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What You Can Do About the Negative Effects of Methane

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What You Can Do About the Negative Effects of Methane

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ABSTRACT

Our central objective was to investigate the apparent rise in methane emissions and whether or not they are having a negative effect on the environment. By themselves, methane emissions are natural and self-regulating (and thus do not cause damage to the atmosphere), but our thesis is that a build up of methane emissions as a result of increased human activity/negligence poses a threat to the environment, and needs to be addressed in the quest to live sustainably.

INTRODUCTION

- Methane has an indirect effect on climate through chemical feedbacks
- Natural processes in soil and chemical reactions in the atmosphere help remove CH$_4$ from the atmosphere.
- Given that gas is often found alongside petroleum, the production, refinement, transportation, and storage of crude oil is also a source of CH$_4$ emissions.
- More than 50% of present-day global methane emissions are anthropogenic; the largest contributors being fossil fuel production, ruminants, rice cultivation, and waste handling.
- Rising methane concentrations can cause increases in ozone and stratospheric water vapor concentrations.
- A molecule of methane is far more effective than a molecule of carbon dioxide in absorbing and radiating energy back to Earth.
- The estimated 1% annual increase in global methane is mainly attributed to human activities
- Methane concentrations have increased dramatically in the 20th century as a result of human activities, including fossil fuel use and agriculture.

REFERENCES


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