

# Climate of Opinion

The Stockholm Network Energy and Environment Update

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## **Contents**

**Commentary – Helen Davison**

**European Energy at the Cross Roads – Barry Neville**

**Ownership Unbundling: The Last Resort? – Bartłomiej Nowak**

**Yesterday's Energy Champions, Today's Cheats – Paul Domjan**

**Microclimates – Top Stories in Energy and Environment**

## Welcome to *Climate of Opinion* – Helen Disney and Paul Domjan<sup>1</sup>

This month's edition of *Climate of Opinion* provides a timely insight into EU Commission plans to create a truly pan-European energy market. Bringing together experts from industry, academia and the think tank world this issue provides an overview of the proposed reforms and examines their role in tackling the multiple energy problems we face.

In this issue of *Climate of Opinion* the theme of liberalisation is explored in detail. Barry Neville, from Centrica, explains how competitive markets are able to best deliver for the consumer, from the perspective of an energy company that has gone through ownership unbundling, and which has experience in both the European and American energy markets. Bartłomiej Nowak, from the European University Institute, discusses the insufficiencies of the current EC legal framework in its ability to guarantee to any EU company the right to sell electricity and gas in any Member State on equal terms and without discrimination. Finally, in an article that originally appeared in *European Voice*, Paul Domjan, energy fellow at the Stockholm Network, laments what he sees as a return to dirigiste protectionism in Brussels, which may have consigned the liberalising agenda, essential for Europe's future energy security, to history.

We hope that you enjoy this edition of *Climate of Opinion*. If you have any comments or recommendations about *Climate of Opinion*, or would be interested in contributing an article for a future edition, please contact Helen Davison: [helend@stockholm-network.org](mailto:helend@stockholm-network.org). We hope you enjoy this newsletter.

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<sup>1</sup> Helen Disney is Chief executive of the Stockholm Network, Paul Domjan is the Stockholm Network Energy Fellow in addition to being Senior Consultant at John Howell & Co

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## Commentary – Helen Davison<sup>2</sup>

July 2007 marked an historic moment for gas and electricity markets across Europe when, in a move designed to cut prices and ensure security of supply, the EU's domestic energy market was opened up for full-scale competition. Backed by a European charter of energy consumers' rights, gas and electricity consumers in all EU Member States (apart from Cyprus, Estonia, Malta and Finland), were granted the right to switch their suppliers; something that previously could only be done in nine EU countries.

The European Commission's struggle to complete the internal energy market does not stop there. The Commission has been pushing for the creation of a single European energy market since the early 1990's on the grounds that it would increase competitiveness and enable European consumers to enjoy the best available prices and service. With climate change at the top of the EU's political agenda, the Commission considers further liberalisation essential for guaranteeing Europe's energy security, promoting the use of renewable energies, and, crucially, for ensuring the functioning of the EU Emissions Trading Scheme.

EU energy Commissioner Andris Piebalgs has made it his goal to create a genuine single EU market for energy by 2009. At the end of this month, he will unveil what will be the most contentious measure of this agenda, a package of proposals that aim towards the forced "unbundling" of integrated groups such as Eon or EDF. The legislation will propose to free up access to gas pipelines and electricity grids so that incumbent suppliers are not able to use their control of networks to block the entrance of competitors by requiring them to sell off their transmission and distribution networks.

If the Commission gets its way – that is, if the text adopted by the European Parliament on 10 July 2007 is adopted by the Council of Ministers –

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<sup>2</sup> Helen Davison is the Energy and Environment Research Officer at the Stockholm Network

then a process of ‘unbundling’ will proceed as the most effective tool to promote investments in infrastructures in a non-discriminatory way, fair access to the grid for new entrants and transparency in the market. Stability will be ensured through minimum investment requirements and non-free market actors, like the Russian state-owned gas company Gazprom, will only be allowed to purchase energy infrastructure if there is reciprocity with that country. In other words, Gazprom will be able to acquire a direct stake in European gas markets only if European companies get upstream investment opportunities in Russia.

