



GLOBAL WARMING, A WAKE UP CALL

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1. INTRODUCTION

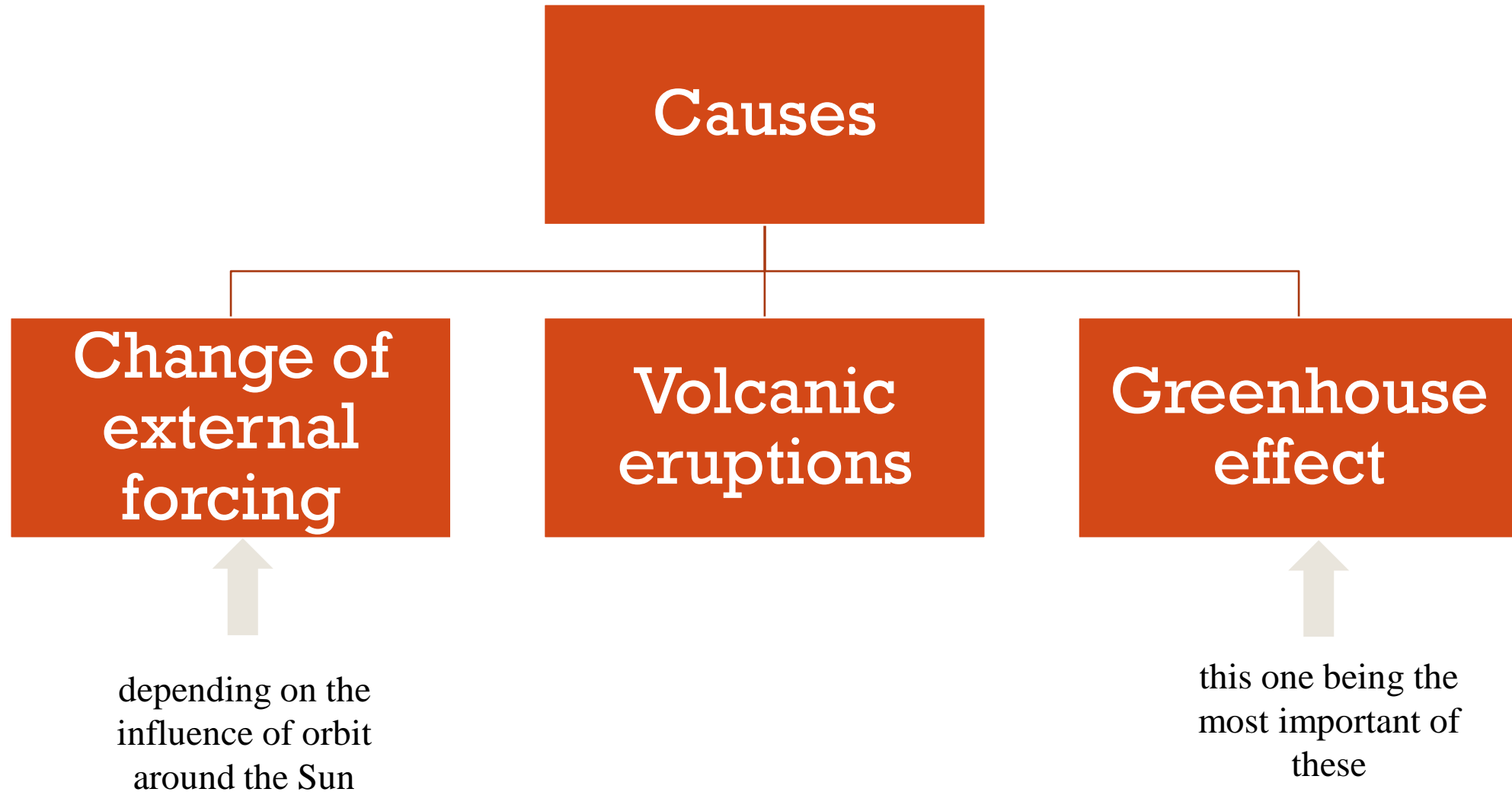
- Whatever we do, the Earth will no longer be habitable in the end. In 5.5 billion years, the Sun will turn into a Red Giant, the oceans will turn into vapors, the temperature of the Earth's surface will be hot enough to melt even the stone on the entire surface of the planet.
- As the brigher and brighter Sun evaporates our oceans, the effect will be much more intense than man-made global warming.



