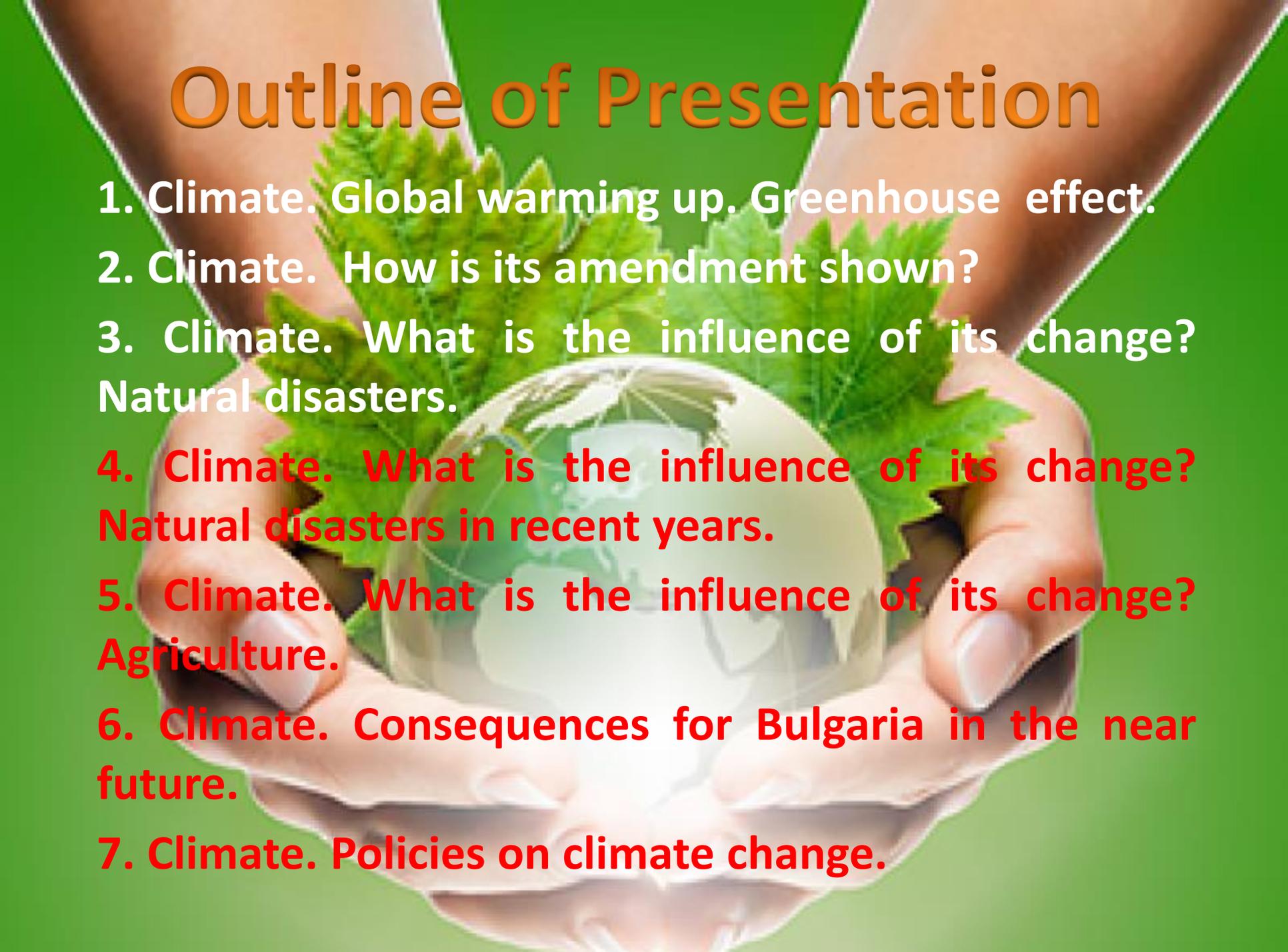




EXISTING CLIMATE CHANGES IN MY COUNTRY



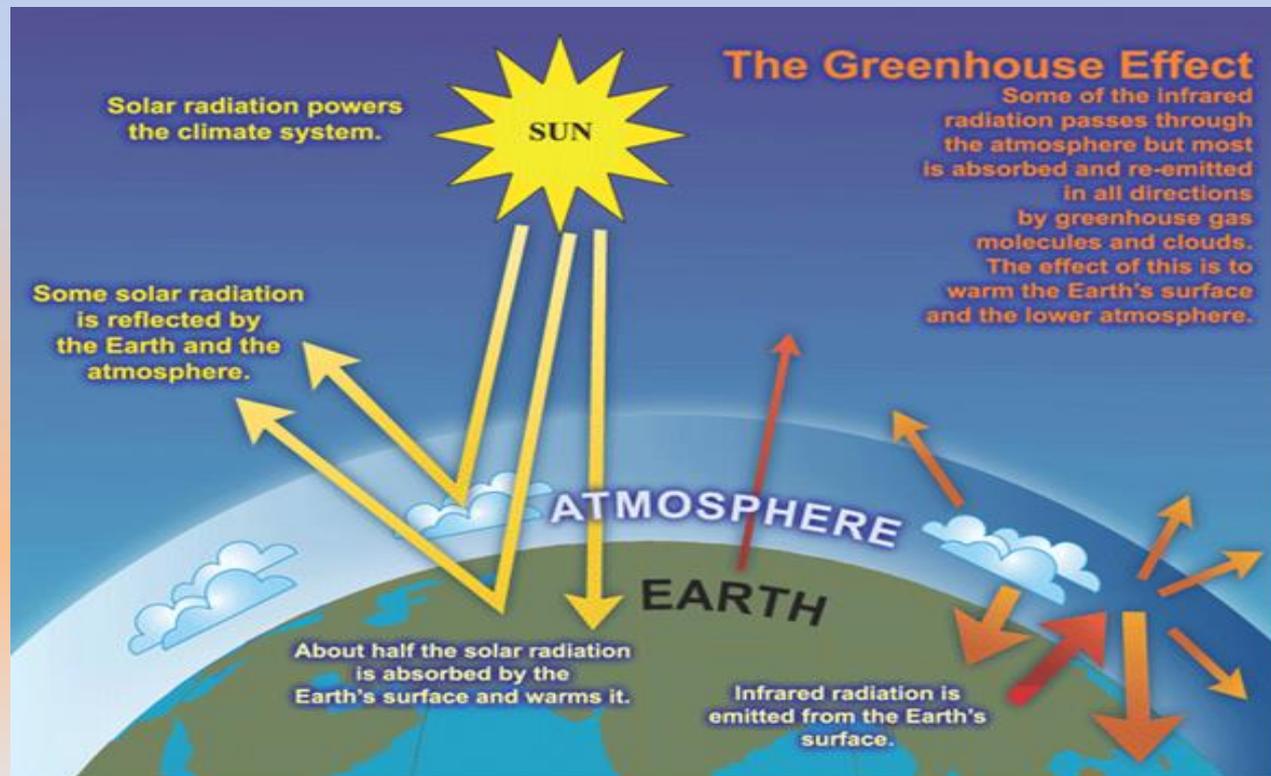
Outline of Presentation



1. Climate. Global warming up. Greenhouse effect.
2. Climate. How is its amendment shown?
3. Climate. What is the influence of its change?
Natural disasters.
4. Climate. What is the influence of its change?
Natural disasters in recent years.
5. Climate. What is the influence of its change?
Agriculture.
6. Climate. Consequences for Bulgaria in the near future.
7. Climate. Policies on climate change.

1. CLIMATE. GLOBAL WARMING. GREENHOUSE EFFECT.

- Climate change is a wide-ranging term that refers to climate change of the earth in long period of time. The same phenomenon often is called global warming ("Global warming"), which recognizes human activities as key factor for the global warming.