How this will be regulated is, however, unclear. The proposals aim to enhance cooperation at a European level through an as yet unspecified ‘EU entity’, in order to promote a more European approach to regulation on cross border issues. The Commission will play a determining role but will not be able to undermine the independence of national regulators, and national regulators will remain the only authority responsible for decisions affecting their national markets.

This leaves considerable implementation and compliance issues. Whilst the Commission can insist that all deals with cross border implications be transparent and put systems in place to ensure that these deals meet certain requirements, it has not yet been established whether all energy deals will have to be referred to the Commission or whether the Commission will simply wait for discriminatory practices to be referred to them for investigation. In either case, considerable detail is lacking about what form the compliance regime will take.

Although there is a clear majority in favour of unbundling at the transmission level, the outnumbered, but vocal, opponents of the proposals might still get their way. It is possible that the Commission may issue compromise proposals in order to avoid an embarrassing French or German veto. Watered down proposals include the option to allow companies to maintain ownership as long as shares of the energy producing company are split from the shares of the transmission network company. A second model under consideration is to allow companies to maintain ownership of their assets

but transfer the management, including investment and other commercial decisions, to an Independent System Operator (ISO) that would pay a fee for the use of the networks. A third option, favoured by France and Germany, is to maintain the status quo while pushing for better implementation of existing directives and reinforced powers for national energy regulators.

The recent merger of GDF and Suez may further threaten the Commission’s goal of deregulation and unbundling. It has left the French state effectively in control of the world’s third largest power company and could signal a growing belief that free markets in energy cannot provide a stable and secure energy supply. In an environment where Russia pursues an aggressive foreign policy through Gazprom, security of supply, rather than ensuring the best prices and services for consumers, has become the major pre-occupation of European politicians. Nicolas Sarkozy is merely doing what many other European politicians would like to by creating a national champion to operate as a major league player on the European energy stage.

The Commission’s success in pursuing its liberalising agenda is crucial. Providing a clear regulatory framework will enable Europe to better deal with Gazprom. The link between energy and climate security is clear – how can the EU maintain a coherent climate policy without first having a common energy policy? Moreover, a market-based approach to climate change like the Emissions Trading Scheme cannot be successful when the energy market is not exposed to real competition. At a broader level, the Lisbon Strategy, the (somewhat ambitious) aim to make the EU the most competitive and dynamic knowledge based economy by 2010, can only succeed if a common energy policy based on a common European interest in the energy field is established in order to diversify energy sources and producers while ensuring that the cost of energy does not become an impediment to economic growth.

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## European Energy at the Cross Roads – Barry Neville<sup>1</sup>

We are fast approaching a defining moment for energy markets. Will Europe finally put the interests of customers first by embracing competitive markets or will the interests of large incumbents continue to hold sway?

### Current problems

Network infrastructure is fundamental to security and continuity of supply. This is especially so in the increasingly interconnected European energy markets in which we live. For example, as we recently witnessed, shutting off a power line over the River Elms can make the lights go out in Belgium, France, Spain and even Portugal.

Because networks are a natural monopoly, ordinary market forces cannot ensure security of supply and a strong, independent regulator is needed to ensure fair play. This is particularly challenging when network companies are integrated within commercial energy companies.

The reality is that there is a fundamental conflict of interest within integrated companies between those parts of the business that manage networks and those parts that sell to the consumer. In the UK this was recognised, resulting in the separation of the gas network (National Grid) from the supply business (British Gas).

Examples of existing failure include Italy, where ENI was fined €290million for delaying cross-border pipeline development as it would have had a negative effect on the gas sales of its own downstream affiliate. Additionally, the European Commission states that three German transmission companies received €400million in congestion revenues from their ownership of networks, yet they invested less than 10% of this to build new interconnectors.

### Effective unbundling and competitive markets

It is widely agreed that effective unbundling is essential but this means different things to different people. The French argue that their 'market' model works and all we need is an incremental change from the existing regulatory arrangements that already include requirements for legal, functional and accounting separation or 'Chinese walls'. All of this was of course before the Commission started investigating Gaz de France and EON for alleged market sharing. The Commission is also looking at Electricite de France and French controlled Electrabel for alleged abuse of dominance for signing exclusive, long-term contracts with industrial customers. So perhaps all is not well in France.

