

18 May 2010

Re-born and renewed in Ukraine

Share Price: £0.165



 12m High:
 £0.34

 12m Low:
 £0.08

 Market Cap:
 £37.6m

 Shares in Issue:
 188.080.000

231,090,000 fully diluted

\$37.5m (min)

 Debt:
 Nil

 Cash at Hand
 £29.3m (27/04/10)

 Current Net Production
 approx 230 boepd

LSE Code: CAD
Sector: Oil & Gas
Market: LSE

One-off Receivables

Website: www.cadoganpetroleum.com

Broker: UBS Investment Bank Company Contact: 0207 2450801

Description: Independent E&P gas specialist operating in Ukraine with sufficient operating cash to meet all current commitments and advance exploration targets.

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Cadogan Petroleum Plc (LSE:CAD) is an independent oil & gas gas exploration and production company operating in Ukraine. It has had problems, technical, legal and managerial, and is currently rebuilding investor confidence in its new management and operational structure following its wholesale re-organisation in 2009.

Its operational assets are concentrated in the Dneiper-Donets basin, onshore in eastern Ukraine with additional properties in the Carpathian basin in the western part of the country. Both basins have a long history of hydrocarbon production and the company has active, revenue generating, gas production assets.

A recent Competent Person's Report (CPR) has restated reserves and resources attributable to the company after concerns that local technical practices and processes provided insufficient support for SPE reporting standards. The CPR, carried out by Gaffney, Cline & Associates effectively moved 3P Reserves from three gas/condensate fields down to 3C Resources.

We will make no comment on that process or the ongoing litigation against previous management for any alleged part in Cadogan's past failings. A major shareholder, Weiss Capital LLC, is moving for liquidation of the company's assets.

Cadogan's most advanced assets are 2 small producing gas fields (Debeslavetske and Cheremkhivske) with total 3P reserves of 2.46Bcf, a small, sub-economic oil field (Sloboda Rungurske) with 3P reserves of 0.012MMbbl and a larger gas/condensate field (Pirkovskoe) with current 3P reserves of 31Bcf gas and 2.14MMbbl condensate.

In addition to Proved, Probable and Possible Reserves Cadogan has discovered 2C Contingent Resources of 2,487Bcf gas and 108MMbbl condensate spread over four fields. Some of the Contingent Resources were previously booked to 3P reserves and will require further work to bring them back into the higher category.

Given the potential size of these fields and the finance required to develop them Cadogan has decided to embark on a farm-out process to reduce the company's risk exposure. This note is being prepared during the farm-out process and we will consider the assets as per current ownership (near 100% for most assets).

With £29m cash and \$37.5m receivables Cadogan is currently trading well below its book value, equivalent to roughly 23p/share. Our NPV based on 2P Reserves at 10% discount rate and 50% risk is £28.1m (\$42.2m) for an aggregate FMV of 35.2p/share (Cash +Recievables+2P Reserves).

Y/E	Group Sales	Declared Profit	Adjusted Profit	Adjusted EPS	P/E ratio	Divi	Yield
	£ 000s	£ 000s	£ 000s	£/sh		£	%
2008A	1,792	(24,877)	(34,363)	(0.17)	N/A	N/A	N/A
2009A	2,342	(107,303)	(118,680)	(0.46)	N/A	N/A	N/A
2010E			No	Estimates			
2011E			No	Estimates			

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Summary of Current Licences and Status

Field Name	Interest	Status	
Debeslavetske	98.29	Producing Gas	
Cheremkhivske	49.8	Producing Gas	
Sloboda Rungurske	100	Shut	
Pirkovskoe-1	97.0	3P Gas Reserves Defined. Producing light oil	
Farm-out Opportunities		1 roddenig light oli	
Pirkovskoe	97.0	3C Resources Defined	
Zagoryanskoe	90.0	3C Resources Defined	
Pokrovskoe	100	3C Resources Defined	
Bitlyanska			
Borynya	96.5	3C Resources Defined	
Bitlaya	97.1	3C Resources Defined	

Table 1 Summary of Current Assets, their ownership status and operation status. Source Cadogan Petroleum.

Cadogan is currently the operator on all licences and fields in which it has an interest. This may change under specific negotiated terms of the farm-out process.

Summary of Net Reserves and Resources 31 December 2009

All the figures shown in tables below are based upon the interest in each field, prior to any farm-out and have been supplied by Cadogan Petroleum via the competent persons report from GCA.

