

# Analyzing the Potential of Gas Hydrates

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## Abstracts

A gas hydrate is a crystalline solid; its building blocks consist of a gas molecule surrounded by a cage of water molecules. Thus it is similar to ice, except that the crystalline structure is stabilized by the guest gas molecule within the cage of water molecules. Many gases have molecular sizes suitable to form hydrate, including such naturally occurring gases as carbon dioxide, hydrogen sulfide, and several low-carbon-number hydrocarbons, but most marine gas hydrates that have been analyzed are methane hydrates.

Aruvian's R'search analyzes this highly lucrative industry in its research report – Analyzing the Potential of Gas Hydrates. The report begins with a basic analysis of natural gas and goes on to analyze the potential of hydrocarbons and gas hydrates. The compact structure of a basic hydrate unit, how to look for hydrates at sea, role of the Hydrate Stability Zone, environmental impact of gas hydrates, and hazards associated with hydrates are all explored within this report.

Exploiting the resource of methane hydrates, understanding the rock physics model, how methane is produced from gas hydrates and many other points are covered in this report. The current gas hydrate programs and budgets involving methane hydrate is also discussed in Aruvian's offering.

With the growing demand for energy, gas hydrates have fast emerged as an attractive option for this energy-hungry world. Aruvian's R'search's report Analyzing the Potential of Gas Hydrates is a step towards researching this industry.

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