

The financing of shale gas activities

A research paper prepared for Friends of the Earth Europe



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RESEARCH & ADVICE

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Jan Willem van Gelder
Mandana Golestani
Joeri de Wilde



Naritaweg 10
1043 BX Amsterdam
The Netherlands
Tel: +31-20-8208320
E-mail: profundo@profundo.nl
Website: www.profundo.nl

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Summary

The objective of this research project is to identify shareholders and other financiers of companies engaged in shale gas developments in Europe, Argentina and South Africa that can (potentially) be pushed to move their money out of that sector. The research project focuses on the past three years (since early 2010). This analysis was conducted by order of Friends of the Earth Europe. The selected companies engaging in shale gas activities are:

- | | |
|---|---------------------|
| • 3Legs Resources | United Kingdom |
| • BNK Petroleum | United States |
| • Chevron | United States |
| • Cuadrilla Resources | United Kingdom |
| • Dart Energy | Singapore/Australia |
| • Hutton Energy | United Kingdom |
| • Marathon Oil | United States |
| • PGNiG | Poland |
| • PKN Orlen | Poland |
| • Repsol | Spain |
| • Royal Dutch Shell | Netherlands |
| • San Leon Energy | Ireland |
| • Sasol | South Africa |
| • Statoil | Norway |
| • Talisman Energy | Canada |
| • Total | France |
| • Yacimientos Petroliferos Fiscales (YPF) | Argentina |

Financial institutions can be involved in the financing of the selected companies by providing corporate loans, by assisting companies with share- and bond issuances, and by (managing) investments in shares and bonds of these companies. To classify which financial institutions are playing an important role in the financing of the selected companies, the importance of the financiers is ranked high (H), moderate (M) or low (L).

Highly important financial institutions for at least one selected shale gas company summarizes the results of the analysis and shows the financial institutions which were highly important financiers for at least one of the selected shale gas companies.

Table 1 Highly important financial institutions for at least one selected shale gas company

Financial institution	Country	3	B	C	C	D	H	M	P	P	R	R	S	S	S	T	T	Y
		L	N	h	u	a	u	a	G	K	e	o	a	a	t	a	t	P
		e	K	e	a	r	t	r	N	N	p	y	n	s	a	t	a	F
		g	P	r	r	t	t	o	G	O	s	a	l	l	o	i	s	
		s	e	r	i	E	n	h		r	l	D	L	i	m	a	l	
		R	t	n	l	n	e	n		i		o						
		e	r		a	e	E			e	D							
		s	o		r	g	r	O		n	u	E						
		s	l		e	y	g	i		n	t	n						
			u		R						c	E						
			e		e						h	n						
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Financial institution	Country	3	B	C	C	D	H	M	P	P	R	R	S	S	S	T	T	Y																																																								
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		e	K	e	a	r	t	r	N	N	p	y	n	s	t	t		F																																																								
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		s	e	r	i	E	n	h	G	r	o	l	l	l	l	l																																																										
		R	r	o	l	n	e	o	O	e	D	L																																																														
		e	e	l	a	e	r	n	i	u	e	e																																																														
		s	s	e	R	n	g	o				o	u	e	e	y	i		t	n										r	m	s	s					c		o	o					e		u	u					s		r	r							c	e							e	s	
			o	u	e	e	y	i		t	n																																																															
			r	m	s	s					c		o	o					e		u	u					s		r	r							c	e							e	s																												
			c		o	o					e		u	u					s		r	r							c	e							e	s																																				
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			s		r	r							c	e							e	s																																																				
					c	e							e	s																																																												
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Erste Group	Austria	-	-	-	-	-	-	-	-	H	-	-	-	-	-	-	-	-																																																								
Government of Norway	Norway	-	-	-	-	-	-	-	-	-	-	-	-	-	H	-	-	-																																																								
Grupo Petersen	Argentina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	H																																																								
ING	Netherlands	-	-	-	-	-	-	L	M	H	L	-	-	L	L	-	L	-																																																								

Financial institution	Country	3	B	C	C	D	H	M	P	P	R	R	S	S	S	T	T	Y
		L	N	h	u	a	u	a	G	K	e	a	a	a	a	a	a	P
		e	K	e	a	r	t	r	N	N	p	o	n	s	t	t	F	
		g	P	v	r	t	o	a	i	O	s	l	L	o	a	a		
		s	e	r	i	E	n	t	G	r	o	D	e	i	i	s		
		R	r	o	l													
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		s	o	e	R													
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Jefferies	United States	H	-	-	-	-	-	-	-	-	-	-	M	-	-	-	-	-
JP Morgan	United States	M	-	L	-	-	-	H	-	-	L	L	-	M	M	M	L	-
Kerogen Capital	Hong Kong	-	-	-	H	-	-	-	-	-	-	-	-	-	-	-	-	-
La Caixa Group	Spain	-	-	-	-	-	-	-	-	-	H	-	-	-	-	-	-	-