1. CLIMATE. GLOBAL WARMING. GREENHOUSE EFFECT.

- The release in the atmosphere of carbon dioxide and other gases causes the so-called greenhouse effect. Although it is often considered that the main greenhouse gas emissions come from the burning of fossil fuels for energy and transport, recent research has shown that animal farming has a greater contribution from transport worldwide.

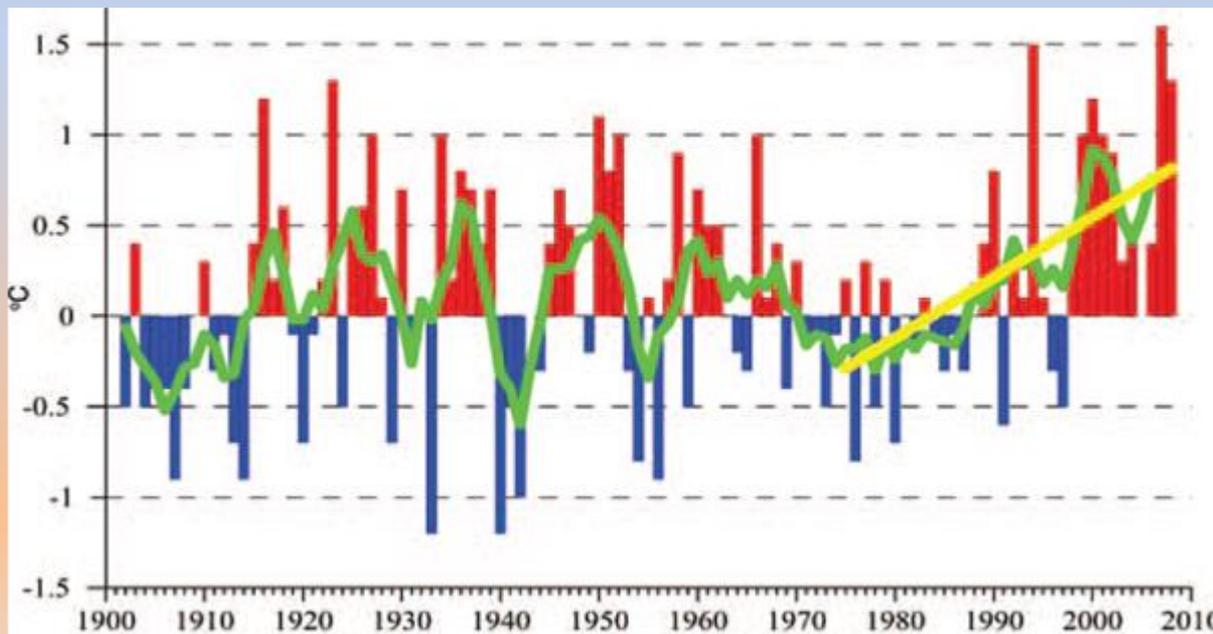


2. CLIMATE. How is its amendment shown?

Since the late 70s of last century in Bulgaria there is a trend towards warming. In the second half of the twentieth century, winters are milder.

As a result of climate change and migration in cities temperature has risen from 1.2 to 2.5 degrees.

The average annual temperature in 2011 is 0,4 ° C above the norm. This is the 14th year in the country, with temperatures higher than normal.



