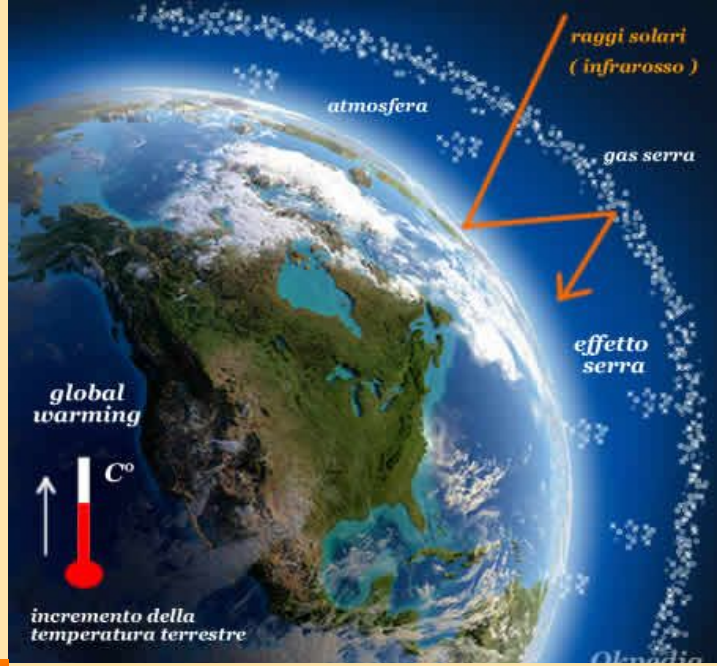
Take urgent action to combat climate change and its impacts

CLIMATE CHANGES

The emission of gases from human activities are responsible for:

- ★ air pollution, that cause diseases
- ★ tend to destroy the Ozone state that protects the Earth's surface
- ★ accumulate in the atmosphere, producing the greenhouse effect that prevents sunlight from dispersing and increases global warming



But what are these gases of human activities?

- ★ exhaust gas
- ★ gas from means of transport
- ★ domestic heating gas (radiators, fireplaces, stoves ...)

THE ENVIRONMENT AND THE HISTORY

This is led to climatic changes that have generated disastrous environmental phenomena.

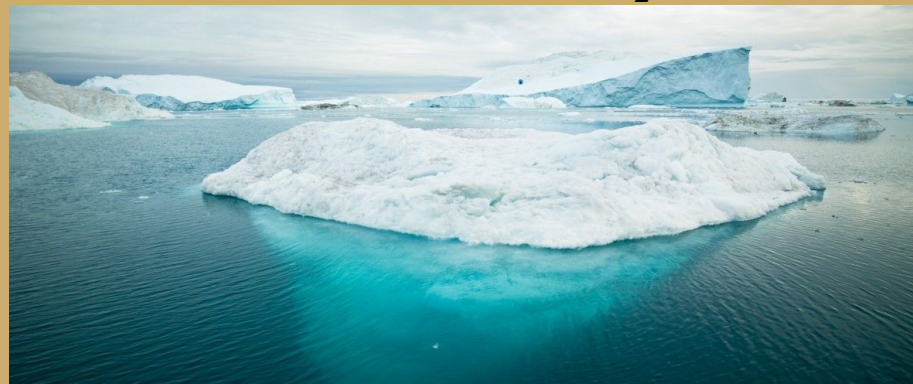
Over the course of history, however, the climate has undergone changes not directly related to human activity, but due to:

- ★ periodic changes in solar activity
- ★ earth's orbit
- ★ ice ages (linked to phases of heating and cooling)

THE THOUGHT OF HISTORIANS

Most scientists are convinced, however, that, not excluding natural factors, human activity has seen an increase in the speed and intensity of these climatic variations:

- ★ since 1800 there has been a rise in temperature, but in recent decades it has become an exponential increase so much that it comes to global warming anthropogenic (caused by humans through their actions on the environment) which has developed a growth effect greenhouse
- ★ also in recent decades, scientists have highlighted the increase of carbon dioxide (CO_2) in the atmosphere and this cause:
  - ➔ desertifications of various and vast regions of the globe
  - ➔ raising of seas and oceans
  - ➔ disastrous meteorological phenomena (floods, anomalous storms, ...)



