

CALLED TO CONTRIBUTE IN THE DECREASE OF "GLOBAL WARMING"



« The destruction of the human environment is extremely serious, not only because God has entrusted the world to us men and women, but because human life is itself a gift which must be defended from various forms of debasement » (LS 5).

The first chapter of the Encyclical *Laudato Si*, presents the signs of times. "But we need only take a frank look at the facts to see that our common home is falling into serious disrepair"¹, says Pope Francis. In addition, he affirms that, although there are other causes, the most important is the connection to human action: « It would hardly be helpful to describe symptoms without acknowledging the human origins of the ecological crisis. A certain way of understanding human life and activity has gone awry, to the serious detriment of the world around us. Should we not pause and consider this?»².

With this current newsletter we wish to continue our ecological awareness, to delve into the causes and effects of global warming and the ecological crisis that it has brought.

The human being has acted aggressively on nature, but today more than in previous times, due, among other things, to the development of the technique,

the lack of environmental awareness, consumerism and the lack of environmental awareness, consumerism and the culture of disposal, which are the result of the selfishness, violence, individualism and indifference that inhabit the human being.

The severity of global warming and the cry of the poor, who suffer the consequences of the deterioration of the environment, call us not only to pause and reflect, but to start acting. In this endeavor, fortunately, many people, numerous institutions and social, cultural and religious movements committed to the paradigm shift in the face of integral ecology are ahead of us. We are called to collaborate with them, learning from their experience and contributing ours.

To achieve ecological conversion, we need a profound change of heart, a new way of thinking and living, facing the current challenge, contrary to a lifestyle that contributes to an alarming increase in global warming and its consequences.

CLIMATE CHANGE AND GLOBAL WARMING

Some say that climate change and global warming have the same meaning, but they are not; though they are related, but they are different realities. **Global warming is the cause of climate change**, that is, the increase of temperature of the planet caused by greenhouse gas emissions into the atmosphere, derived from human activity, which are causing very harmful changes in the climate.

The earth has already heated and cooled naturally on other occasions, but the truth is that these cycles had always been much slower, taking millions of years, while now and as a result of human activity, these changes have occurred in a very short time.

¹ LS 61

² LS 101

WHEN DID HUMANS BEGIN TO INFLUENCE GLOBAL WARMING?

Experts coincide in pointing to the Industrial Revolution as the turning point at which greenhouse gas emissions released into the atmosphere began to surge. It must be remembered that the Industrial Revolution was born out of many other small revolutions: agricultural, technological, means of transport, finance... that gave rise to a new model of production and consumption.

The increase in the demand and production of energy obtained mainly through fossil fuels, have caused the planet to enter what part of the scientific community has called the *Anthropocene*, a new geological era characterized by the increase in the powerful and harmful actions of the human species on the planet, especially in the last two centuries.

The main result has been the increase in the global temperature of the planet, which since that period has increased by 1.1 °C. Today, it is estimated that at the end of this century the thermometer may increase even more, even if the commitments to reduce gas emissions set by the countries are met.

CAUSES OF GLOBAL WARMING

The greenhouse effect is a natural process that allows the Earth to maintain the conditions necessary to host life: the atmosphere retains part of the sun's heat; without the greenhouse gases, the planet's average temperature would be -18 ° C.

The atmosphere is made up of various gases that, in the right proportion, do their job. The problem occurs, when the emission of greenhouse gases into the atmosphere increases and it retains more heat than necessary, causing the average temperature of the planet to increase and it produces what we call global warming.

Greenhouse Effect

Carbon dioxide (CO₂), methane (CH₄), halogenated compounds, tropospheric ozone and nitrogen oxide are mainly emitted by the burning of fossil fuels for electricity generation, transportation, heating, industry, the building, etc. Also caused by livestock, agriculture, mainly by rice cultivation, wastewater treatment and landfills, among others.



The problem arises when the emission of greenhouse gases into the atmosphere increases and it retains more heat than necessary ...