Global warming is known as the phenomenon of continuous increase in average recorded atmospheric temperatures in the immediate vicinity of the soil, as well as ocean water, observed in the last two centuries, but especially in recent decades.

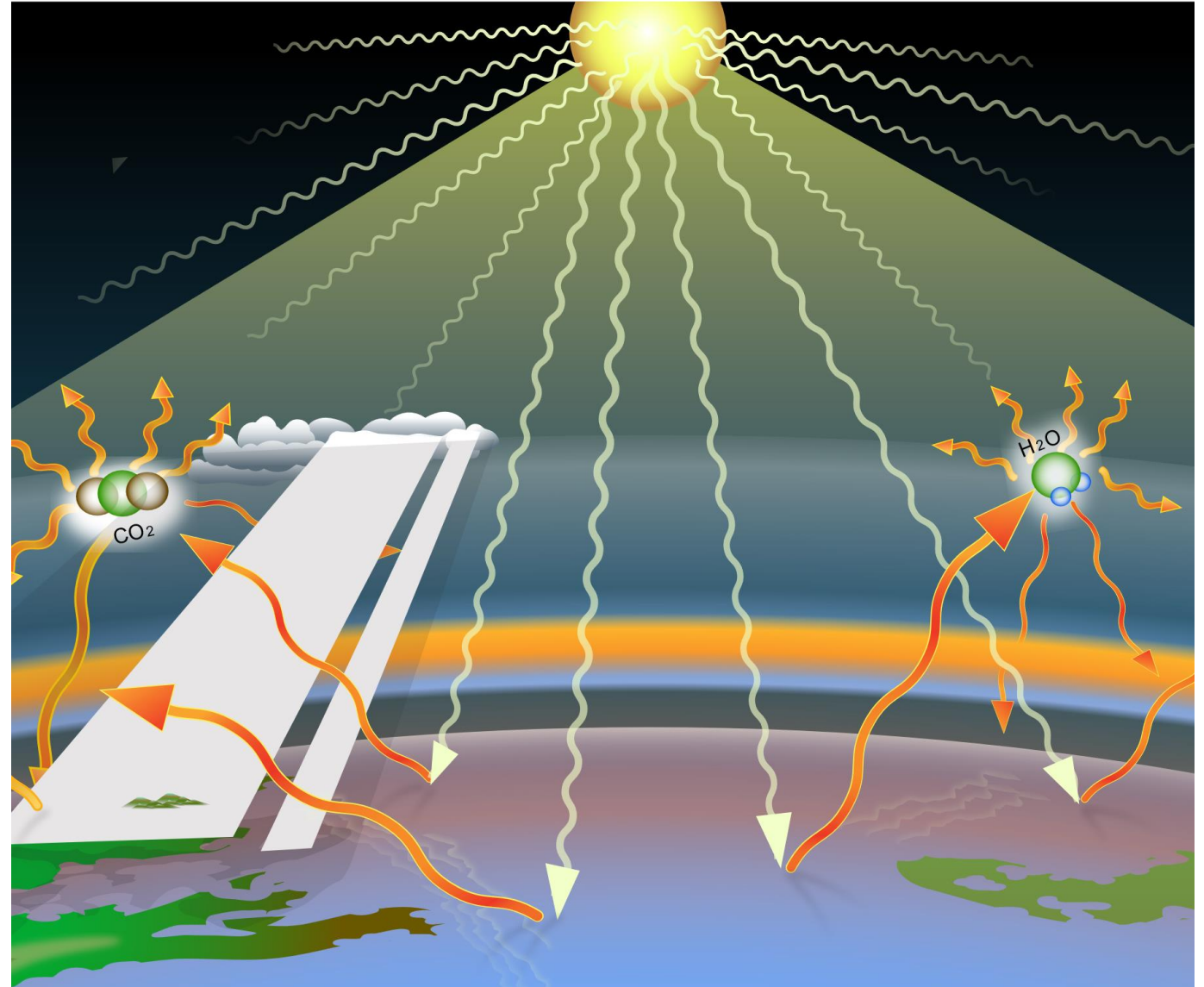


2.CAUSES

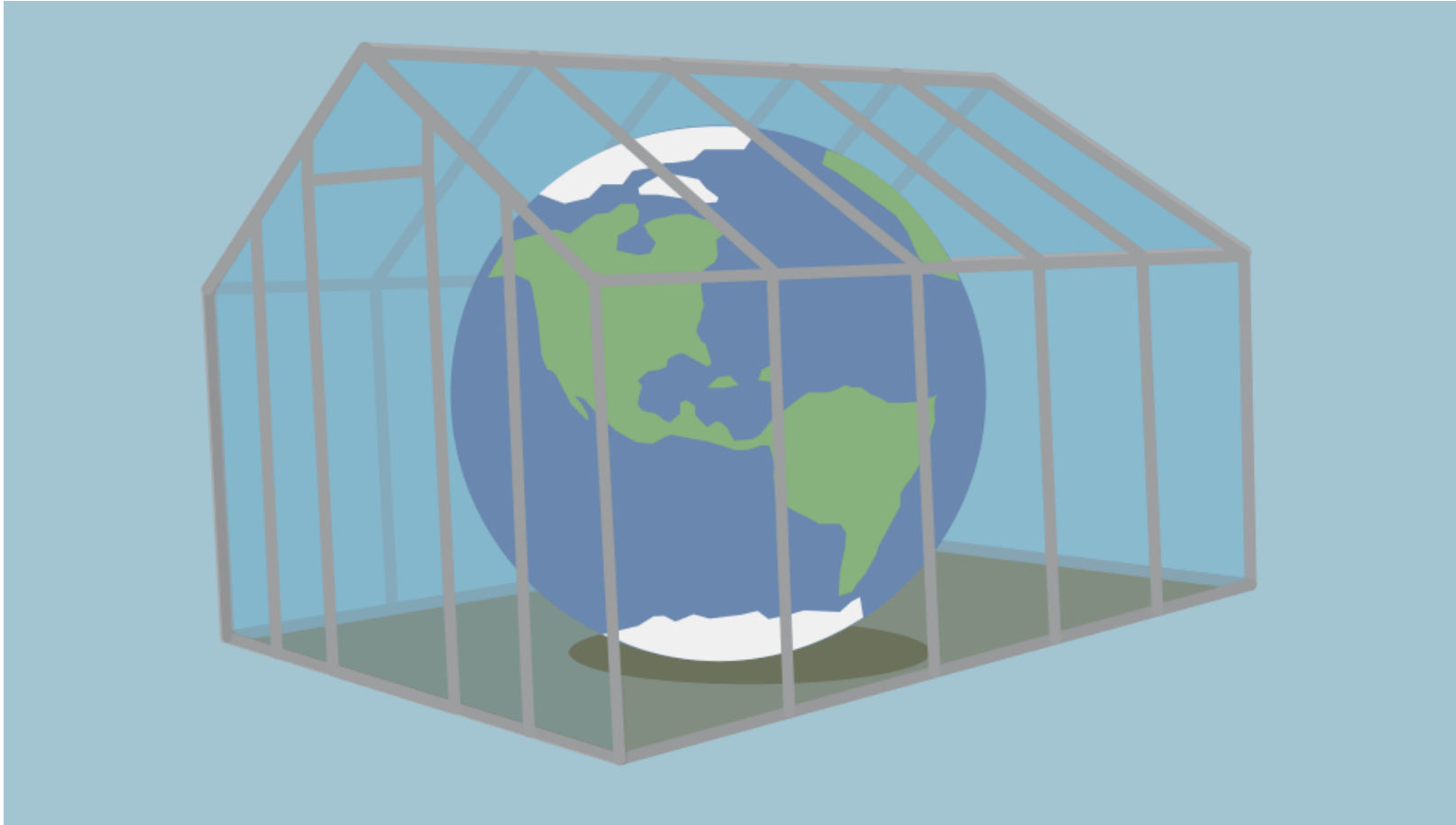


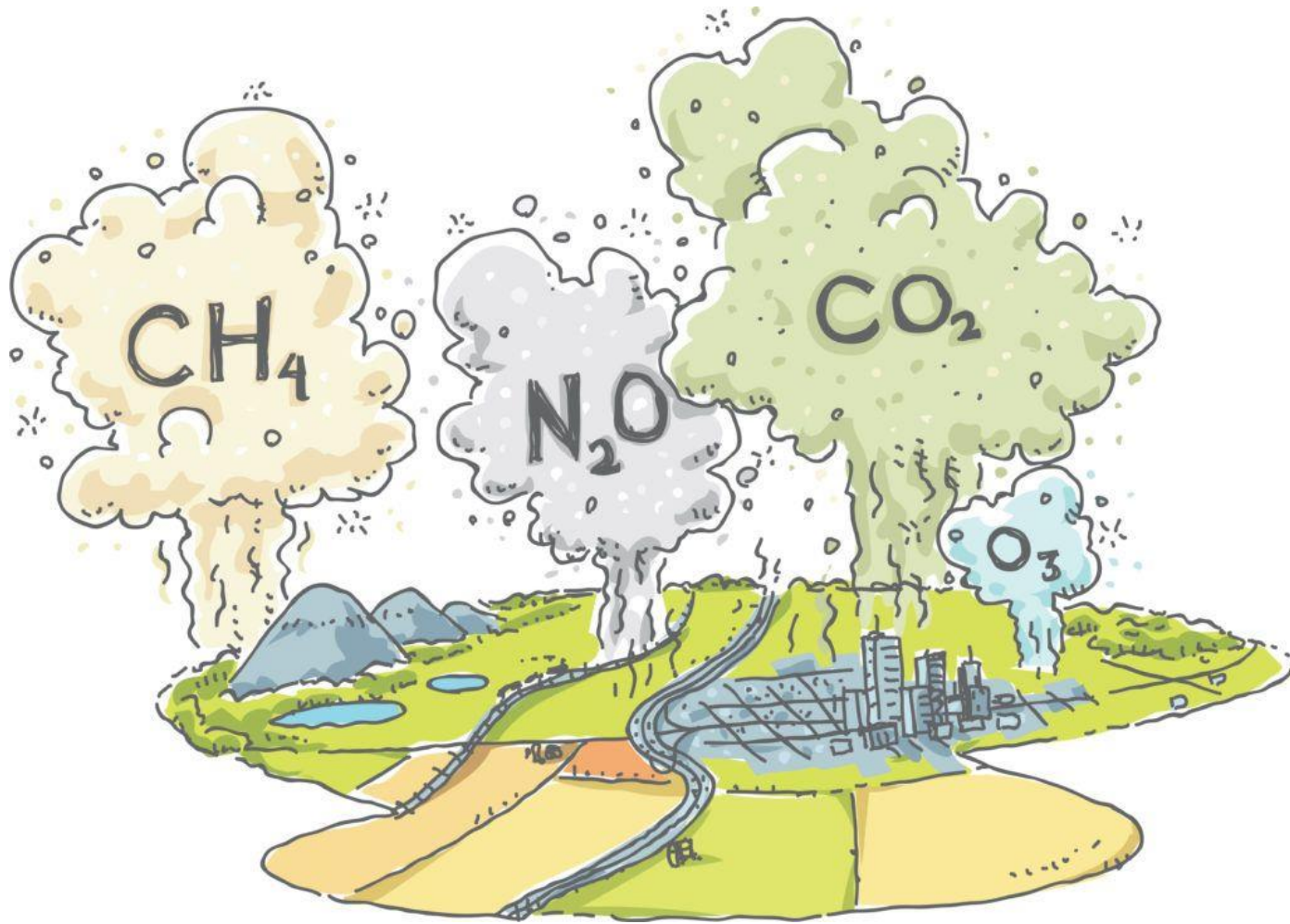
2.1 GREENHOUSE EFFECT

- The greenhouse effect is a term used to highlight the contribution of certain