WHAT CAN THE INDIVIDUAL DO?

And we, can we do something about the weather? Surely... just change some habits every day. For example:

- Using LED bulbs (they consume 60% less energy) and turning off the lights when we are not at home
- Keeping air conditioning and heating in an interval of 5 ºC less or more than the outside temperature, to reduce consumption.
- Use full load household appliances (washing machines..) and try to reduce daily water consumption.
- Not leaving TV and computers on standby: they consume more electricity than we think.
- Bringing special waste such as batteries, computers, smartphones and tablets to collection centers and not to normal dumpsters.

WHAT NEEDS TO BE DONE ON A LARGE SCALE?

Polluted emissions must decrease by 45% by 2030 and reach zero - net of carbon dioxide reabsorbed from the atmosphere - by 2075 and emissions of other greenhouse gases must be reduced by 35% by 2050. We must act simultaneously on different sectors: construction, industry, transport, energy production, agriculture, forest and land use.

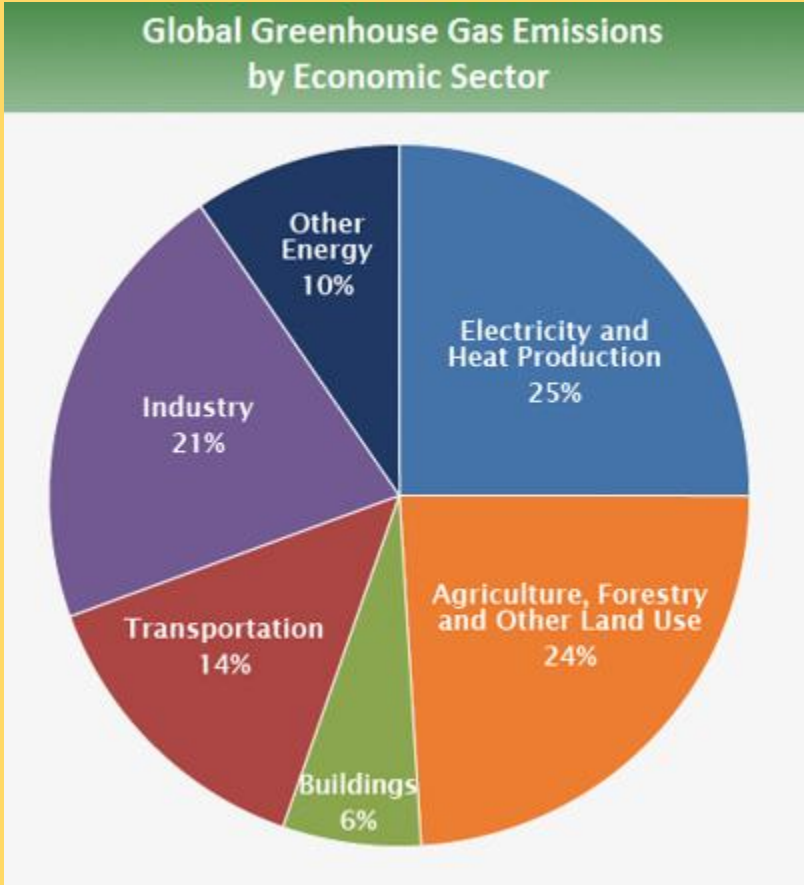
GREENHOUSE GASES

Climate changes' major cause is the greenhouse effect. Some gases present in the atmosphere act like glass in a greenhouse: they stop the solar heat from coming back to space, causing global warming.
These gases are:

- Carbon dioxide
- Methane
- Nitric oxide
- Flourinated gases

Greenhouse gases are emitted in the atmosphere because of men's activities, which are (as shown in the chart with the respective percentages):

- Elecricity and heat production
- Agricolture, forestry and other land use
- Industry
- Transportation
- Other energy
- Buildings



