

The Occurrence of Methane in Marine and Freshwater Ecosystems and its Impact on Climate Change

Abstract

Actual effort to understand the global change encourage scientists to get more data and expert knowledge about this worldwide problem. As a hydrosphere occupies almost two thirds of the Earth surface, it becomes an important part of current research. Greenhouse gases are slowly leaking from marine and freshwater ecosystems, and so I have decided to completely understand the potential risk of escaping methane – an efficient greenhouse gas – from aquatic ecosystems. The purpose of such a research is to ascertain how important, hazardous and distant is sudden methane release danger. Whether the ocean reserves threaten our population and if there are other similar methane sources closer to us. This question follows the immense concern and focus on CO₂ emissions. According to the following text, seriousness of methane release situation is equally substantial. Not only, that CH₄ is twenty times more powerful greenhouse gas than CO₂. It is furthermore an abundant component of our planet's habitats, hidden in the oceans and freshwater reservoirs. As my research shows, there are two main difficulties brought with methane emissions. First, it is a permanent and increasing leakage of methane gases from freshwater ecosystems. Second, there is a potential peril of a sudden massive release of methane from deep ocean stores. Each case brings a significant risk on a global scale, besides, both have a positive effect on global warming. While comparing several aquatic habitats, such as oceans, lakes, rivers and streams, I discovered the magnitude and importance of methane emission issues. Nevertheless, despite the global warming theme is becoming more relevant and alarming, there is still a lack of information and scarcity of relevant data from methane release. Every crucial article or scientific paper point out to this plain gaps and warn against the immense impact that lack of knowledge can bring.