To the President of Italy
To the President of the Italian Senate
To the President of the Italian Chamber of Deputies
To the President of the Italian Government

PETITION ON ANTHROPOGENIC GLOBAL WARMING

The undersigned, citizens and scientists, send a warm invitation to political leaders to adopt environmental protection policies consistent with the current scientific knowledge. In particular, it is urgent to combat pollution where it occurs. In this regard, we regret the delay in applying the available scientific knowledge aimed at reducing the abundant anthropogenic pollutants present in both land and marine environments.

But we must be aware that carbon dioxide (CO_2) is not a pollutant. On the contrary, like water, it is an indispensable element for the life on our planet.

In recent decades, it has been claimed that the warming of the Earth's surface by about 0.9°C observed since 1850 would be anomalous and caused exclusively by human activities, in particular from emissions into the atmosphere of CO₂ coming from the use of fossil fuels. This is known as the anthropogenic global warming theory (AGWT) that has been mostly promoted by the Intergovernmental Panel on Climate Change (IPCC) of the United Nations. This theory predicts serious and harmful environmental changes in an imminent future, unless drastic and costly mitigation measures are immediately adopted. In this regard, many nations of the world have joined programs of reduction of CO₂ emissions and are pressed to adopt even more demanding programs, which entail heavy burdens on the economies of the individual member states, with the pretense of controlling the climate and, therefore, "save the planet".

However, the claim that the observed warming has been induced by anthropogenic activity is an unproven conjecture that has been deduced only from some climate models. These are complex computer programs called General Circulation Models (GCMs). On the contrary, the scientific literature has increasingly demonstrated the existence of a natural climatic variability that the models are not able to reproduce. This natural variability explains a substantial part of global warming observed since 1850. Thus, the anthropogenic responsibility for the climate change observed during the last century is exaggerated. Therefore, the catastrophic predictions of these models are not realistic.

The climate is the most complex system on our planet, and it must be studied using methods adequate and consistent with its level of complexity. Yet, climate simulation models do not reproduce the observed natural variability of the climate at multiple time scales. In particular, they do not reconstruct the warm periods observed during the last 10,000 years. These occurred about every a thousand years and include the well-known Warm Medieval Period, the Roman Warm Period and other warm periods during the Holocene Optimum. These periods have been warmer than the current one, despite the fact that the concentration of CO₂ was lower. A consistent amount of evidences suggests that these large climatic oscillations were

induced by the millennial cycles of solar activity. This strong climate sensitivity to solar changes is not reproduced by the above models.

It should be noted that the warming observed since 1900 began in the 18th century, that is since the end of the Little Ice Age (around 1700), which was the coldest period of the last 10,000 years. This cold period was induced by a number of grand minima of solar activity such as the Maunder's Solar Minimum (1645-1715). Since the 18th century, following its millennial cycle, solar activity has increased and warmed the Earth's surface. Furthermore, the models fail to reproduce known climatic oscillations such as one with a period of about 60 years. These were responsible, for example, for a warming period (1850-1880) followed by a cooling (1880-1910), followed by another warming (1910-40), again by another cooling (1940-70) and by a new warming period (1970-2000) similar to that observed 60 years earlier. The following years (2000-2019) have not seen the 0.2°C/decade warming predicted by the GCMs, but a substantial climatic stability that has been sporadically interrupted only by the rapid natural oscillations of the equatorial Pacific Ocean, known as the El-Nino Southern Oscillations, such as the sudden warming observed between 2015 and 2016.

The mass media also claim that extreme events, such as hurricanes and cyclones, have dangerously increased in the last decades as a result of anthropogenic activity. Conversely, these events, like many climate systems, are modulated by the aforementioned 60-year climatic cycle. For example, the official data from 1880 regarding tropical Atlantic hurricanes moving toward North America, show a strong 60-year oscillation, well correlated with the Atlantic Multi-Decadal Oscillation, which is a natural thermal oscillation of the North-Hemisphere Atlantic Ocean. The observed hurricane frequency peaks per decade observed in the years 1880-90, 1940-50 and 1995-2005 are compatible with each other. From 2005 to 2015 the number of hurricanes has decreased following the aforementioned cycle. **Thus, in the period 1880-2015, between number of cyclones (which oscillates) and CO₂ (which has increased monotonically) there is no correlation**.

The obvious conclusion is that the climate system is not sufficiently understood yet. Although it is true that CO_2 is a greenhouse gas, according to the same IPCC, the equilibrium climate sensitivity to its atmospheric increase is still extremely uncertain: it is estimated that a doubling of the atmospheric CO_2 concentration, from the preindustrial level at about 300 ppm to 600 ppm, could warm the global surface temperature from a minimum of 1°C to a maximum of 5°C. This uncertainty is enormous. In fact, many recent studies based on experimental data have estimated that the climate sensitivity to CO_2 increase is significantly lower than that estimated by the IPCC models.

Thus, it is scientifically unrealistic to attribute to anthropogenic emissions the responsibility for the warming observed from the past century to today. The proposed alarming forecasts are not credible, since they are based on models whose results contradict the experimental data. All evidentiary facts suggest that these models overestimate the anthropogenic contribution and underestimate the natural climatic variability, especially that induced by the sun, the moon, and by the oceanic oscillations

Finally, the mass media publicize the message that there would be an almost unanimous consensus among scientists in favor of the AGWT of the IPCC, therefore the scientific debate is closed. However, the scientific method requires that the facts, and not the number of adherents, make a conjecture a theory.

In any case, the same alleged consent does not exist because there is a remarkable variability of opinions among specialists — climatologists, meteorologists, geologists, geophysicists, astrophysicists — most of whom recognize the importance that natural climatic variability has had for the global warming observed since 1850 or 1950 to today. There have also been petitions signed by thousands of scientists who have expressed dissent with the conjecture of anthropogenic global warming. These include the one promoted in 2007 by the physicist F. Seitz, former president of the American National Academy of Sciences, and the one promoted by the Non-Governmental International Panel on Climate Change (NIPCC) whose 2009 report concludes that *Nature*, *not Human Activity*, *Rules the Climate*.

In conclusion, given the crucial importance that fossil fuels have for humanity as an energy supply, we suggest not to adhere to uncritical policies finalized to mitigate CO₂ emissions with the illusory pretense of ruling the climate

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