Gas

Field Name	Proven (1P)	Proven & Probable	Proven, Probable
		(2P)	& Possible (3P)
	(Bcf)	(Bcf)	(Bcf)
Debeslavetske	0.68	1.30	1.80
Cheremkhivske	0.21	0.26	0.31
Sloboda Rungurske			
Pirkovskoe-1	1.50	10.0	29.00
Total	2.39	11.56	31.11

Reserves 31Bcf

3P Gas

Table 2: Current attributable 3P gas Reserves. Note that in-place oil and gas within the Sloboda-Rungurska field is not currently economic, so does not meet reporting requirements.

Condensate

Field Name	Proven (1P) (MMbbl)	Proven & Probable (2P) (MMbbl)	Proven, Probable & Possible (3P) (MMbbl)
Pirkovskoe-1	0.07	0.57	2.10
Total	0.07	0.57	2.10

Table 3: Current attributable 3P condensate reserves.

Oil

Field Name	Proven (1P)	Proven & Probable (2P)	Proven, Probable & Possible (3P)
	(MMbbl)	(MMbbl)	(MMbbl)
Sloboda Rungurske			
Pirkovskoe-1	0.01	0.02	0.04
Total	0.01	0.02	0.04

Table 4: Currently attributable 3P oil Reserves. Note that in-place oil and gas within the Sloboda-Rungurska field is not currently economic, so does not meet reporting requirements.



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Contingent Resources

Gas

Field Name	1C	2C	3C
	(Bcf)	(Bcf)	(Bcf)
Pirkovskoe	49	547	1,101
Zagoryanskoe	69	394	777
Bitlyanska			
Borynya	473	1,008	1,688
Bitlaya	236	539	944
Total	827	2,488	4,510

3C Contingent & Possible Resources 4,510Bcf

Table 5: Currently attributable 3C Contingent Gas Resources.

Condensate

Field Name	1C (MMbbl)	2C (MMbbl)	3C (MMbbl)
Pirkovskoe	3.4	35.6	72.7
Zagoryanskoe	4.5	25.5	50.3
Borynya	12.3	30.1	67.1
Bitlaya	6.9	16.9	32.9
Total	27.1	108.1	223.0

Table 6: Currently attributable 3C Contingent Condensate Resources.

Prospective Resources

Field Name	Low (Bcf)	Best (Bcf)	High (Bcf)
Gas			
Pokrovskoe	92	237	950
Condensate			
Pokrovskoe	3.0	8.4	32.8

Table 7: Prospective Resources in the Pokrovskoe field.

Valuation

As with all in-situ resources valuation is difficult and with the farm-out process underway it would be unwise to make a forecast of earnings prior to the results of that process being known. However we can estimate what Cadogan's current in-situ hydrocarbon assets may be worth on its current ownership and present this as a consolidated NAV. Although our models do show us NAVs based on DCFs on an asset by asset basis we will not predjudice the farm-out process by publishing those results. It is for Cadogan's potential partners to state their own risk tolerance and the value that they will place on each particular asset.

Cadogan estimates a total asset value of up to £60.1m should shareholders request liquidation, however this does not include subsurface assets or on-going litigation. We have no reason or means to question that assessment.

Cadogan's liquidation value ~£60m

In reaching our estimates we have assumed the following;

All assets are less than 5,000m depth. There is a step down in royalty payments at 5,000m TVD, but many of the assets span this dividing line so until wells are drilled and tested the exact royalty payment due is uncertain. We are using the conservative, higher, rates of royalty.

Total production taxation and royalty payments are therefore assumed to be US\$0.9347 Mcf gas and US\$18.79/bbl oil or condensate.

We have assumed that CAPEX and OPEX estimates made by GCA in their CPR of Feb 2010 are realistic. On the basis of past E&P costs shown in Cadogan's accounts we see no reason to challenge those forecasts.

We have assumed that the forward oil price forecast produced by Sproule on 30 April 2010 is valid to 2020 and have added an incremental 2% pa for production after that time.



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We have assumed that light oil sales from the Pirkovskoe field will attract a \$22/bbl discount from Brent crude, that Sloboda Rungurske production will sell at a \$38/bbl discount (which makes that field uneconomic at present), that condensate sales attract 78% of Brent crude and that GCA estimates for gas sales to industrial customers hold between 2011 and 2015 and then rise at 2% pa after that point.