The two key options for reform are the Independent System Operator (ISO) model and full ownership unbundling.

The ISO is an independent organisation that operates one or more transmission systems. The transmission assets continue to be owned by the Transmission System Operator (TSO). So the ISO separates ownership from operational control of the transmission grid. A Deep ISO or ISO plus is where the maximum extent of activities are carried out by the ISO. Here the TSO's activities are limited to asset ownership with the ISO responsible for all investment and operational decisions. A shallow ISO or ISO minus has a more limited number of activities carried out by the ISO. For example, investment decisions may be the responsibility of the TSO with the ISO being responsible for real-time system operations including cross-border energy flow management.

It is important to remember that the ISO model in the UK electricity market was not established to prevent an abuse of a dominant position and, not surprisingly, is not a solution to this type of problem in Europe. Instead it was introduced to facilitate the trading of electricity between England, Scotland and Wales. Therefore the ISO has to date been used to facilitate market integration not separation. Only a very deep ISO would be adequate to ensure the necessary investments and this would require ongoing

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heavy and complicated regulation with the real risk of getting it wrong at the outset.

By contrast, under full ownership unbundling the network assets are no longer owned by the supply or generation business or any related entity. Ownership unbundling provides clearer financing structures which reflect the relatively low risk nature of the capital intensive activity of network ownership. With ownership unbundling there would be no risk of investment decisions being influenced by internal generation or supply interests and it would lead to the elimination of any cross-subsidies between the monopoly and competitive businesses. Therefore, ownership unbundling is the cleanest solution.

Diversity of supply is essential to security of supply. The best means of ensuring diversity is via the competitive market. In the UK, where ownership unbundling in gas provided the impetus to a fully competitive market, 24 companies from 11 countries are currently investing €15bn in UK energy markets. Recently, significant sources of new gas supply have led to material falls in UK wholesale gas and electricity prices which have fed through to lower customer bills. Britain has the cheapest household gas prices in Europe and its domestic electricity prices are below the European average.

### Meeting Europe's needs

In many quarters, the energy debate appears to be characterised by a choice of competitive markets or security of supply. The assumption is that markets that are government-managed inherently offer better security of supply. However, Centrica believes that security of supply and a competitive market are mutually reinforcing. It is the 'old' structure, of a single integrated company that dominates its national market and restricts new entrants, that fatally undermines security and continues to fail Europe's customers.

European energy markets are at a crossroads. Billions of Euros will have to be invested over the next few years to replace ageing power stations and upgrade and expand gas networks. At the same time a massive shift to low carbon generation must be delivered. Attracting new

entrants and sufficient funds is critical to this new investment and the clearest signal that a country can give that it is being serious about competitive markets is by ensuring equal access to the monopoly network by new entrants. By doing so security of supply will be improved and consumers will get a better deal.

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### Ownership Unbundling: The Last Resort? – Bartłomiej Nowak<sup>1</sup>

The nature and number of infringement cases<sup>2</sup> across the EU, three years after the obligation to transpose the Electricity<sup>3</sup> and Gas<sup>4</sup> Directive on 1 July 2004, clearly reveals the insufficiencies of the current EC legal framework. While in theory everything is fine in the view of many Member States, the practical execution of the provisions of the Directives remains a significant problem.

Domestic markets are at present dominated by national champions, which envisage further consolidation rather than market opening. EDF and GDF in France and RWE and E.ON in Germany are very good examples of this. They hold monopolist positions on their domestic markets, at the same time as being the EU's largest vertically integrated undertakings. Further consolidation of the energy champions which gain a significant share of the markets not to say dominant positions leads to the presumption that competition on the domestic and European market is to a large extent excluded.

