



Climate change

Is our planet in danger? The scientific evidence is clear: surface temperatures on Earth are warming extremely fast, showing a definite change in global climate. Some scientists believe that temperatures will increase considerably by the middle of the 21st century, with negative consequences for our planet. It can provoke the death of forests, the **flooding** of coastal areas or, on the contrary, drought in some parts of the world. Changes in climate have always occurred over the course of millennia but the cycles of cooling and warming happened slowly in the past.

Now it's different. Climate is changing more rapidly than ever before and the main cause seems to be human activity. A lot of scientists think that from burning fossil fuels, such as oil, gas and coal, the atmosphere is now full of carbon-dioxide, which traps heat on the Earth's surface acting like the glass in a **greenhouse**.

How the world feels the heat

We are already experiencing global warming and there are clear signs of it in different parts of the world. Some large areas are having heat waves but the worst danger is the warm temperatures at the North and South Poles. This phenomenon causes the **melting** of arctic ice. The arctic ice is becoming very thin, it is breaking into smaller pieces and melting so that the polar ice cap **is shrinking**, provoking a slow but significant rise of the sea level. Some of the most beautiful areas are in danger for this reason, for example the Maldives which are only 1.80 metres above sea level.

Some other parts of the world, on the contrary, are experiencing **drought** which **is** adversely **affecting** a great number of territories in Africa, southern Europe and western North America. Only very few regions, such as Russia and northern Europe, can benefit from a warmer climate but most of the world will suffer even more in the near future, particularly the poor nations and the tropics.

Changes in the weather

Global warming is also causing evident consequences for the weather. Everybody can see it by reading newspapers or listening to the news. The increasing number of violent storms and hurricanes is a clear example. In fact, these natural phenomena destroy people's lives as well as the economy of the countries where they take place.



Glossary

to flood: inondare; **greenhouse:** serra; **to melt:** sciogliere; **to shrink:** restringersi; **drought:** siccità;
to affect: colpire

practice

- A. Read the section “Climate change” and write T (True) or F (False) at the end of the statements. Correct the false statements.**

	T	F
1. Surface temperatures on earth are decreasing.		
2. Changes in climate now occur faster than in the past.		
3. Global warming provokes the melting of arctic ice and the rise of sea level.		
4. There are fewer hurricanes and storms connected to global warming.		

- B. Read the section “Climate change” and answer the questions.**

- What is the greenhouse effect?
.....
- What is the main cause of global warming according to most scientists?
.....
- What are the principal consequences on the weather?
.....
- Why is the sea level rising?
.....

- C. Complete the sentences with the correct form (present simple or present continuous) of the verbs in brackets.**

- Scientists (think) that temperatures (increase) very fast compared to the past.
- Greenhouse effects (consist) in trapping heat on the Earth's surface which (get) warmer rapidly.
- Some parts of the world (experience) drought which usually (make) the economic situation really difficult.
- The melting of ice (occur) when the ice (get) thinner and thinner and (break) into small pieces.
- Now the increase of temperatures (cause) the death of forests and the flooding of coastal areas.

- D. Find in the text antonyms to the following words; then write the Italian equivalent.**

From the text	Antonyms	Italian equivalent
1. danger		
2. to warm		
3. to increase		
4. rapidly		
5. to trap		
6. to begin		
7. death		
8. clear		
9. violent		