Anomalies of air temperature in Bulgaria to the period 1961-1990 g

2. CLIMATE. How is its amendment shown?

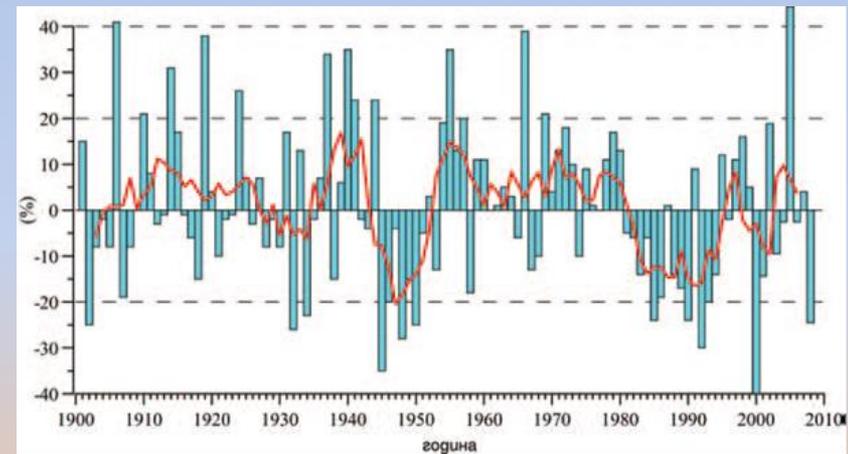
There are more and longer periods of drought followed by severe storms and severe flooding and damages with victims.

The frequency of extreme weather events is increased, such as an increase in the average number of days with daily rainfall over 100 mm - about 30% in the period 1991-2007 compared to the baseline period (1961-1990);

An increase of heavy rainfall; increased frequency of the spring-summer type clouds with rain, increased frequency of thunderstorms and hail in the winter months like January and February, and in April and September in the period 1991-2006 compared to the same base period.

Hot flashes with very high temperatures - damage to the economy, human victims.

With 40% is reduced the snow-retention period and the amount of rain has fallen by over 30%.



Anomalies of annual precipitation in Bulgaria in the period 1961-1990g.

2. CLIMATE. How is its amendment shown?

7 times has increased the number of fires and 24 times have increased burnt areas. A record number of fires were reported in Bulgaria in 2000 and 2007, respectively 1710 and 1479. In that way were burnt over 100 thousand acres.

A loss of approximately 13% of the Bulgarian forest for the past 15 years.

The upper range of broadleaf forests is shifting towards greater height.



3. Climate. What is the influence of its change?

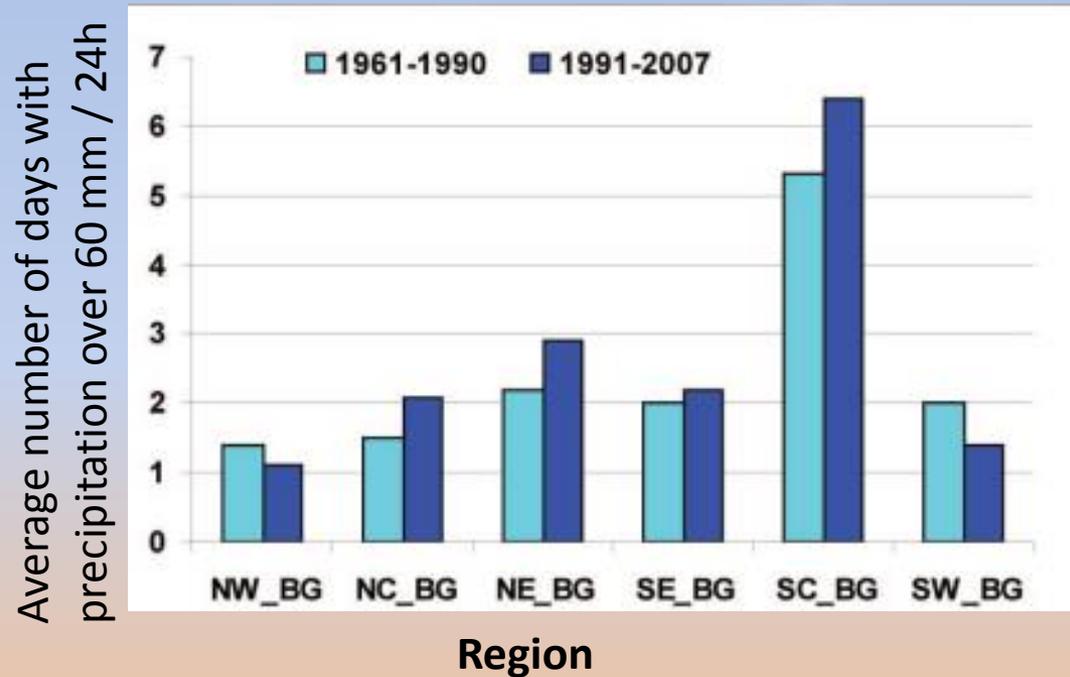
Natural disasters.