gases emitted naturally or artificially to the warming of the Earth's atmosphere by changing the permeability of the atmosphere to solar radiation reflected from the Earth's surface.



- The result is called a "greenhouse effect" because the atmosphere acts like glass covering a greenhouse - heating the interior.





- The greenhouse effect normally maintains a comfortable temperature on our planet. However, human activities increase the amount of greenhouse gases in the atmosphere, and thus the greenhouse effect is increased and the Earth's temperature rises.



Greenhouse effect

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graph LR; A[Greenhouse effect] --> B[Water vapor(70%)]; A --> C[Carbon dioxide(9%)]; A --> D[Methane(9%)]; A --> E[Ozone(7%)]
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Water vapor(70%)

Carbon dioxide(9%)

Methane(9%)

Ozone(7%)



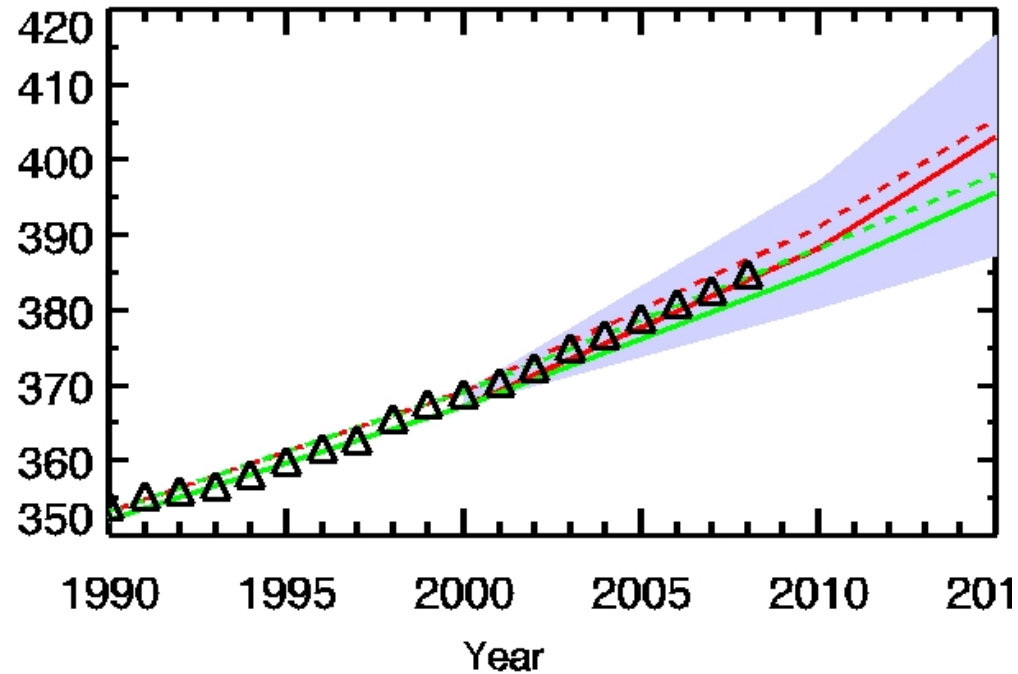
The background image shows a landscape with a dense forest in the foreground. In the middle ground, there are several industrial smokestacks or chimneys. Two of these stacks are prominent on the right side, emitting thick, white plumes of smoke that rise into the sky. The sky is filled with large, billowing clouds, some of which are tinged with a warm, orange-yellow light, suggesting a sunset or sunrise. The overall scene conveys a message about human industrial activity and its impact on the environment.

