

NATURAL GAS IN MARINE ENVIRONMENT OF THE BLACK SEA AND ITS EFFECT ON CLIMATE CHANGE

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For almost 30 years serious interest has been directed toward natural gas as a potential energy and factor in global climate change. The principal sources of natural gas in marine environment are the transformations of organic matter in the earth's crust, microbial decomposition of organic substances and reduction of mineral salts. Besides the previously mentioned sources, gas hydrates are another extremely promising source of gas hydrocarbons on the sea bottom. The components commonly found in natural gas released from marine environment of the Black Sea are methane and its homologues, carbon dioxide, hydrogen sulfide, nitrogen, and also helium. From these gases, carbon dioxide and methane are highly potent greenhouse gases. Their emission appeared to be linked to climate changes and species extinction both in the ocean and on continental margins. To the extent possible, this paper constitutes a review on investigated deposits of natural gas from Black Sea and its effect on climate change from this area. An instantaneous release of natural gas could have an impact on atmospheric composition and thus on the radioactive properties of the atmosphere that affect global climate.