The one sales price that we will highlight as being subject to probable revision is the GCA Ukrainian industrial gas price. This is locally negotiated on a year-by-year and contract by contract basis, so may vary as Ukrainian demand rises and falls. Cadogan's current average sale price is apparently \$8/Mcf vs. GCA estimated \$8.59/Mcf (a 7% variance). We have used the current average sales price for 2010 and the CGA estimate thereafter.

We feel that this is a valid assumption since there is a distinct possibility that gas produced in the western licences may be exported rather than used locally. It would then attract European standard pricing, be payable in Euro and so is subject to some exchange rate uncertainty at this point in time. The valuation presented here can only be taken as indicative, so we feel that 7% variance is an acceptable tolerance to work to on this variable.

We will repeat that the figures we present here are pre-farm out and aggregated to, consciously, avoid placing a specific value on each asset. We are not in a position to assess any bidders likely strategies or risk tolerances so it would be unfair at this point to state the NAVs that our models are providing.

Assets Outside the Farm-out Process

Obviously there is nothing to restrict our publishing our valuation of the assets that are not subject to farm-out. These are the current 3P reserves held in Debeslavetske, Cheremkhivske & Pirkovskoe-1 and their current production.

The 3P reserves booked to the Pirkovskoe-1, as opposed to the wider Pirkovskoe field, are included as they can potentially be brought on-stream with very little further development and as a stand-alone asset. However, the possible size and extent of the wider gas field would seem to make this a less desirable outcome in terms of shared infrastructure and reservoir management.

Should the assets be disposed of it is therefore not only the 3P reserves that need to be considered in this case, but also the synergy of the wider field development. So in this case we will present a comparative hypothetical cumulative cash flow between the current Pirk-1 base case (Figure 3) and the longer term development case for this particular field (Figure 4) this is to allow an 'order of magnitude' comparison between development cases and does not constitute a revenue forecast for Cadogan.

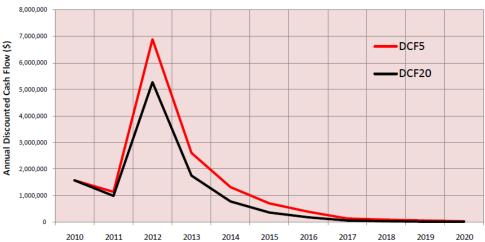


Figure 1: Aggregated un-risked DCF based upon Current 1P Reserves. Source Hardman & Co.



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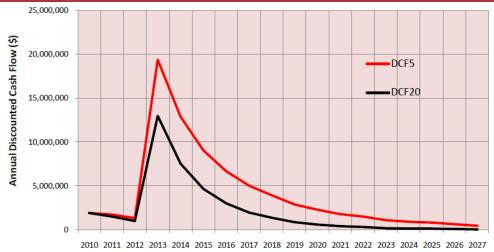


Figure 2: Un-risked Aggregated DCF based upon current 2P reserves. This represents the P50 probabalistic production outcome. Source Hardman & Co.

In Figures 1 & 2 we can see the estimated revenue from 1P reserve production and 2P reserve production. The conservative 1P revenue estimate is dominated by the Debeslavetske field until 2012 when production from a single well in the Pirkovskoe field takes over. Undiscounted annual revenues of \$22.4m are expected in 2013 after tax and royalty.

Estimated 2013 revenue from 2P reserves \$22.4m post-tax

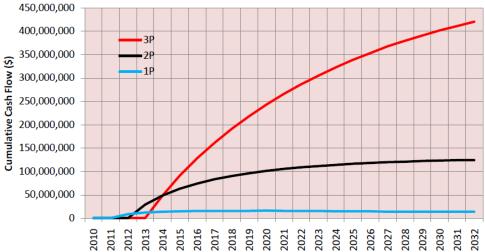


Figure 3: Un-risked Cumulative Cash Flow attributable to Cadogan from the Pirk-1 well. Source Hardman & Co.

As shown in Figure 3 there is clearly substantial revenue due to be generated past 2012 from these developed fields and we understand that, when interest on the company's bank balance is included, the company is currently close to break-even, though that does exclude the cost of on-going litigation. Obviously if the company can get to the end of 2012, it should be in a position to refinance in order to develop some of its assets towards production. With cash and receivables sufficient to cover 3 or more years G&A, there is only the question of the outstanding litigation that could weigh on the company's books. On that we can make no comment.

Net Asset Value for 2P Reserves

Based solely on 2P reserves and the assumptions shown above our DCF10 valuation of Cadogan's Reserve book is \$42.2m. With a 50% risk and exchange rate of \$1.50:£1.00 this becomes £28.1m.