The Pollution that destroys marine ecosystems

The oceans are carbon sinks, they absorb up to 50% of the generated CO₂.

The pollution produced by carbon dioxide increases the acidity of the oceans and compromises the marine food chain.

The Destruction of terrestrial ecosystems and deforestation

Forests are natural carbon sinks that absorb CO₂ through photosynthesis and return oxygen to the atmosphere.

The Earth has lost 178 million hectares of forest since 1990, which is roughly the size of Libya³.

CONSEQUENCES OF GLOBAL WARMING

"Climate change is a global problem with serious environmental, social, economic, distributive and political dimensions. The worst impacts are likely to fall on developing countries in the coming decades⁴. The main consequences are:

The changes in the ecosystems, desertification and the extinction of species.

The variation of the living conditions in natural environments causes deaths, diseases and massive migrations of species.

The ecosystem changes and desertification kills 10.000 to 50.000 species each year.

³ Evaluación de los recursos forestales mundiales (FRA 2020)

⁴ LS 5

Before this problem, Pope Francis said: «God has joined us so closely to the world around us that we can feel the desertification of the soil almost as a physical ailment, and the extinction of a species as a painful disfigurement»⁵.

Mass migrations

“Climate change causes migrations of animals and plants that cannot always adapt, and this in turn affects the productive resources of the poorest, who are also forced to migrate with great uncertainty for the future of their lives and the lives of their children. There has been a tragic rise in the number of migrants seeking to flee from the growing poverty caused by environmental degradation. They are not recognized by international conventions as refugees; they bear the loss of the lives they have left behind, without enjoying any legal protection whatsoever”⁶.

The melting of the poles and the rising of sea levels

The heat causes the ice mass to melt at the poles, which in turn causes the sea level to rise, causing flooding and threatening coastal shores, even small island states are at risk of disappearance.

"The melting in the polar ice caps and in high altitude plains can lead to the dangerous release of methane gas, while the decomposition of frozen organic material can further increase the emission of carbon dioxide"⁷.

Ocean Acidification

The absorption of too much CO₂ causes the death and disease of marine flora and fauna: fish, algae, corals and other underwater organisms.



“Particularly threatened are marine organisms which we tend to overlook, like some forms of plankton; they represent a significant element in the ocean food chain, and species used for our food ultimately depend on them.” (LS 40)

⁵ LS 89

⁶ LS 25

Extreme weather events

Hurricanes, cyclones, typhoons, droughts, floods, rains or snowfalls increase their degree of violence due to global warming, causing more deaths, victims, displaced people and material damage.

The figure of the climate refugee, not yet recognized by the United Nations, is a reality that is estimated to have reached one billion people in the year 2050.



“The most unfortunate thing is that the most severe impact always falls on the poorest”.

Increasing poverty

Many of the poor live in areas particularly affected by phenomena related to warming, and their means of subsistence are largely dependent on natural reserves and ecosystemic services such as agriculture, fishing and forestry. They have no other financial activities or resources which can enable them to adapt to climate change or to face natural disasters, and their access to social services and protection is very limited⁸.

DOES GLOBAL WARMING HAVE SOLUTION?

If society does not lower its rates of CO₂ emissions into the atmosphere, scientific reports predict multiple risks and impacts. According to NASA, humans have caused major climate changes that reach the point that even if we stopped emitting greenhouse gases today, global warming would continue to occur for at least several more decades.

It takes time for the planet to respond, and carbon dioxide, the predominant heat-trapping gas, remains in the atmosphere for hundreds of years.

There is a lag between what we do and when we notice its effects.

⁷ LS 24

⁸ LS 25

But it may not be too late to avoid or limit some of the worst effects of global warming. It all depends on how our emissions of carbon dioxide and other pollutants will be in the coming years.

