are the biggest contributors to dust pollution in our country.

- ▶ **Dust reduction systems should become widespread and all the necessary inspections should be done in order to prevent the air pollution caused by stone quarries.**

8-PLANNING IS A MUST

- In parallel with the uncontrolled population growth, day by day we are proceeding on the way to be a consumer community.

- Because of lack of planning and direct provisions for sharing resources in a sustainable way, our island is defeated to concrete.

▶ Lack of improvement in the sewage systems within the whole country, threatens the water resources and causes diseases as well.

9- PRODUCTION OF DROUGHT RESISTIBLE PRODUCTS

- ▶ Activities should be initiated to produce products that are resistible to drought rather than products that need excess water like citrus, in order to reduce the effects of water scarcity in our water deprived country.

10- PREVENTIVE MEASURES ARE NECESSARY

- ▶ The taxation system should be revised. For example, private pools of the new villas, which are increasing daily, should be taxed.

11- ORGANISING SAVING CAMPAIGNS

- ▶ A genuine saving campaign should be established in the energy consumption and the water usage areas. As a result significant amounts of energy and water can be saved.

12- EDUCATION SHOULD BE PROVIDED TO EVERY LEVEL

- ▶ Climate change should take its place in the text books. Awareness should be raised by organizing seminars and conferences to students, workers, civil servants and farmers.

**“We are not inheriting this world from our
ancestors, we are borrowing it from our
grandchildren.”**

A Red Indian Proverb

THANKS A LOT...