



The Catalyst Group Resources

(a member of The Catalyst Group)

Gwynedd Office Park P.O. Box 680 Spring House, PA 19477 Phone: 215-628-4447 Fax: 215-628-2267
E-mail: tgr@catalystgrp.com Web Site: www.catalystgrp.com

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Coal: A Resource Not To Be Ignored

Study Abstract

Coal is the most abundant, widely dispersed non-renewable hydrocarbon resource on earth, with at least 2 trillion to 909 billion mt in reserves worldwide, consuming 4.8 billion mt/yr, with over 150+ years of life as defined today. It is the primary fuel for electricity generation (54% in the U.S. and 39% globally) and the most affordable hydrocarbon resource.

Despite its abundance and relative low-cost, the world seems to have embraced the concept that biomass is the economical answer to the energy crisis. Regardless of the press, government legislation and incentives, this is not an entire solution! *There are many solutions and opportunities to resolve the “energy crisis” and to address energy security factors involving indigenous resources on a regional basis. Moreover, there are additional environmentally friendly, economic alternative energy and fuels opportunities to evaluate which just make good corporate investment sense.*

TCGR’s study, ***Unconventional Coal Conversion: Technology Development & Commercial Progress***, will investigate, document and explore unconventional advanced coal technologies which: broaden the resource base and improve feedstock efficiency and utilization that ultimately lead to reduced overall cost(s) for the production of power, fuels and chemicals.

A sample of the advanced coal technology developments to be covered include:

- Advanced Biomass Co-firing
- Coal Bed Methane (CBM) and Coal and Abandoned Mine Methane (CMM / AMM)
- Enhanced CBM-CO₂ Sequestration
- Coal-to-Liquids (CTL)
- Coal Liquefaction – Direct and Indirect; and
- Underground Coal Gasification (UCG)

It is clear that energy and chemical companies need to take a more pragmatic view of the rhetoric being promoted today. Moreover, with sound investment(s), each company can escape the confusion and profit by looking to resources like TCGR who will report the facts about the energy demands, the new technologies available and the different paths towards the solutions for the future. For coal, the

challenge is how to best utilize this resource as part of the energy mix and make it environmentally friendly at the same time.

The study is available in printed format as well as electronically (as a PDF file), allowing unlimited use/distribution of the report on a site-license basis. For more information, see our website at <http://www.catalystgrp.com/unconventionalcoalconversion.html> or contact Jeanne Drahos (jmd@catalystgrp.com) or John J. Murphy (jjm@catalystgrp.com) at 215-628-4447.

The Catalyst Group Resources (TCGR), a member of The Catalyst Group, is dedicated to monitoring and analyzing technical and commercial developments in catalysis as they apply to the global refining, petrochemical, fine/specialty chemical, pharmaceutical, polymer/elastomer and environmental industries. The Catalyst Group Resources' assessment is based on information obtained from the public domain as well as internal sources and industry interviews. TCGR's analysis will report factual information, as well as hypotheses/interpretations based on this information, in order to derive a reasonable set of expectations. Factors could cause actual results to differ from our forward-looking statements and The Catalyst Group Resources undertakes no obligation to publicly revise these forward-looking statements to reflect events or circumstances after the date hereof.