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Summaries""; ""Appendix G Projects Funded by DOE Under the Methane Hydrate Research and Development Program""
""Appendix H Letters from the Methane Hydrate Advisory Committee (2001 and 2002) to Department of Energy Secretary Spencer Abraham""""Appendix I Membership of the Interagency Coordinating Committee and the Technical Coordinating Team""; ""COLOR PLATES""

Sommario/riassunto

Methane hydrate is a natural form of clathrate - a chemical substance in which one molecule forms a lattice around a "guest" molecule with chemical bonding. In this clathrate, the guest molecule is methane and the lattice is formed by water to form an ice-like solid. Methane hydrate has become the focus of international attention because of the vast potential for human use worldwide. If methane can be produced from hydrate, a reasonable assumption given that there are no obvious technical or engineering roadblocks to commercial production, the nation's natural gas energy supply could be extended for many years to come. This report reviews the Department of Energy's (DOE) Methane Hydrate Research and Development Program, the project selection process, and projects funded to date. It makes recommendations on how the DOE program could be improved. Key recommendations include focusing DOE program emphasis and research in 7 priority areas; incorporating greater scientific oversight in the selection, initiation, monitoring, and assessment of major projects funded by the DOE; strengthening DOE's contribution to education and training through funding of fellowships, and providing project applicants with a set of instructions and guidelines outlining requirements for timely and full disclosure of project results and consequences of noncompliance.