There are more and longer periods of drought followed by severe storms and severe flooding and damage with victims.

An increase of heavy rainfall. Heavy rainfall and outdated infrastructure drainage systems caused over the past decade many repeated floods.



3. Climate. What is the influence of its change? Natural disasters.



Ratios of the average number of days with precipitation over 60 mm / 24h for the period 1991-2007g. and for the base period (1961-1990g.) for the six administrative regions, which is Bulgaria divided into.

An occurrence of thunderstorms and hails in the winter months like January and February.

An increased frequency of the average number of days with thunderstorms and hails in April and September.

4. Climate. What is the influence of its change?

Natural disasters in recent years.

In the last 3-4 years Bulgaria is subjected to severe floods, which are associated with big damage and destruction - collapsed houses, roads, bridges, destroyed crops. There are casualties.

In 2014, Bulgaria was struck by more than 10 devastating floods in different cities which took human lives.



5. Climate. What is the influence of its change?

Agriculture.

Climate change is unfavorable for the growth and development of crops, orchards and forests. They are characterized with a deficiency of the soil humidity, and this is the reason for the shortening of the growing season as a result of water shortages in the soil.

The data from phonological observations show overtaking in the development with 7-15 days in different climatic regions.

In Bulgaria the warming will mainly affect the growing season of plants, resulting in the production of two major crops in the country, which decrease - in corn with about 23% and in winter wheat with 15-17%.



5. Climate. What is the influence of its change? Agriculture.

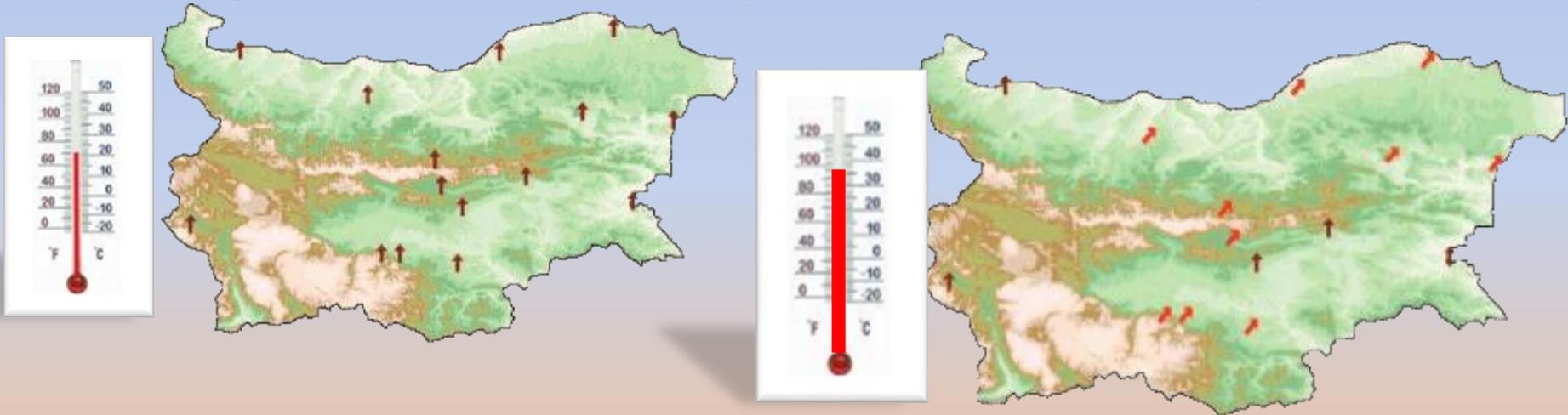
Because of the global warming Bulgarian scientists have already created varieties of plants that withstand droughts. They have developed peach varieties that thrive successfully and in great heat.