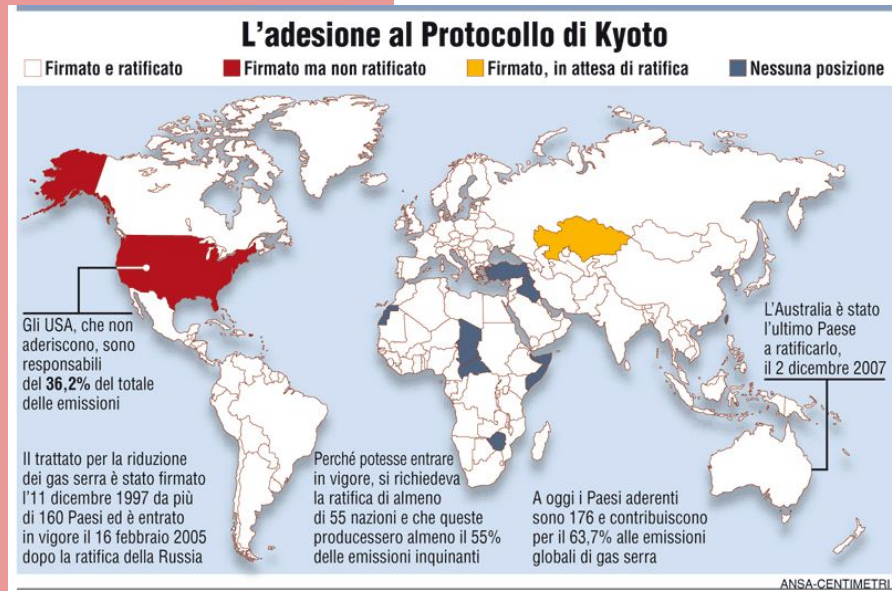
HOW HAVE THE EUROPEAN STATES DECIDED TO ACT?

According to scientists, even the new production systems have ended up threatening the survival of mankind and that of the environment.

On these issues, the European states have decided to question themselves in order to try to give answers through various meetings, let's see some of them ...

KYOTO PROTOCOL

The Kyoto Protocol was signed in December 1997, in the Japanese city of Kyoto. The Kyoto Protocol, based on the principle of "common but differentiated responsibilities", commits industrialized countries and those with economies in transition to a reduction in the emissions of the main greenhouse gases compared to 1990 values.



KYOTO PROTOCOL

For the treaty to enter into force it was necessary that it be ratified by no less than 55 nations, and that these same signatory nations together accounted for no less than 55% of global greenhouse emissions of human origin. The United States of America, the main emitter of greenhouse gases (36.1%) has not yet ratified.

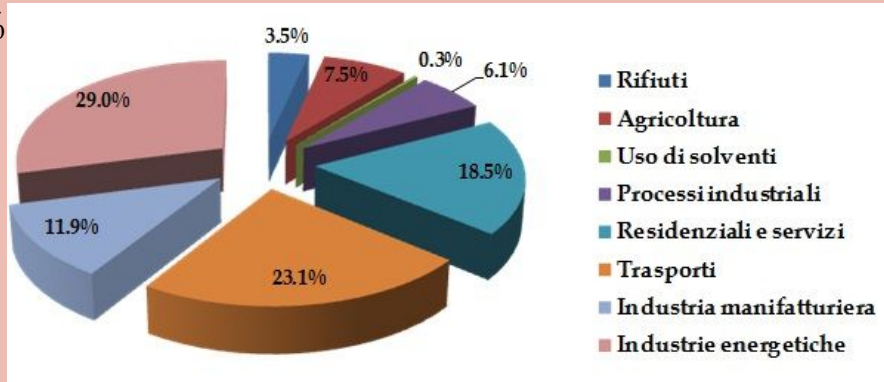
The Protocol did not enter into force until February 16, 2005 thanks to the ratification by Russia. As of May 2013, 192 states have signed up to the protocol. On 16 March 2007, the anniversary of the second year of accession to the Kyoto protocol was celebrated. With the Doha agreement, the extension of the protocol was extended from 2012 to 2020.

THE KYOTO PROTOCOL IN ITALY

The Kyoto Protocol, which ended its validity on 31/12/2012, provided for an emission reduction for States which on average is worth - 5% to be achieved by 2012. Italy has ratified the Kyoto Protocol through the law ratification of 1 June 2002. Italy had signed an emission reduction target of -6.5%: this reduction target had been identified on the basis of the indications of national research bodies. Considering the average reduction in emissions in the commitment period (2008-2012) compared to the base year (1990) it was "only" -4.6%: Italy has not completed its commitment.