Moreover, energy regulators are not granted all the necessary powers and independence needed

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<sup>2</sup> Until January 2007 the Commission has launched 34 infringement procedures against 20 Member States for violation and non-transposition of the existing Electricity and Gas Directives

<sup>3</sup> Directive 2003/54/EC of the European Parliament and Council of 26 June 2003 concerning common rules for the internal market in electricity

<sup>4</sup> Directive 2003/55/EC of the European Parliament and Council of June 2003 concerning common rules for the internal market in natural gas

for them to ensure that competitive, open and non-discriminatory markets are put in place and existing national legal frameworks do not allow proper and efficient regulation of the cross border issues relating to gas and electricity network access. It seems that currently the EU is unable to guarantee to any EU company the right to sell electricity and gas in any Member State on equal terms and without discrimination. The European Commission in its Communication Note on prospects for the internal gas and electricity market<sup>1</sup> maintained that the preferential access granted to cross border interconnectors demonstrates the shortcomings of current regulations.

Additionally the functional and legal unbundling of the network operators, which are vertically integrated, remains a significant problem. This has a direct, negative impact on equal access to the networks for all independent suppliers, especially in distribution, where legal separation was not required until 1 July 2007. What's more, different levels of unbundling in various Member States tends to create situations hindering competition among market players, since they are difficult to reconcile with EC principles on the free movement of capital under Article 56 of the EC Treaty. Member States with higher levels of unbundling are in a disadvantageous position vis-à-vis Member States where monopolists, mainly state owned are dominant. As a result major strengthening of existing provisions is indispensable.

Since the scope of this article is limited the first and most important thing to tackle should be the unbundling. In many EU countries the electricity networks and gas pipelines are still property of the so called vertically integrated undertakings, responsible for generation, extraction, supply, transmission and distribution. Whereas competition can be promoted in the generation/production and supply side of the vertically integrated companies, the transmission

and distribution segments remain natural monopolies on which market mechanisms are to some extent blocked. Vertical integration simply raises the possibility for incumbents to favour their own divisions. As a result the European Commission within the Electricity and Gas Directives proposed to separate transmission network operators responsible for transmission activities and distribution network operators responsible for distribution. This was supposed to be achieved at three levels: unbundling of accounts as well as functional (managerial) and legal unbundling. Unfortunately, domestic execution of the unbundling provisions is as yet unfinished. In many cases current unbundling provisions implemented into national legislations simply do not remove the incentive for cross subsidization or discrimination against competitors regarding third party access. In other words incumbents owning the networks may still use network infrastructure to block new entrants. Discriminatory access conditions include unequal access to network capacity, manipulation of access tariffs, manipulation of the availability of capacity to ensure that lines required by competitors are congested, or maintenance of artificially small balancing zones<sup>2</sup>.

Additionally investment incentives tend to be distorted. Vertically integrated network operators simply have no incentive to develop the networks in the interests of other market participants. Evidence suggests that the investment decisions of vertically integrated undertakings are directed to the needs of their supply and/or generation affiliates<sup>3</sup>. As a result

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<sup>1</sup> Communication from the Commission to the Council and the European Parliament. Prospects for the internal gas and electricity market from 10/01/2007, Implementation report – COM(2006) 841 final pp. 6-7

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<sup>2</sup> For more on this see Communication from the Commission to the Council and the European Parliament. Prospects for the internal gas and electricity market from 10/01/2007, Implementation report – COM(2006) 841 final p.10

<sup>3</sup> See for instance the national sections on network operator and unbundling in the Commission Staff Working Document, Implementation report on electricity and gas EU regulatory framework. Country reviews – SEC(2006) 1709; and the Technical Annex to the Communication from the Commission, Sector Enquiry under Article 17 of Regulation(EC) No 1/2003 on the gas and electricity markets (final report) – SEC(2006) 1724, especially paragraphs 157(gas) and 487 (electricity)

new entry at the generation or supply side is limited. In this case the most feasible solution as well as motivation for system operators to operate, maintain and develop the networks in the interest of all market players would be the unbundling of assets or simply ownership unbundling.

Ownership unbundling tends to be the most pro-competitive sort of unbundling. It is also the best way to prevent discrimination and to minimize the need for regulation. Under ownership unbundling, the vertically integrated company is required to sell or trade its network assets to another company, which is not already present in the generation/production and supply activities.

Unbundling has already been voluntary introduced in several Member States and has had a positive impact on energy markets like in the UK. On the other hand, markets in which there is less ownership unbundling (for instance France or Poland) require more detailed and complex regulation in order to prevent discrimination. Let's hope the Commission will draw on the UK experience when formulating the next legislative steps leading to ownership unbundling.

