

# Global Tight Gas Market 2013-2023 - The Underappreciated Predecessor of Shale Gas

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## Abstracts

Tight gas development is, from a variety of viewpoints, an underappreciated component of the unconventional oil and gas industry. Like shale, this unconventional resource will enjoy double-digit percentage point growth in E&P capital expenditure over the next 5 years. Large-scale production is limited to North America and China, a situation that will have changed by 2023. Visiongain has determined that the value of capital expenditure on Tight Gas E&P efforts will reach \$8,718.9m in 2013.

Not until 2011 did shale gas production overtake the contribution of tight gas to US domestic natural gas supply. Without the development of the tight gas industry - now decades old - drilling and completion techniques capable of extracting gas from shale formations would not have evolved.

However, the tight gas industry is only a notable part of the natural gas supply picture in North America and China. The entrance of China is a recent development, but is the most important for future spending on tight gas E&P efforts. Shale gas and coalbed methane production are far lower than is desired and ambitious targets for domestic natural gas production, set by the Chinese government, will need to be met with ever-increasing volumes of tight gas.

Argentina and Oman help to buttress this capital expenditure, whilst market spaces such as Europe and Australia are delayed by an inability to access any economy of scale. Indeed, a high cost drilling and completion environment, combined with environmental opposition to hydraulic fracturing, create barriers to tight gas E&P that prevent capital deployment. Further limitations include artificially low natural gas prices and the depressed hub prices of North America.

Liquids-rich tight gas formations have become crucial to project economics, especially in North America. Aside from rig efficiency gains and E&P targeting liquids-rich plays, tight gas developers in this region will, in the long-term, rely on the ability to access export markets via LNG.

Despite limitations, mostly as a result of gas prices or drilling and completion cost, the overall picture for tight gas is positive. Plentiful reserves, a growing global natural gas market and extensive experience born from decades of North American development are just some of the factors that enable capital expenditure expansion over the next 10 years.

### **What makes this report unique?**

Visiongain consulted widely with industry experts and full transcripts from these exclusive interviews are included in the report. As such, the report has a unique blend of primary and secondary sources providing informed opinion. The report provides insight into key the drivers for, and restraints on, tight gas E&P capital expenditure. It also identifies future growth areas, analyses leading companies and provides a unique blend of qualitative analysis combined with extensive quantitative data, including global and regional market forecasts from 2013-2023 - all highlighting key business opportunities.

### **Why you should buy the Global Tight Gas Market 2013-2023: The Underappreciated Predecessor of Shale Gas**

171 pages of comprehensive analysis

3 Exclusive Visiongain interviews with:

Alan Flavelle, Executive Chairman at Greenpower Energy.

Viktor Soreg, Director of Exploration Portfolio Management for the Eurasian region at MOL Group.

Stephen Keenihan, Chief Executive Officer, Managing Director and Executive Director of Transerv Energy.

100 tables, charts, figures, maps and graphs

Tight Gas E&P CAPEX forecasts between 2013-2023 globally and for five

leading national markets

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Canada,

China,

Oman

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## About

Alan Flavelle is Executive Chairman at Greenpower Energy Ltd and a veteran of the oil and gas industry. Since the early 1960s he has been involved as a petroleum geophysicist in the exploration and production of oil and gas resources around the globe and has worked at the management and board level of the industry since the 1980s. With particular expertise in coalbed methane and tight gas he has spent time in a wide variety of countries and worked for some of the largest integrated oil and gas companies, such as Chevron. He is Fellow of the Australasian Institute of Mining and Metallurgy and holds a degree in Physics with sub majors in Mathematics and Geology from the University of Western Australia. Visiongain interviewed Mr. Flavelle in July 2013 and would like to thank him for his extensive and invaluable remarks.

Greenpower Energy Limited (ASX:GPP) is a publicly traded Australian energy company aimed at monetising coal and natural gas assets in Western Australia in an environmentally friendly way. The company is currently focussed on harnessing a CTL solution to monetise its coal assets, but also holds tight gas acreage in the Perth basin.

Visiongain: Briefly describe the work of Greenpower Energy and your involvement in the development of tight gas.

Alan Flavelle: We have some acreage in the Perth Basin that we think is pretty good. Our company has a joint venture on that acreage with a small American company who are the operators. Through a very strange set of circumstances our main activity is in something different, but is also in the energy field. We are developing a process invented by General Electric (GE) for converting coal to transport fuels in a responsible, environmental way. This is something entirely different to Fisher-Tropsch. It is the ingenuity of the GE laboratories in the US that has thrown this up and they were very interested in pursuing it; we have taken it on and they are doing a lot of trials on our coal in their laboratory in New York. That's our main activity and we regard our acreage in the Perth basin – which we like very much – as a peripheral. The farming out of this reflects our position toward it. Nonetheless, as a petroleum geophysicist, I do have quite a bit of experience in tight gas over the years.

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