



Global Assessment of Methane Gas Hydrates: Outreach for the public and policy makers

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The United Nations Environment Programme (UNEP), via its official collaborating center in Norway, GRID-Arendal, is in the process of implementing a Global Assessment of Methane Gas Hydrates. Global reservoirs of methane gas have long been the topic of scientific discussion both in the realm of environmental issues such as natural forces of climate change and as a potential energy resource for economic development. Of particular interest are the volumes of methane locked away in frozen molecules known as clathrates or hydrates. Our rapidly evolving scientific knowledge and technological development related to methane hydrates makes these formations increasingly prospective to economic development. In addition, global demand for energy continues, and will continue to outpace supply for the foreseeable future, resulting in pressure to expand development activities, with associated concerns about environmental and social impacts. Understanding the intricate links between methane hydrates and 1) natural and anthropogenic contributions to climate change, 2) their role in the carbon cycle (e.g. ocean chemistry) and 3) the environmental and socio-economic impacts of extraction, are key factors in making good decisions that promote sustainable development.

As policy makers, environmental organizations and private sector interests seek to forward their respective agendas which tend to be weighted towards applied research, there is a clear and imminent need for an authoritative source of accessible information on various topics related to methane gas hydrates. The 2008 United Nations Environment Programme Annual Report highlighted methane from the Arctic as an emerging challenge with respect to climate change and other environmental issues. Building upon this foundation, UNEP/GRID-Arendal, in conjunction with experts from national hydrates research groups from Canada, the US, Japan, Germany, Norway, India and Korea, aims to provide a multi-thematic overview of the key aspects of the current methane hydrate debate for both the land-based Arctic deposits and those in the marine environment.

The Global Assessment of Methane Gas Hydrates will consist in:

1. An electronic publication (e-book) which would have the advantages over a printed publication of broad exposure and ease of distribution, as well as being easier to update. This medium allows for dynamic graphics, interactive figures and multimedia content. An example e-book produced by UNEP/GRID-Arendal can be viewed at www.grida.no/publications/vg/kick/ebook.aspx .
2. A limited printing of a hardcopy version is also proposed, for distribution to policy makers and to targeted stakeholders.
3. A dedicated hydrates web portal containing the latest scientific research results in a format accessible to decision makers, the general public and the media. Versatile web applications, interactive, dynamic visualization tools and dedicated evolving indicators are all tools proposed to be included in the portal. This tool is planned to allow for research scientists to update outputs with new data and is meant as a long term repository of scientific knowledge of global methane gas hydrates.