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### Yesterday's energy champions, today's cheats – Paul Domjan<sup>1</sup>

The commitment to 'free and undistorted competition' was symbolically cast aside at the 21-23 June EU summit and, amid the fanfare and horse-trading of Nicolas Sarkozy's debut and Tony Blair's swansong, the third, and nominally final, deadline of 1 July set by the European Commission for the 'full liberalisation' of Europe's energy markets slipped quietly by.

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<sup>1</sup> Paul Domjan is energy fellow at the Stockholm Network and a director of John Howell and Co. Ltd., a risk consultancy firm. He was formerly the first Energy Security Advisor to the US European Command, US Department of Defense. This article originally appeared in the 12 July 2007 issue of *European Voice*

A return to dirigiste protectionism in Brussels may now have consigned this agenda, critical to Europe's long-term energy and economic security, to history. Energy has long been considered a strategic resource by governments. In the post-war decades, the provision of reliable and cheap energy by vertically integrated national champions fuelled Europe's economic re-birth. Integrating the entire energy cycle – generation, transmission and distribution – into a single management structure allowed them to internalise the interactions between these different assets that had historically proved too complex for the market-place. Governments believed that allowing these firms to attain and enjoy monopoly privileges would near-guarantee cheap, secure energy supply.

This model no longer works. Lack of competition inevitably reduced efficiency and advances in information technology make possible near-perfect price and capacity information. As such, vertically-integrated firms are now neither the only, nor the best, source of cheap, secure energy. Countries that have fully broken up former monopolists have enjoyed commensurate benefits. Britain pushed through two waves of energy deregulation in the 1990s and subsequently enjoyed the lowest average prices and achieved the greatest diversity of supply in Europe. In spite of consistent prodding from Brussels, continental leaders only began re-examining their ossifying energy markets following last winter's Ukrainian energy shock.

Despite differing degrees of liberalisation, energy markets remain very highly concentrated, isolated within national boundaries and often fragmented along regional lines. In Germany, for example, the four major energy firms effectively divided up the regional energy markets following liberalisation in 1998 and continue to dominate them to this day. As a result, German domestic consumers pay some of the highest energy prices in Europe despite relatively low wholesale prices.

A second, related problem is the lack of cross-border interconnection and, thus, competition. Monopolist providers are, rationally, loathe to invest in infrastructure that will increase the competition they face and this, combined with the bureaucratic and regulatory hurdles involved

with building cross-border links, means that energy networks remain largely isolated within borders. Energy prices vary as much as 100% between member states in part because discrete networks prevent them from responding to supply and demand across the continent. Unfortunately, those countries, such as the Baltic States, that are most likely to face an energy shock are those that are least integrated into the European grid. The vertical integration of firms prevents new entrants – the building block of competition – into the energy markets by controlling access to network capacity.

This phenomenon extends beyond national borders. Europe's energy giants have of late been taking advantage of their domestic dominance to sign opaque long-term contracts and swap assets with foreign-owned, vertically-integrated firms such as Russia's Gazprom. These arrangements capture existing network capacity almost exclusively for the duopoly at the expense of the consumer, involve sufficient capital to plausibly affect foreign policy and are carefully constructed to avoid competition review by Brussels.

In the wake of May's EU-Russia summit, ENI, E.ON Ruhrgas and GdF called for better relations with Russia. Their vision of European energy liberalisation was best enunciated by Domenico Dispenza, the chief operating officer of ENI, who argued that "international and national companies must work together".

But while it is acceptable for two private sector firms operating in a competitive market to agree long-term pricing, it is pernicious for near-monopolists to do so in order to bolster their earnings at the expense of their customers' pocket-books and their continent's security. European governments must realise that geology and technology have transformed the energy industry and must re-assess their markets accordingly. While vertically integrated national champions provided cheap, secure energy in the past, only competitive, international markets can do so today.

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## Microclimates – Top Stories in Energy and Environment

### Camp Climate Change

August saw a week of direct action by climate change protestors focusing on the aviation industry.

