

Carbon dioxide and global warming, where are we?

Since 1980, environmentalists focus on global warming, heat-trapping gas and their consequences. There are links between the fool weather and pollution. But which kind of link? Direct link, causes and consequences, ... Every body knows it will do lots of damages, in a few decades but now too. With this press review, I would like to aware of the variety of carbon dioxide and global warming consequences (with the articles named: Fears over climate as Arctic ice melts at record level and Acidic oceans threaten marine food chain) and propose a solution against their effects through Steps to limit global warming gas.

1. Consequences of global warming and carbon dioxide.

The first article, named Fears over climate as Arctic ice melts at record level, was published in the Guardian at the end of September of 2005. It deals with global warming consequence on Arctic ice. It reminds that these ultimate years we record the lowest level of melting of sea ice because of the increase of temperatures. But this is not the only cause: ice melts themselves accelerate the warming because dark-coloured water absorbs less heat than white ice. The white ice has an important index of reflection so the heat is sent back to the atmosphere whereas water absorbs all the heat from the sun.

The journalist enounces the direct effects of this transformation of water state. The temperatures are 2 or 3 degrees higher than in 1955.

Then, there are four years in a row with the lowest record of ice extents; the downward trend shows us that it's not a short-term anomaly.

Beside, the famous passages, which join Canada, Asia and Europe was reduced to a 60 miles way and the Northeast Passage is ice free since August 15.

On an other part, springtime begins earlier and earlier each year and winter's recoveries are smaller and smaller.

Ultimately, the destruction of the icy spaces threats wildlife: polar bears, for instance, need wide space for their living and the ice melts is with the decrease of the number of bears.

We can remark that ice constitutes one of the main reserves of drinking water; with the ice, an expensive resource is disappearing.

In order to check the evolution of the thickness of Arctic sea ice and certificate the global warming role on its decline, a European project has been launch with a satellite monitoring.

More there is water in the ocean, more the carbon dioxide can be dissolved into. So the ice melts can have such a positive function but the second article show us that's a wrong idea.

2. Acidic oceans threaten marine food chain.

This article is taken from The Guardian; it's about the effects of carbon dioxide dissolution in the ocean on marine food chain.

The fact is that the rise of carbon dioxide in the atmosphere makes ocean water too corrosive for marine organisms. With the dissolution of carbon dioxide, water becomes so acidic. So, this phenomenon entails the dissolution of shells for finding again a balance in the reaction. For the animals, it's a real danger; it's not possible surviving in this kind of environment. And the disappearance of marine organisms have important consequences and especially for larger marine food. Really, larger marine organisms are fishes and they eat shells and little organisms. If their food disappears, they'll die in their turn. So, the main consequence is changes in the marine food chain.

Beside, if carbon dioxide is taken up by oceans, it stripped out carbonate dissolved in surface waters. So marine organisms are less available to build their shells and exoskeletons with carbonate calcium. By the year 2100, there will have a drop by 60% of carbon available for marine organisms.

Acidification would take decades to be really felt but early it would have consequences on entire ecosystems. Polar oceans' wildlife will be first to feel the brunt of rising carbon dioxide levels.

On the other hand, carbon dioxide dissolution is a good fact because it reduces this heat trapping gas and contributes in the decrease of carbon dioxide concentration in the atmosphere. Oceans absorb 4 kg of carbon dioxide each days on the 11 kg produced by an average person.

To conclude, this article spotlights only negative aspects without proposing solutions but they exist! My third article explains one of them.

3. Steps to limit global warming gas.

This article has been published in The New York Times at the end of September of 2005. An international group associated with the United Nations studies on climate changes and published a report explaining a solution to limit the effects of global warming gas. It suggests a solution based on “capturing and storing the carbon dioxide generated by power plants and factories”.

With this method, they preview a drop by 30% of the carbon dioxide concentration and would switch cleaner technologies. We can reckon that they find THE solution but while this method is cheaper than others, it would have bad effects on economy: the cost of electricity will soar and stay high during years and years. So, industries won't accept it. On the other hand it's necessary to provide the incentive by a policy because it's not economically profitable.

We know that carbon dioxide gas is the main actor in the panel of heat trapping gas. Consequently, the method is the most promising and is already used in few countries.

The next problem is: Where can we put the gas? The countries, which are using the method for «capturing and storing the gas», inject it into wells. But power plants don't grow on rock, so it's necessary to transport or pipe the carbon dioxide and that will increase the cost of the method. Moreover, we don't reckon if wells can serve as repositories for a long time and how much gas might be stored.

To conclude, the method is really promising but nowadays, fuel is too cheap and attractive to develop others renewable energies. For the moment, people is not ready to put on the first ground the environmental aspect and let the economist one on the back ground.

Conclusion

Carbon dioxide has lots of consequences on Earth. It entails global warming, it destroys marine organisms, it takes part in ice melts, it participates in making the weather fool... The last fact is the main one felt by people and against which they protest. Nobody is happy with this trend but nobody doesn't do anything. We know solutions like "capturing and storing gas" but while people think through the economical aspect we won't change our habits and use these new discoveries. The next step is change attitudes.