Financial institution	Country	3	B	C	C	D	H	M	P	P	R	R	S	S	S	T	T	Y
		L	N	h	u	a	u	a	G	K	e	o	a	a	a	a	a	P
		e	K	e	a	r	t	r										
		g																
Macquarie Group	Australia	-	H	-	-	-	H	M	-	-	-	-	H	-	-	-	-	-
Mitsubishi UFJ Financial Group	Japan	-	-	L	-	-	-	L	-	H	-	L	-	-	-	-	-	-
Morgan Stanley	United States	-	-	L	-	-	-	H	-	-	L	L	-	-	-	-	M	M
National Government	Argentina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	H

Introduction

The objective of this research project is to identify shareholders and other financiers of companies engaged in shale gas developments in Europe, Argentina and South Africa that can (potentially) be pushed to move their money out of that sector. The research project focuses on the past three years (since early 2010). Friends of the Earth Europe selected the following companies engaged in shale gas activities:

• 3Legs Resources	United Kingdom
• BNK Petroleum	United States
• Chevron	United States
• Cuadrilla Resources	United Kingdom
• Dart Energy	Singapore/Australia
• Hutton Energy	United Kingdom
• Marathon Oil	United States
• PGNiG	Poland
• PKN Orlen	Poland
• Repsol	Spain
• Royal Dutch Shell	Netherlands
• San Leon Energy	Ireland
• Sasol	South Africa
• Statoil	Norway
• Talisman Energy	Canada
• Total	France
• Yacimientos Petroliferos Fiscales (YPF)	Argentina

This report is organised as follows: Methodology presents the methodology. The subsequent chapters summarise the involvement of financiers in the selected companies. For each company, the involvement with respect to bond- and shareholders, underwriting of shares and bonds and providing loans is researched. An analysis is made of the importance of each financier of the companies.

A summary can be found on the first pages of this report.

Methodology

1. Objective

The objective of this research project is to analyse the financiers of a selection of oil and gas companies since early 2010. The selected companies are exploring and developing shale gas reserves mainly in Europe, the United States, Argentina, Australia and South-Africa.

2. Selected companies

The following companies, including all their subsidiaries, are included:

• 3Legs Resources	United Kingdom
• BNK Petroleum	United States
• Chevron	United States
• Cuadrilla Resources	United Kingdom
• Dart Energy	Singapore/Australia
• Hutton Energy	United Kingdom
• Marathon Oil	United States
• PGNiG	Poland
• PKN Orlen	Poland
• Repsol	Spain
• Royal Dutch Shell	Netherlands
• San Leon Energy	Ireland
• Sasol	South Africa
• Statoil	Norway
• Talisman Energy	Canada
• Total	France
• Yacimientos Petroliferos Fiscales (YPF)	Argentina

This list of companies was compiled by Friends of the Earth Europe.

3. Types of finance

The financiers can be involved in the financing of the two selected companies by providing corporate loans, by assisting companies with share- and bond issuances, and by (managing) investments in shares and bonds of these companies. Below, these financing categories are discussed in more detail:

Corporate loans: The easiest way to obtain debt is to borrow money. In most cases, money is borrowed from commercial banks. Loans can be either short-term or long-term in nature. Short-term loans (including trade credits, current accounts, leasing agreements, et cetera) have a maturity of less than a year. They are mostly used as working capital for day-to-day operations. Short-term debts are often provided by a single commercial bank, which does not ask for substantial guarantees from the company.

A long-term loan has a maturity of at least one year, but generally of three to ten years. Long-term corporate loans are in particular useful to finance expansion plans, which only generate rewards after some period of time. The proceeds of corporate loans can be used for all activities of the company. Often long-term loans are extended by a loan syndicate, which is a group of banks brought together by one or more arranging banks. The loan syndicate will only undersign the loan agreement if the company can provide certain guarantees that interest and repayments on the loan will be fulfilled.

Share issuances: Issuing shares on the stock exchange gives a company the opportunity to increase its equity by attracting a large number of new shareholders or increase the equity from its existing shareholders. These shareholders can be private investors as well as institutional investors.

When it's the first time a company offers its shares on the stock exchange, this is called an Initial Public Offering (IPO). When a company's shares are already traded on the stock exchange, this is called a secondary offering of additional shares.