New technologies do keep from frost apricots and almonds, which are the earliest flowering species.



6. Climate. Consequences for Bulgaria in the near future.

Most climate models show an increase in temperatures of the Air in Bulgaria from 2 ° to 5 ° C by the end of the century.



The expected global warming will be accompanied by an increase in the frequency of the waves of the hot air in combination with the increased humidity and urban air pollution. The result will likely be an increase in the number of heat stroke.

6. Climate. Consequences for Bulgaria in the near future.

According to most climate scenarios winter precipitation will increase by the end of this century, but rainfall during the warm half of the year is expected to decline.

-  A sharp increase in forest fires and almost complete destruction of the Bulgarian forest.
-  A sharp decline in the quality and quantity of agricultural production.
-  Emergence and spread of new diseases for our region, such as malaria and pests.
-  A very high risk of floods caused by the rapid melting of mountain snows.

7. Climate. Policies on climate change.

Within the package of the EU "Climate change", Bulgaria is committed until 2020 to increase the share of energy from renewable energy sources by 16%.

The production of "green energy" is the best guarantee for sustainable development.

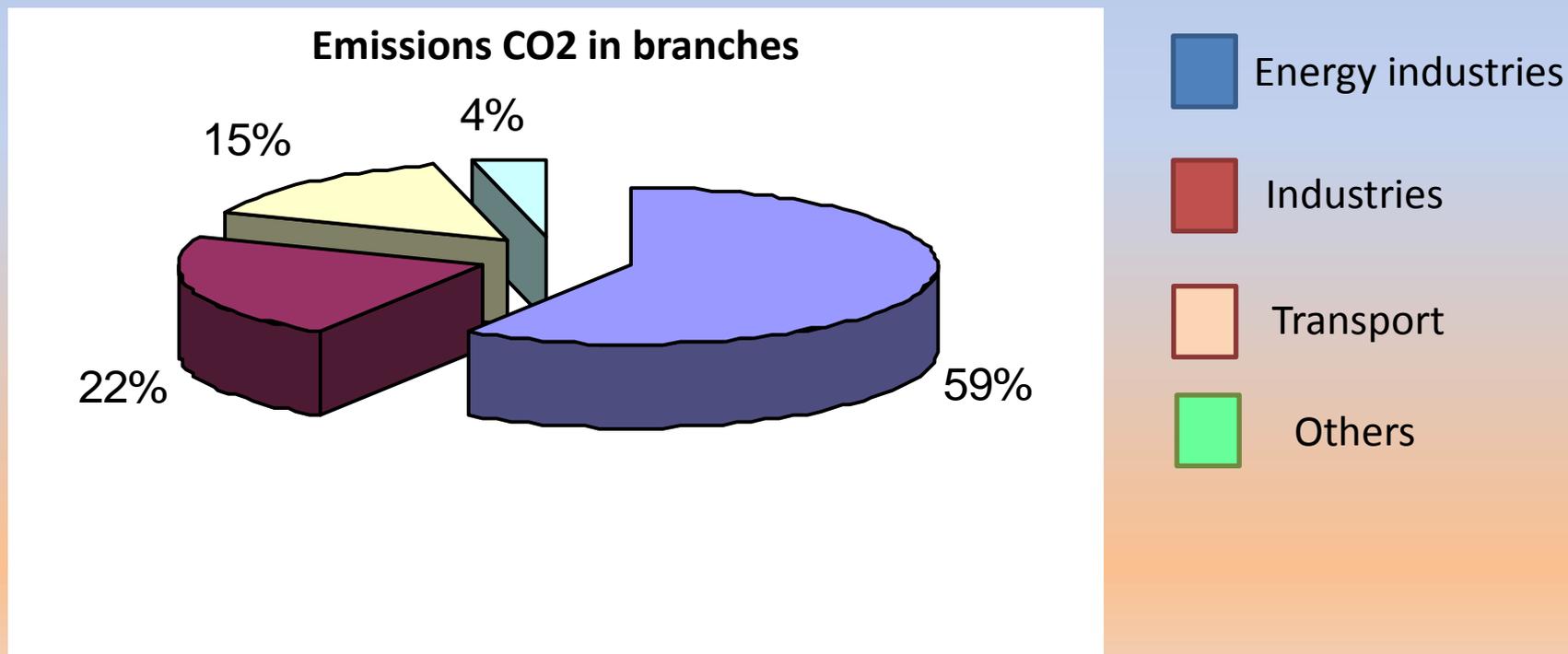
Bulgaria and the Kyoto Protocol.