«Sadly, there is widespread indifference to such suffering, which is even now taking place throughout our world. Our lack of response to these tragedies involving our brothers and sisters points to the loss of that sense of responsibility for our fellow men and women upon which all civil society is founded»⁹.

VENERABLE LUIS AMIGÓ ENLIGHTENS US



“Beloved children, everything, in one word, that the Lord carried out and provided for in creation, both in the order of nature and in that of grace, clearly shows for us to take part in His life of love¹⁰.

The destruction of our sister and mother Earth affects us all everywhere, because everything is interrelated, everything is connected, as Fray Luis Amigó says: *“The omnipotence and wisdom of God shines, more than in everything, in the infinite variety that it is observed, even in beings of the same species; but despite this variety, you will see them so intimately united and linked together that each one of them is like a link in the admirable chain of creation”*¹¹.

It is urgent to listen to the cry of the Earth and act in a more responsible and proactive way, in daily life, understanding, more and more, that we are all united and connected. Our faith in God's love and fidelity, manifested in the gift of life, urges us to change our attitudes and actions, to be firm and solicitous in our dealings with Creation. There is an urgent call to establish equitable relationships with God, with others and with Creation.

The Capuchin Tertiary family is called to seriously recognize the practices that do not correspond to our spirituality and rather respond to a consumeristic lifestyle. The groanings of Creation,

that become louder and louder as nature is shattered, ask us to adopt ever simpler lifestyles.

« If people could see that change comes about as a result of millions of tiny acts that seem totally insignificant, well then they would not hesitate to take those tiny acts» (Howard Zinn)

Let's take advantage of the following little acts, that can be practiced in our surroundings, and that can contribute significantly to reducing global warming:

1. Help in the **education of the care of Creation**, in word and action.
2. Conserve **water**. Open the shower as needed. Don't leave the faucet open while brushing your teeth or while shaving ; do not throw any garbage into the sea, rivers and lakes.
3. Moderate use of **vehicle**, and make efficient use of it. Reduce the consumption of **air conditionings and heaters**.
4. Use recycled **paper** regularly. Reduce paper consumption. Use the sheets on both sides. Do printing and photocopies only when necessary.
5. Require for long-term sustainable management of natural resources from the **government**.
6. **Plant trees**. One hectare of trees eliminates the same amount of carbon dioxide over the course of a year that 4 families produce in the same period.
7. Recycle the **garbage**: Separate the different elements of your garbage: aluminum, paper, glass, plastics and organic matter in order to reuse them.
8. Avoid overusing the iron, water heater and the washing machine. Turn off your computer and your TV after use. Use **energy** saving light bulbs.

⁹ Ibid.

¹⁰ OCLA 338

¹¹ OCLA 974

9. Do not eat exotic animals such as turtles, iguanas ... **Eat** more fruits, vegetables and legumes than meat. Never buy small fish for eating.

10. Chemical products: Minimize the use of chemical compounds such as aerosols, fertilizers...



"We can all contribute to the CARE, our planet needs".

LET US REFLECT AND SHARE :

1. Why is it important to deeply understand what global warming and climate change is?
2. How can you and your institution contribute to reducing global warming?

Websites for more information:

- ✓ UNFCCC — (Convención Marco de las Naciones Unidas sobre el Cambio Climático) <http://unfccc.int>
- ✓ Paneles Intergubernamentales sobre el Cambio Climático (PICC) <http://www.ipcc.ch>
- ✓ Movimiento Climático Católico Global (MCCG) <https://catholicclimatemovement.global>
- ✓ El Papa Francisco y el medio ambiente (videos) <https://youtu.be/gbo800owYak>
https://youtu.be/Kiz5RAw8_Gw
- ✓ El Papa Francisco y el cuidado del medio ambiente (video) <https://youtu.be/mebyoNSSJhs>

Sr. Margarita Robles, tc

"Humanity is called to recognize the need for changes of lifestyle, production and consumption, in order to combat this warming or at least the human causes which produce or aggravate it » (LS 23)