Ironically, a leading charter jet company said the protest at Heathrow caused more business and first-class travellers to turn to private jets.

<http://www.timesonline.co.uk/tol/news/uk/article2245665.ece>

<http://news.independent.co.uk/uk/transport/article2871491.ece>

### EU emissions trading turns litigious

New EU states want to be allowed to emit more carbon than they have been allocated under phase II of the European emissions trading scheme. Lithuania, Latvia, Estonia, Poland, Hungary, Slovakia and the Czech Republic, are all challenging the EU's allocation decisions worried that tighter allocations will hit their fast growing economies hard.

<http://www.iht.com/articles/2007/07/31/business/emit.php>

<http://news.independent.co.uk/europe/article2826191.ece>

### Who's the greenest of them all?

The major parties continue to attempt to win the green vote with bold, environmental measures. The Conservative party unveiled a giant package of taxes, regulations and incentives which have been met with scepticism by some of the old Tory guard. In many cases the proposals come into direct conflict with their own recent report on competitiveness.

<http://www.guardian.co.uk/environment/2007/sep/10/politics>

### **Tougher measures on carbon targets**

The government's proposals to tackle climate change need to be tougher and made legally enforceable, say MPs and peers. A report said the government's target of a minimum 60% cut in carbon emissions by 2050 may not be adequate. International aviation emissions should be included in targets and there should be a cap on the use of "carbon credits" to meet them. It backed the government's five-yearly carbon targets, but said there should be annual "milestones" and reports.

[http://news.bbc.co.uk/1/hi/uk\\_politics/6928084.st](http://news.bbc.co.uk/1/hi/uk_politics/6928084.st)

### **A really cold war**

Russia planted its flag on the ocean floor under the North Pole in a symbolic gesture to claim the rights to the sea bed which could be rich in oil and gas. In a dramatic technical feat the Russians dispatched two mini-submarines 2.5 miles to the ocean floor in what is believed to be the first expedition of its kind.

The Russian move has been seen by some as a brazen land grab. "You can't go around the world and just plant flags and say 'We're claiming this territory'," said Peter MacKay, Canada's Foreign Minister.

The North Pole oil rush has been facilitated by the accelerated shrinking of the polar ice cap because of global warming, allowing exploration that had been previously unthinkable because of the extreme conditions.

[http://news.independent.co.uk/sci\\_tech/article2831111.ece](http://news.independent.co.uk/sci_tech/article2831111.ece)

<http://www.timesonline.co.uk/tol/news/world/europe/article2199335.ece>

<http://www.iht.com/articles/2007/08/12/opinion/edartctic.php>

### **Pollution gets personal**

Plans for the world's first personal carbon trading scheme, in which people buy and sell their rights to produce pollution, were unveiled this month.

The Royal Society for the Encouragement of Arts, Manufactures & Commerce (RSA) is piloting a project later this year to test whether personal carbon trading could work on a large scale.

The idea is being considered by the government as a radical way to curb emissions of greenhouse gases such as carbon dioxide from households and consumers.

Matt Prescott, who runs the RSA project, said: "Personal carbon trading is a way to bridge the gap between individual and collective action. It would be a way for the government to give people a sense of purpose in their efforts to reduce their emissions."

<http://www.guardian.co.uk/environment/2007/sep/10/climatechange.politics>

The Stockholm Network has had several pieces of media coverage for its energy work this month.

Helen Davison featured in the Guest Comment section of Private Equity News commenting on the wisdom of calls to deter private equity investments in Europe's energy markets.

[http://www.stockholm-network.org/downloads/media/Private\\_Equity\\_News\\_300707.pdf](http://www.stockholm-network.org/downloads/media/Private_Equity_News_300707.pdf)

Helen Davison, also had a letter printed in the Independent which addressed the need for an independent body to monitor Gazprom acquisitions, which, when considered in pan-European terms form a pattern of Kremlin sponsored abuse of Europe's energy markets.

<http://www.stockholm-network.org/downloads/media/HelenIndependent.pdf>

And Paul Domjan was interviewed by Moscow Business Radio about European attitudes to Gazprom.

<http://radio.businessfm.ru/>