

**MUD VOLCANOES: CONTRIBUTIONS TO
ATMOSPHERIC GASES AND SIGNIFICANCE
FOR GLOBAL CLIMATE CHANGE**

Judd Alan

Applied Geology, University of Sunderland, Sunderland, UK

E-mail: alan.judd@sunderland.ac.uk

Mud volcanoes are distributed widely around the world, both on land and offshore. Emissions and eruptions are accompanied by the release of large volumes of gases – mainly methane and carbon dioxide. As these are two of the most important Greenhouse Gases, it is important that gas emissions from mud volcanoes are quantified and considered in the context of the budgets of these atmospheric gases compiled by (amongst others) the Intergovernmental Panel for Climate Change (IPCC).

In this paper previous estimates of mud volcano gas methane and CO₂ emissions will be reviewed, and compared to other documented sources (natural and anthropogenic) so that their significance as an agent for global climate change, today and during the geological past, can be assessed.