2.2 HUMAN INFLUENCE

- Besides nature's contribution to this unfortunate phenomenon the human race also participates to making the Earth's condition worse, by their lifestyle. By using fossil fuels, CO₂ it's being released into the atmosphere, degrading it. Deforestation is one on the most crucial thing making the atmosphere more toxic.

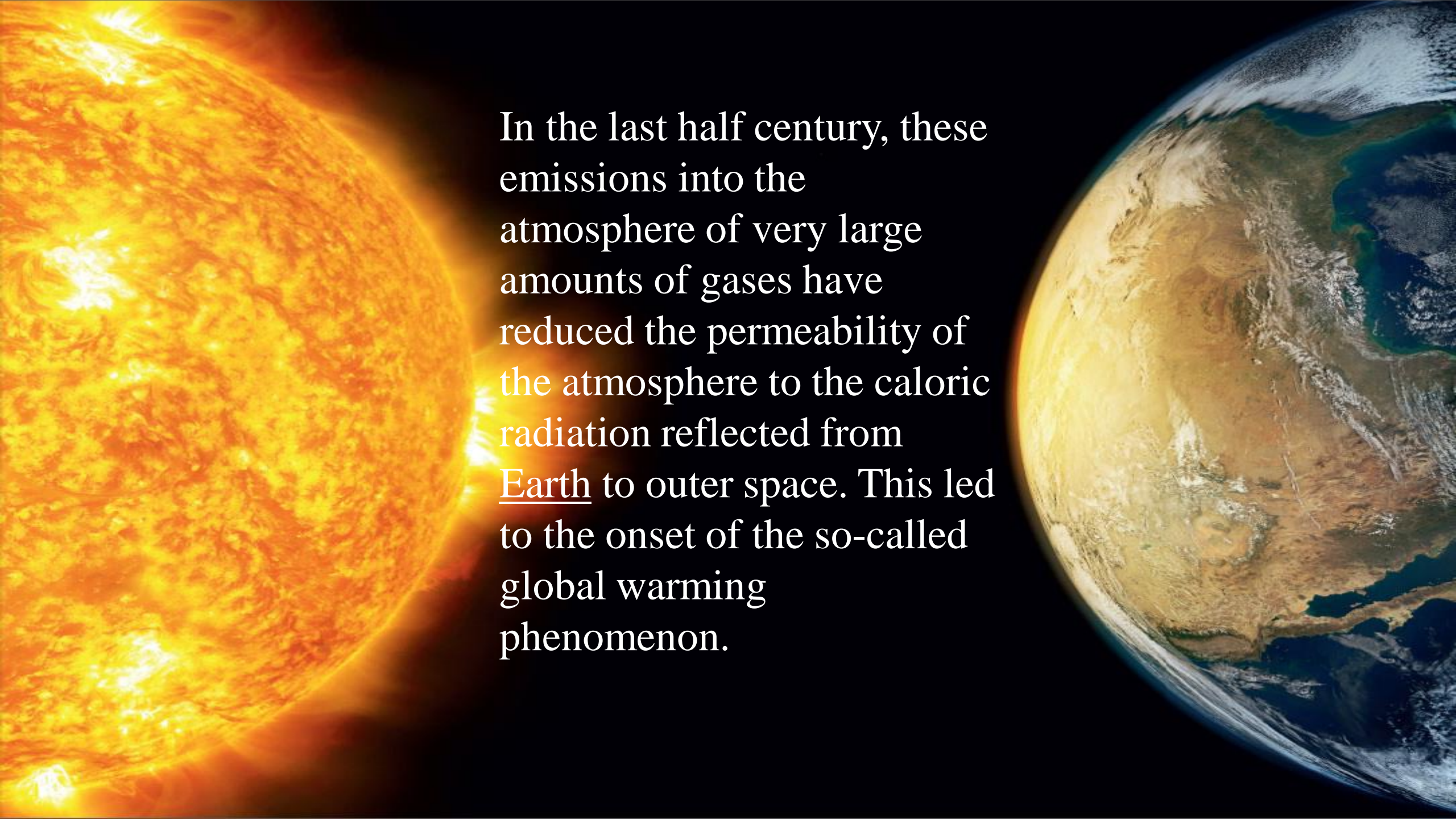


3. STUDIES



- According to the IPCC Climate Change 2014: Mitigation of Climate Change report, 62% of greenhouse gas emissions between 2000 and 2010 are carbon dioxide. Greenhouse gas emissions increased faster between 2000 and 2010 than in the previous three decades, and almost half of the carbon dioxide emissions from 1750 to 2010 are due to the last 40 years.





In the last half century, these emissions into the atmosphere of very large amounts of gases have reduced the permeability of the atmosphere to the caloric radiation reflected from Earth to outer space. This led to the onset of the so-called global warming phenomenon.



▪ According to a 2007 study, 22% of the world's greenhouse gas emissions come from agriculture, a percentage similar to that of the industrial sector, but higher than that of transport. Cattle farming, especially transport and feeding, is responsible for 80% of greenhouse gas emissions from agriculture (methane gas and carbon dioxide).



INTERACTIVE LEARNING

Accessing this site we can see how the Earth's condition has changed a lot in the past few years

<https://climate.nasa.gov/interactives/climate-time-machine/> , and it clearly shows that it is becoming worse as the years pass by. We can also acknowledge how we can improve Terra's state by planting more trees, reducing the deforestation movement or trying to remove as much carbon as possible from different types of activities, by accessing this interactive site <https://en-roads.climateinteractive.org/scenario.html?v=2.7.39&p55=0.1&p57=-0.1> .



4.EFFECTS

There are many effects that will happen in the future if global warming continues.

