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The entire surface of our planet could have been covered by ice more than half a billion years ago  
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## [Prehistoric Ice Age Averted by Carbon Dioxide](#)

*The substance can also warm the atmosphere to a boiling point*

Carbon dioxide is now the main substance responsible for the global warming effect that our planet is experiencing, and international [efforts](#) are aimed at finding a solution to reduce its presence in our air. Few people know that CO<sub>2</sub> also saved our planet in the past. Without it, life as we know it would have been made impossible for at least a few million years. &nbsp; The Cryogenian Period, which stretched from about 840 to 635 million years ago, was one characterized by extreme cold and by the fact that most of our planet's surface was covered in ice. Analysis done on ice sheets and glaciers worldwide revealed that the cold period had the potential to cover the entire Earth, which would have meant the extinction of all life forms thus far developed.&nbsp;This would have set back evolution by many millions of years, and then, most likely, species would have evolved differently, which means that humans may have never appeared. Knowing this, researchers have been trying to understand what exactly prevented the world from freezing over, and the only plausible explanation they came up with was the influence of carbon dioxide.&nbsp;The substance was apparently synthesized from oxygen, which was forced into the oceans by lowering temperatures. More oxygen in the water oxidized the organic matter already present there and turned it into the carbon compound, which was then released in the air. More CO<sub>2</sub> meant more heat got trapped in the atmosphere, and temperatures slowly grew, until the equatorial oceans were no longer in danger of freezing.&nbsp;Of course, all these phenomena happened over millions of years, but, because they did, we can now live to fight against the very substance that, at one point, rescued our ancestors from certain death. However, we should not cross the line to the other side, by saying that the global warming we are now experiencing is just a natural cycle, as there are multiple pieces of evidence against such a reckless statement.