Bulgaria has ratified the Kyoto Protocol in 2002. Joining the EU in January 2007, the country implemented the mechanism "Emissions trading".



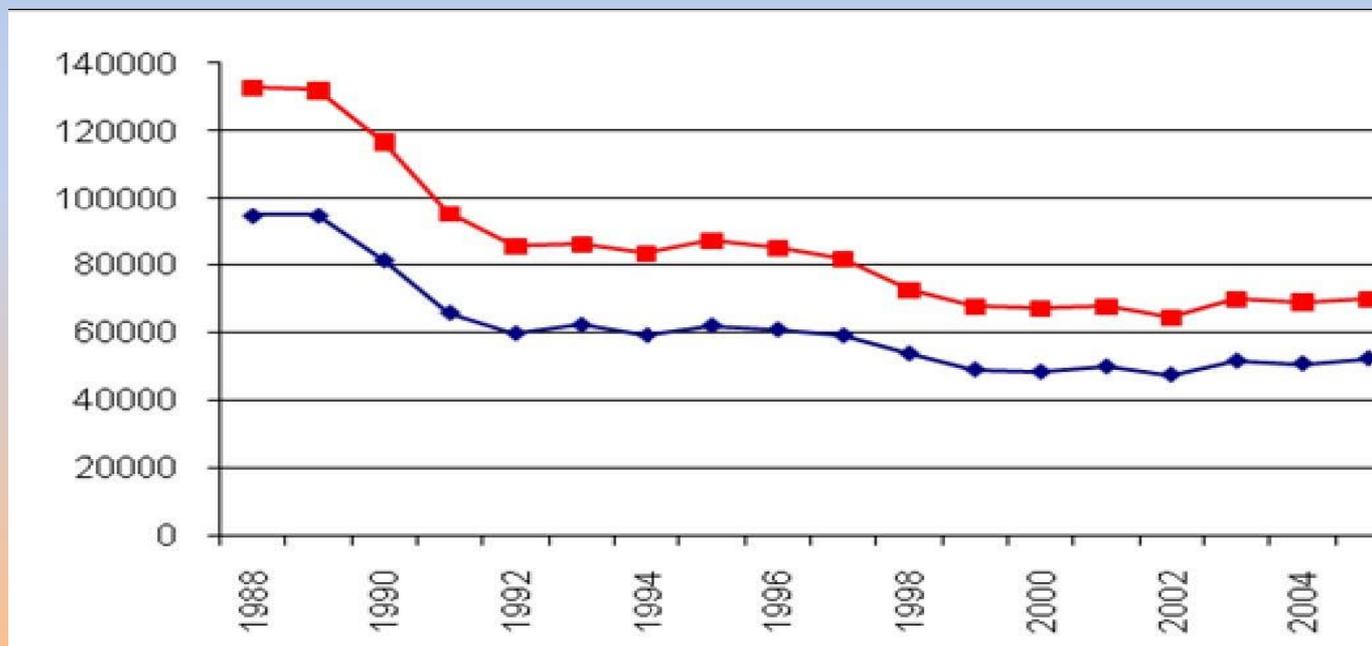
7. Climate. Policies on climate change.