Polar ice caps
melting

Economic
consequences

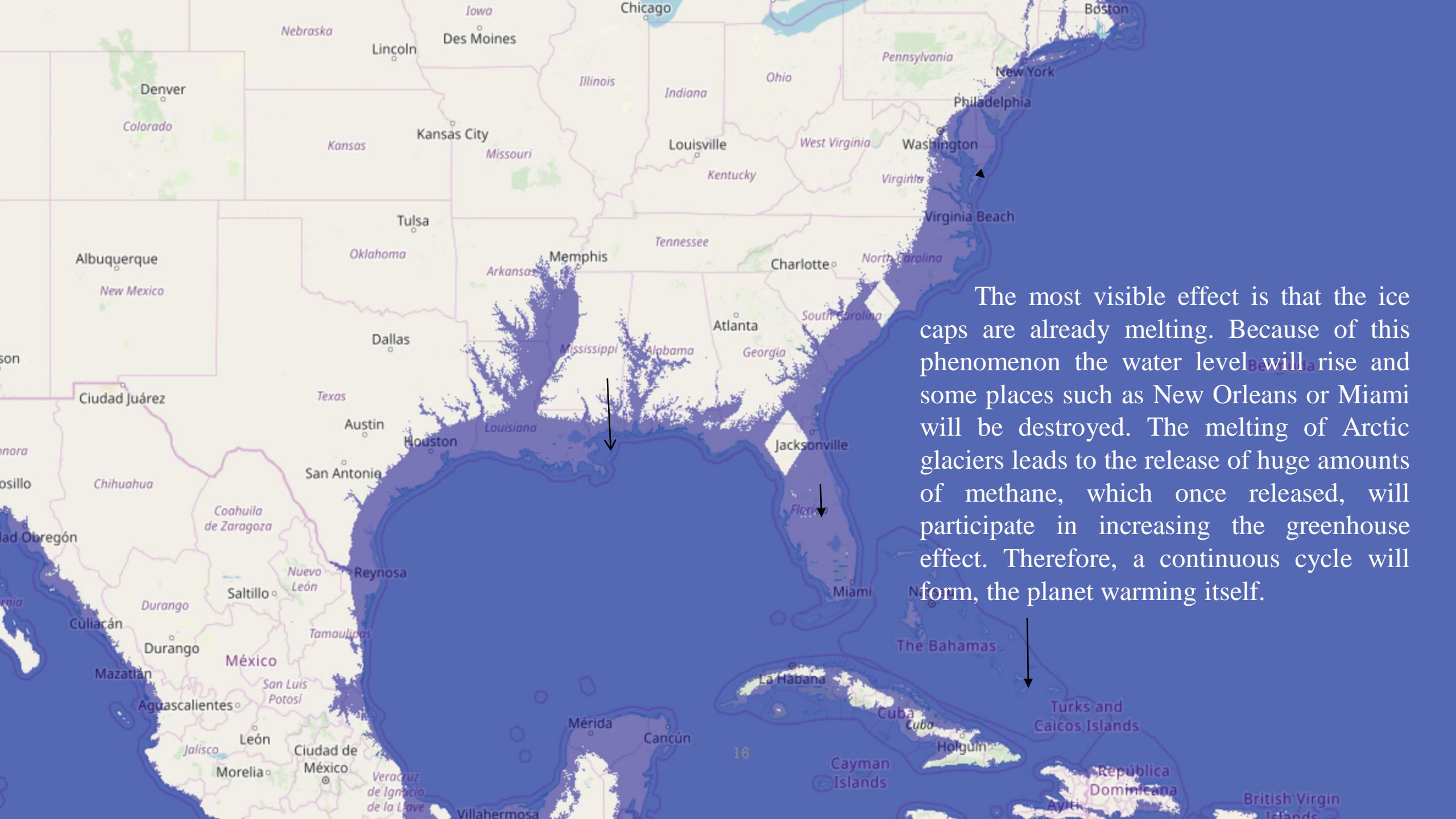
Warmer
waters

Hurricanes

Spread of
diseases

Earthquakes





The most visible effect is that the ice caps are already melting. Because of this phenomenon the water level will rise and some places such as New Orleans or Miami will be destroyed. The melting of Arctic glaciers leads to the release of huge amounts of methane, which once released, will participate in increasing the greenhouse effect. Therefore, a continuous cycle will form, the planet warming itself.

ENDANGERED ANIMALS

Another effect is the species loss of habitat. Species that include polar bears and tropical frogs will be extinct due to climate change. They cannot adapt the habitat that changes their living or temperature.



5. SOLUTIONS

Besides the solutions we offered previously in the essay, we can add recycling. Recycling can reduce garbage by reusing plastic bags, bottles, papers or glass. It prevents pollution by reducing the need to use raw materials and conserves natural resources such as timber, water and minerals. These materials are biodegradable and can't pollute oceans or won't stay on the ground for millions of years.





RECYCLING

Paper

Plastic



Produced from
cellulose



Complex
polymer→toxic
materials such as
cetaldehyde



PLASTIC



These particles are a danger to the health of all living creatures and are found in food, on the ground, in the air, floating on the surface of the water and in the deep sea. Marine living creatures, as well as people, are consuming this wide variety, whether intentionally or accidentally. In a study published by ecologist Elliott Hazen, it was found that marine fish, including some that are consumed by humans, ingested synthetic parts of different sizes. Out of 555 fish species surveyed, more than 2/3 had ingested plastic particles.



TODAY'S CHALLENGES

- → generating 66.000 tons of contaminated masks and 57.000 tons of plastic packs that are thrown into the territory of a single country each year

The recycling industry is constantly developing and is certainly a domain of the future. but no matter how technical recycling processes evolve, remember that while your role is the simplest, you are the most important part of this system.



6. CONCLUSIONS

However, in the next two billion years, temperatures will skyrocket, and if living beings do not adapt, or do not leave the planet in time, the life itself will disappear. We will have to find another habitable planet. Until then, we must save ourselves, we must take care of this planet, to cherish this "pale blue dot".

Earth, as seen from Voyager,
3.7 billion miles away



THAT'S US...
YOU AND ME AND EVERYONE

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THANK YOU!

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