



'Unexpected growth' in CO2 found

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Carbon dioxide (CO2) levels in the atmosphere have risen 35% faster than expected since 2000, says a study.

International scientists found that inefficiency in the use of fossil fuels increased levels of CO2 by 17%.

The other 18% came from a decline in the natural ability of land and oceans to soak up CO2 from the atmosphere.

About half of emissions from human activity are absorbed by natural "sinks" but the efficiency of these sinks has fallen, the study suggests.

The research, published in the Proceedings of the National Academy of Sciences (PNAS), was carried out by the Global Carbon Project, the University of East Anglia, UK, and the British Antarctic Survey.

It found that improvements in the carbon intensity of the global economy have stalled since 2000, leading to an unexpected jump in atmospheric CO2.

"In addition to the growth of global population and wealth, we now know that significant contributions to the growth of atmospheric CO2 arise from the slow-down of natural sinks and the halt to improvements in the carbon intensity of wealth production," said the study's lead author, Dr Pep Canadell, executive director of the Global Carbon Project.

Global sink

The weakening of the Earth's ability to cope with greenhouse gases is thought to be a result of changing wind patterns over seas and droughts on land.

"The decline in global sink efficiency suggests that stabilisation of atmospheric CO₂ is even more difficult to achieve than previously thought," said report co-author Dr Corinne Le Quere of the British Antarctic Survey.

"We found that nearly half of the decline in the efficiency of the ocean CO₂ sink is due to the intensification of the winds in the Southern Ocean."

The declining power of the seas to soak up industrial pollution is not only being recorded in the southern hemisphere, however.

According to a separate 10-year study published recently, the effect is also being seen in the North Atlantic.

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