In the National Plan for allocation of allowances are included 132 installations and nearly 42 million tons of harmful gases.



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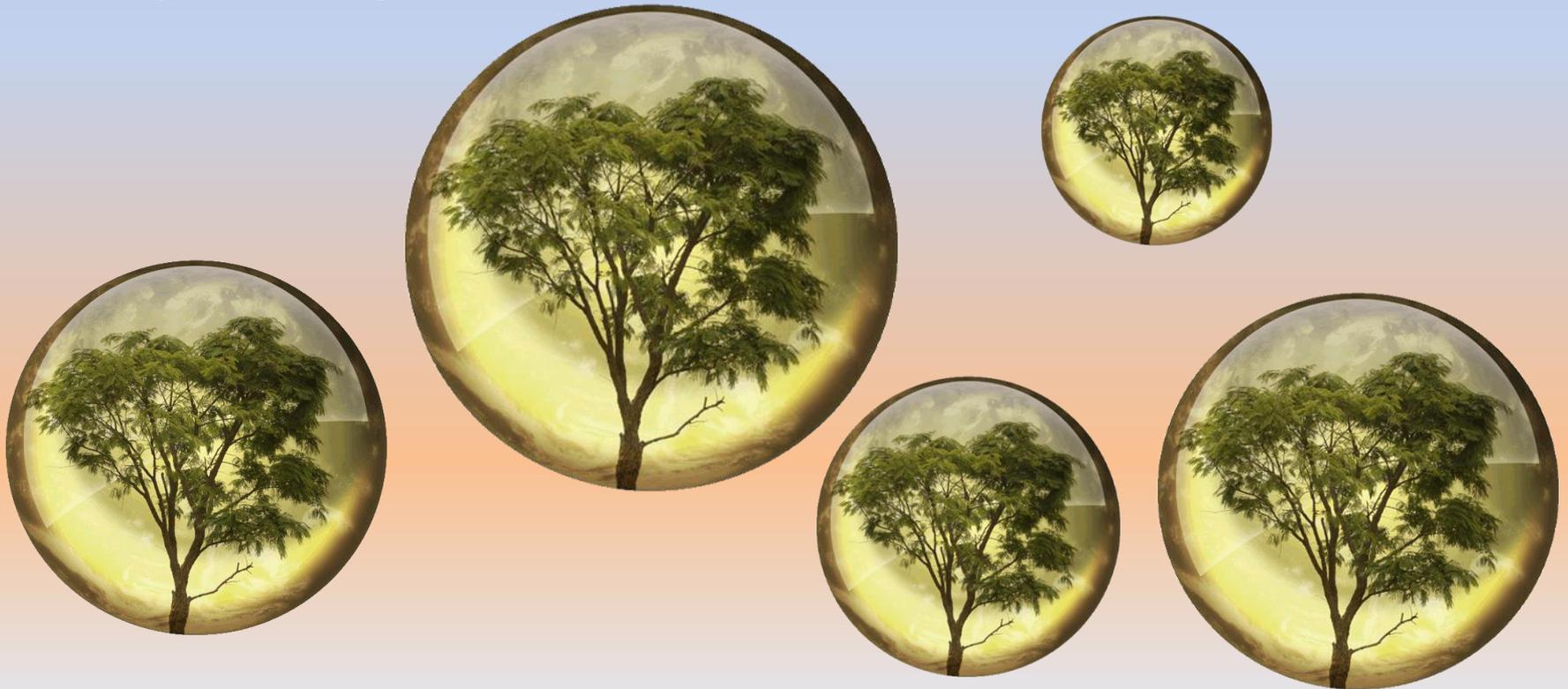


■ Total emissions in branch energy

■ Total emissions

Climate change is a global problem.

To overcome this problem, global actions are needed. The choice is our right and duty - to act or to be inactive witnesses of the changing life of the planet, which we will leave as an inheritance for the posterity.



BULGARIA -

beautiful, green, sunny!