To arrange an IPO or a secondary offering, a company needs the assistance of one or more (investment) banks, which will promote the shares and find shareholders. The role of investment banks in this process therefore is very important.

Bond issuances: Issuing bonds can best be described as cutting a large loan into small pieces, and selling each piece separately. Bonds are issued on a large scale by governments, but also by corporations. Like shares, bonds are traded on the stock exchange. Bonds are sold on the capital market, to private investors as well as institutional investors. Banks rarely buy any bonds. But to issue bonds, a company needs the assistance of one or more (investment) banks which underwrite a certain amount of the bonds. Underwriting is in effect buying with the intention of selling to investors. Still, in case the investment bank fails to sell all bonds it has underwritten, it will end up owning the bonds.

(Managing) investments in shares: Financial institutions can, through the funds they are managing, buy shares of a certain company. This provides the company with new equity, and gives the financial institution a direct influence on the company's strategy. The magnitude of this influence depends on the size of the shareholding.

In this report we list the largest institutional shareholders of each company, generally the ones owning more than 0.25% of the company's shares. As these institutional shareholders are usually asset managers which manage shareholdings on behalf of a number of private investors, pension funds and other institutional shareholders, we also provide a separate list of shareholdings of big international pension funds in these companies. These lists are not complete, as they are dependent on the level of transparency of the pension funds.

(Managing) investments in bonds: Like shares, financial institutions and private investors can buy bonds of a certain company. The main difference between owning shares and bonds is that owner of a bond is not a co-owner of the issuing company; the owner is a creditor of the company. The buyer of each bond is entitled to repayment after a certain number of years, and to a certain interest during each of these years.

In this report we list bondholders as far as information is available, which is mainly limited to bonds owned by American insurance companies (including American subsidiaries of foreign insurance companies).

For loans and underwritings of shares or bonds, all deals since 1 January 2010 were researched. If the amount committed or underwritten per financial institution is unknown, it is estimated by using the following rule of thumb:

In the case of loans (corporate loans or revolving credit facilities), 40% of the total amount is committed by bookrunners and 60% by other participants of the syndicate. If, however, the amount of bookrunners is (almost) equal to, or higher than, the amount of participants, the reverse is used: 60% for the bookrunners and 40% for the arrangers.

In the case of share- and bond issuances, 75% of the total amount is committed by bookrunners and 25% by other participants of the syndicate. The amount provided by bookrunners should always be higher than the amount provided by participants.

In the case of share and bondholdings, the amounts are always known, so no estimate was needed.

For share and bondholdings the most recent figures are listed. In the case of shareholdings, some companies have two types of shares: ordinary shares and Depository Receipts (DRs). DRs are shares which are traded on a local stock exchange but represent a foreign company's publicly traded shares. One of the most common types of DRs is the American Depository Receipt (ADR), which represents a specific number of shares of a foreign stock traded on a U.S. stock exchange. If companies have two types of shares, we added the value of both types of shares.

In the summary of the report, a table is included summarising all financial relationships between the selected financial institutions and companies.

Assessing the importance of financial institutions

This report aims to define which financial institutions are playing an important role in the financing of the selected companies involved in shale gas operations. To assess how important the role of each financial institution is in the financing of the specific companies since early 2010, we will take the following approach:

- The financial importance of shareholdings is assessed separately, as risk-taking capital is more valuable for a company. We assess the financial importance of shareholdings as follows:
 - *high* a shareholding of 10% or more;
 - *moderate* a shareholding between 1% and 10%;
 - *low* a shareholding below 1%.
- To assess the financial importance of other financial services, we relate the capital provided by the financial service to the total assets of the company. We will call the financial importance of the service:
 - *high* if the capital provided amounts to more than 10% of the total assets of the company;
 - *moderate* if the capital provided amounts to more than 1% of the total assets of the company, but less than 10%;
 - *low* if the capital provided amounts to less than 1% of the total assets of the company.

Regarding the application of this criterion, we make the following remarks:

- If the financial service is provided at the holding level, we relate the capital provided to the total assets of the holding company. If the financial service is provided to a specific subsidiary, we relate the capital provided to the total assets of this subsidiary.

- If the equity of the company is negative, we relate the capital provided to the total debt instead of to the total assets;
- With regard to a syndicated loan, we will look at the part of the loan provided by each individual bank. But for the arranging banks (the syndicate leaders), we will look at the total value of the syndicated loan;
- With regard to a share or bond issuance, we will look at the amount underwritten by each individual bank. But for the arranging banks, we will look at the total value of the issuance;
- With regard to the bank managing a debt restructuring process, we will look at the total amount of debt which is being restructured.

