

The Future of Global Shale Gas Development: Will Industry Earn the Social License to Operate?

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I. Introduction

By most accounts, the vast shale gas reserves found throughout the world offer an unprecedented opportunity to meet growing energy demand in a cleaner and more sustainable manner. While the economic and energy security benefits of shale gas development could be substantial for many countries, the evolving environmental, social and regulatory responses to shale gas development continue to challenge the industry. As shale gas development continues to go global, there is likely to be continued scrutiny of how industry and governments are responding to the concerns raised.

While there is a widely held view within the industry that shale gas resources can be developed in a safe and environmentally sound manner, the public and policy leaders in many regions remain skeptical. Since shale gas development is a global opportunity, there is a growing need to coordinate and share lessons learned and best practices on a global scale to ensure that the opportunity is not just limited to some areas of the world.

II. Analysis – What your paper will discuss

A. Environmental and Economic Implications of Shale Gas Development

As a clean-burning fuel, many business and policy leaders have begun to look to natural gas to meet growing energy demand using more environmentally sustainable fuels. In most countries, however, the “case for gas” is just being developed with policy makers weighing a number of “shale gas drivers” including energy security, diversity of supply, lowering energy costs, emissions and a host of other reasons.

More recently, increased focus has been placed on the potential economic benefits of shale gas development. Several recent studies have concluded that against the background of a historically slow economic recovery and persistently high unemployment, the increased spending associated with shale gas development throughout the United States has been an important engine for jobs creation and economic recovery.

B. Earning the “Social License to Operate”

In order for shale gas to reach its global potential, industry must “earn and maintain a social license to operate.” This will require a commitment on the part of governments, industry and stakeholders to engage with local communities to address the environmental and social impacts of shale gas development. A key requirement is the development of a successful regulatory framework that mitigates adverse impacts by providing clear rules and regulations to encourage investment while protecting public safety and environment.

Many countries, including the United States are in the process of developing or adjusting their regulatory frameworks to address the numerous issues and challenges that have been raised pertaining to shale gas development. As such, it is increasingly becoming important to understand what the legitimate environmental risks are and how regulations might mitigate those risks. This analysis is complicated by the inherent complexities in oil and gas law but also by the multitude of studies that have been released in the past few years that have served to increase our knowledge about the potential risks, but has also served to increase the sheer volume of information that governments and stakeholders must analyze.

Thus far, the most serious risks related to shale gas development center around the following issues, which will be addressed in detail in the full paper:

1. The water lifecycle - from water acquisition to disposal;
2. The risk of water contamination and well integrity issues;
3. Disclosure of chemicals used in hydraulic fracturing fluids;
4. Induced seismicity (earthquakes); and
5. Emissions from shale gas production.

III. Conclusion

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Some of this work is already underway with the IEA recently announcing the creation of an Unconventional Gas Forum to address key environmental issues and share insights on operational best practices from around the world. In the meantime, it remains to be seen whether global shale gas will be a “revolution” like it was in the United States, or more of an “evolution” as countries assess their resources, the environmental issues and their regulatory frameworks.