According to NIR 2014, national emissions in 2012 were structured as follows:

- ★ in the transport sector increased by + 2.9%
- ★ for energy industries decreased by -8%
- ★ in the residential and services sector, they increased by + 8.2%
- ★ in the manufacturing industry decreased by -36.8%
- ★ in industrial processes decreased by -26.5%
- ★ in agriculture decreased by -16%
- ★ in waste management and treatment decreased by -17.5%

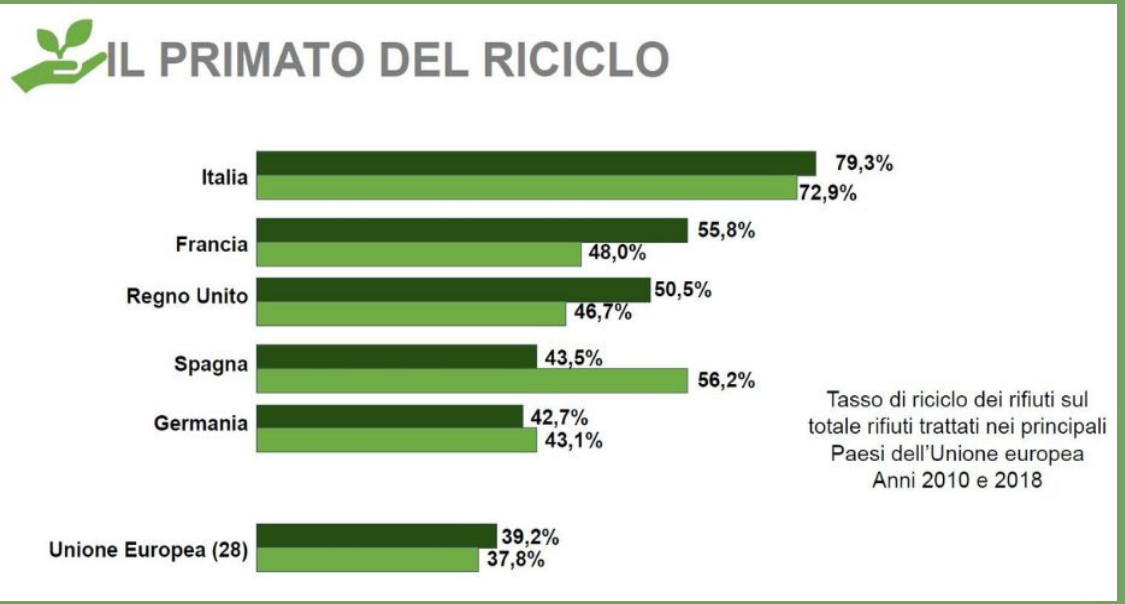


PARIS AGREEMENT

The Paris Agreement was adopted in December 2015 at the Paris Climate Conference; in short, it is an attempt by the acceding countries to relaunch the environmental issue within the political and economic agenda.

The objectives are to contain the average global temperature increase in the long term, within 2 °C compared to pre-industrial levels. the acceding countries have decided to meet every five years to periodically assess the progress made, with the most industrialized countries having to support the least developed countries in their efforts to reduce the volume of emissions.

ITALY AND THE WASTE DIRECTIVE



In Italy, the Minister for the Environment of the Regions tries to assess this environmental impact by analyzing any projects and with regard to this assessment, the waste directive is significant and important. this concerns the rules on the recovery and disposal of waste, is Directive 156 of 1991 and addresses the problem of waste production in developed countries, therefore all the Member States of the European Community have undertaken to adopt those measures and those measures necessary to ensure that waste is disposed of or recovered without any danger to man and the environment. (As we see in the image, the excellent work done by our country in this area has paid off).

WHAT IS THE FINAL GOAL?

The **final goal** to be achieved consists in combating environmental, social and cultural degradation and promoting resilience, that is, the ability to resist and react to the difficulties and traumas associated with this environmental degradation.

So the **basic goal** is to allow other generations to survive in an increasingly sustainable world, for example by reducing consumption levels, waste and ensuring the objective well-being of society.