PGNiG

Company profile

PGNiG SA is the leader of the Polish natural gas market, as well as the only vertically integrated gas company in Poland. Its parent undertaking is Polskie Górnictwo Naftowe i Gazownictwo. As at September 30th 2012, the PGNiG Capital Group comprised PGNiG SA, as the parent undertaking, and 46 production and service companies, including 25 subsidiaries of PGNiG SA and 21 indirect subsidiaries of PGNiG SA. The group is engaged in all upstream and downstream operations of gaseous fuels. The roots of the companies forming PGNiG date back to the 19th century, to the beginnings of Polish and world oil industry. The company has been operating under the name PGNiG since 1982. In 1996, the state-owned company PGNiG was transformed into a joint stock company. On September 23rd 2005, PGNiG floated its shares on the Warsaw Stock Exchange, in the largest public offering in 2005. The Company's main shareholder on debut day was the State Treasury, which held 84.75% of the shares. Starting from April 3rd 2009 PGNiG started a process of free of charge shares distribution to its employees (750,000,000 shares).¹

In 2008 PGNiG has started two important investment projects: develop the Lubiatów-Międzychód-Grotów field (LMG field) and expansion of Wierzchowice underground gas storage facility.² Potential shale gas reserves in Poland are present in Silurian/Ordovician formations of the petroleum basin stretching from Pomorze Gdańskie in the north all the way down to the south-eastern part of the Lublin province. As part of its shale-gas exploration and appraisal programme, PGNiG has acquired licences covering 15 areas located within the most prospective Silurian/Ordovician shale formations belt. This total area covers 12,763 km². In February 2013, PGNiG reported its first, but delayed, horizontal fracturing well probing a shale gas prospect on the Baltic Sea coast.³

PGNiG and companies in the PGNiG Capital Group are responsible for:

- gas and crude oil production
- gas and crude oil fields development in Poland and abroad
- geological, geophysical and exploration services in Poland and abroad
- gas import to Poland
- storage of gas in underground gas storage facilities
- distribution of gas fuel.

Financial structure

At the end of December 2011 PGNiG owned total assets of PLN 37,964 million (€ 8,557 million). These assets were financed by the following financial stakeholders:⁴

Shareholders	€ 5,520.0 million	64.5%
Joint-venture partners	€ 1.5 million	0.0%
Bondholders	€ 742.4 million	8.7%
Banks	€ 384.4 million	4.5%
Others (including taxes, provisions, etc.)	€ 1,908.7 million	22.3%

Especially the shareholders are very important financial stakeholders of PGNiG. The company has both bondholders and outstanding bank loans.

The following paragraphs discuss the different groups of financial stakeholders in more detail. All financial relationships since early 2010 are analysed.

Share issuances

PGNiG did not issue new shares since early 2010.

Shareholders

PGNiG is listed on the Warsaw Stock Exchange.

Largest institutional shareholders of PGNiG shows the largest institutional shareholders of PGNiG owning at least 0.25% of the shares (except for pension funds), while Pension funds holding shares in PGNiG lists the pension funds owning shares in PGNiG. Together, these shareholders own or manage 81.57% of the shares of PGNiG. The total value of these shareholdings is € 6.2 billion.

Table 2 Largest institutional shareholders of PGNiG

Investor	Country	# of shares	% all shares	Value (€ mln)	Filing date
State Treasury of the Republic of Poland	Poland	4,271,911,724	72.41	5,626.0	31 Jan 2013
Aviva	United Kingdom	98,110,443	1.66	90.55	31 Dec 2011
ING	Netherlands	95,305,840	1.61	89.11	31 Dec 2011

Investor	Country	# of shares	% all shares	Value (€ mln)	Filing date
Powszechny Zakład Ubezpieczeń Spółka Akcyjna	Poland	84,146,223	1.43	82.99	30 Jun 2012
BlackRock	United States	69,151,317	1.20	88.95	31 Dec 2012
Vanguard Group	United States	48,176,939	0.82	61.62	31 Dec 2012
AXA	France	46,513,548	0.79	46.31	29 Jun 2012
Amplico Powszechne Towarzystwo Emerytalne	Poland	35,211,627	0.60	32.25	30 Dec 2011

Investor	Country	# of shares	% all shares	Value (€ mln)	Filing date
Nordea Bank	Sweden	17,681,123	0.30	16.19	31 Dec 2011
Société Générale	France	15,877,527	0.27	20.91	31 Jan 2013
Allianz	Germany	16,707,514	0.29	15.54	31 Dec 2011
DZ Bank	Germany	11,094,100	0.19	10.94	30 Jun 2012
Total		4,809,887,925	81.57	6,181.36	

Source: Thomson ONE Banker, "Share ownership", *Thomson ONE Banker (www.thomsonone.com)*, viewed in February 2013.

Pension funds holding shares in PGNiG shows all pension funds that hold shares in PGNiG.

Table 3 Pension funds holding shares in PGNiG

Pension Fund	Country	Value (€ mln)	Filing date	Source
Norwegian Government Pension Fund – Global	Norway	12.81	31 Dec 2011	⁵
CalPERS	United States	3.44	30 Jun 2011	⁶
ABP	Netherlands	1.00	30 Sep 2012	⁷
bpfBOUW	Netherlands	0.14	30 Sep 2012	⁸

Pension Fund	Country	Value (€ mln)	Filing date	Source
National Pensions Reserve Fund	Ireland	0.09	31 Dec 2011	⁹

Bond issuances

The following bond issuances of PGNiG and its subsidiaries since early 2010 could be found:

In June 2010, PGNiG issued new bonds with a total value of PLN 3,000 million (€ 713.40 million). The bonds had a three-year maturity. The proceeds were used for general corporate purposes and the refinancing of bank debt. The syndicate consisted of the following 7 financial institutions, each committing an amount of: ¹⁰

BNP Paribas	France	€ 101.91 mln
Citi	U.S.	€ 101.91 mln
Commerzbank	Germany	€ 101.91 mln
ING	Netherlands	€ 101.91 mln
PKO Bank	Poland	€ 101.91 mln
Société Générale	France	€ 101.91 mln
UniCredit	Italy	€ 101.91 mln

In February 2012, Polish Oil and Gas Co-Libya BV issued new 4.000% five-year maturity bonds with a total value of € 500 million. The proceeds were used for general corporate purposes. The syndicate consisted of the following 3 financial institutions, each committing an amount of: ¹¹

BNP Paribas	France	€ 166.67 mln
Société Générale	France	€ 166.67 mln
UniCredit	Italy	€ 166.67 mln

Bondholders

Largest bondholders of PGNiG presents an overview of the largest bondholders of PGNiG. Together these bondholders own or manage 5.17% of PGNiG's outstanding bonds, with a value of € 56.7 million.

Table 4 Largest bondholders of PGNiG

Investor	Country	% all bonds	Value (€ mln)	Filing date
Lombard Odier Darier Hentsch & Cie	Switzerland	1.10	12.08	December 2012
Banco Santander	Spain	0.90	9.89	June 2012
UBI Banca	Italy	0.82	8.99	January 2013
UniCredit	Italy	0.80	8.79	June 2012
Amundi	France	0.55	6.00	September 2012

Investor	Country	% all bonds	Value (€ mln)	Filing date
Universal Investment	Germany	0.39	4.25	September 2012
Aktia	Finland	0.32	3.50	December 2012
DZ Bank	Germany	0.29	3.20	September 2012
Total			5.17	56.70

Source: Bloomberg Database, "Bondholdings", *Bloomberg Database*, viewed February 2013.

Bank loans

The following bank loans secured by PGNiG and its subsidiaries since early 2010, which are used for shale gas activities, could be found:

In July 2012, PGNiG secured a PLN 1,500 million (€ 356.25 million) six-year credit facility from a syndicate of banks. The proceeds were used for refinancing. The syndicate consisted of the following five financial institutions, each committing an amount of: ¹²

Banco Santander	Spain	€ 71.25 mln
DZ Bank	Germany	€ 71.25 mln
ING	Netherlands	€ 71.25 mln
Nordea Bank	Sweden	€ 71.25 mln
PKO Bank	Poland	€ 71.25 mln

Importance of financial institutions

The importance of financial institutions financing PGNiG shows all highly and moderately important financial institutions which have financed PGNiG since early 2010.

The importance of financial institutions financing PGNiG

Financial institution	Country	Importance
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BNP Paribas	France	High
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Société Générale	France	High
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UniCredit	Italy	High
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Financial institution	Country	Importance
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State Treasury of the Republic of Poland	Poland	High
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Aviva	United Kingdom	Moderate
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Banco Santander	Spain	Moderate
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BlackRock	United States	Moderate
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Citi	United States	Moderate
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Financial institution	Country	Importance
Commerzbank	Germany	Moderate
ING	Netherlands	Moderate
Nordea Bank	Sweden	Moderate
PKO Bank	Poland	Moderate
Powszechny Zakład Ubezpieczeń Spółka Akcyjna	Poland	Moderate

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