Risked 2P NAV on DCF10 is £28.1m



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Going Forward

As previously stated the farm-out process will define the attributable resources and the potential attributable reserves going forward, so we will give one example of the potential value uplift in moving resources to reserves. We cannot, and will not give this as a forecast since the Pirkovskoe licence is part of the current farm-out process. We present it here as a semi-quantitative example of potential value uplift.

Pirkovskoe

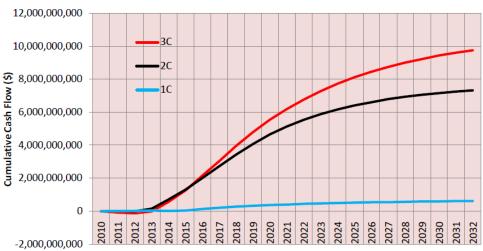


Figure 4: Hypothetical Cumulative Cash Flow based on current 97.0% working interest in the entire Pirkovskoe field. This field is currently part of the farm-out process. Source Hardman & Co.

We stress here that Figure 4 is based upon 3C Contingent and Possible Resources and not 3P Reserves and we urge those unfamiliar with the difference to consult the Society of Petroleum Engineers reporting guidelines (available at www.spe.org). However, the evidence strongly suggests that a significant proportion of the Contingent and Possible Resources may be booked back into Reserves after some further geological and geophysical work. If we make the assumption that there is a 100% conversion rate (there won't be, but until further work is done on this field we don't know what any conversion rate may be) then current 2P cumulative pre-tax cash flow rises from \$135m over 23 years to \$11.3bn over 29 years, an 84X upside.

Very significant upside in farmout targets

Of course this is speculative and dependent on our models remaining relevant over 20+years, which is unlikely in all honesty. However the question is not whether \$100m or \$10bn is the total cumulative cash flow, it is whether there is value in the further development of the in-situ assets. On the basis of this comparison between two development scenarios already published by Cadogan, there appears to be a very strong case for moving forward. This is the same fundamental business case for investment in all mineral resource sectors and to ignore it rejects the proposition that value can be added to an asset by exploration.

Consolidated Visualisation of Future Value

Apologies for the rather convoluted linguistics. It is as tiring to write as it is to read, but we are somewhat hampered by what we can legitimately state as fact and what we can hypothesise given that we don't know the outcome of the farm-out process.

We present the following graph of consolidated hypothetical cash flow should current 1C Contingent Resources from all farm-out targets be converted to 2P Reserves in order to demonstrate as clearly as we can the magnitude of the difference between a simple short-term strategy and one that looks to develop existing geological assets. All data shown here are discounted, taxed and include CAPEX and OPEX requirements, but are un-risked.

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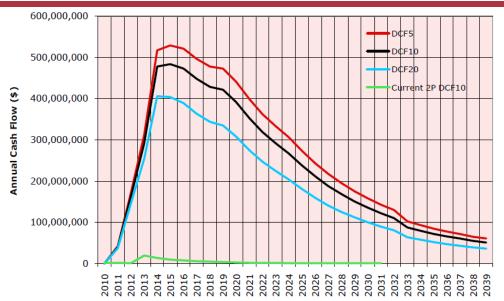


Figure 5: Hypothetical aggregated annual cash flow (using DCF5, DCF10 and DCF20) should current 1C contingent resources be converted to 2P Reserves. The Current 2P reserve DCF10 cash flow curve is shown in green. All cash flows are discounted but unrisked. Source Hardman & Co.

With Figure 5 we hope to have demonstrated that there is value in onward development of Cadogan's assets and that even a minority holding is likely to realise greater returns than its current production assets or their disposal.

Brief Company History

Date	Event
October 2004	Cadogan incorporated and equity invested.
December 2005	Acquisition of Pirkovskoe and Pokrovskoe licences. Equity raised.
September 2006	Acquisition of first exploration licence in Western Ukraine
September 2007	Blaz and Monastreytske licences acquired
January 2008	Zagoryanske licence acquired. Interest in gas-related assets in Western Ukraine Acquired.
May 2008	IPO on main board of the London Stock Exchange
March 2009	Senior management replaced and wholesale re-organisation undertaken by new management team. Drilling activity suspended. Staffing levels reduced. Consultant contracts reviewed. Purchasing policy rationalised.
November 2009	A number of non-core assets divested. New strategy of risk control instituted and farm-out policy established.
December 2009	Forward strategy agreed with directors and detailed work schedule established.
March 2010	Reserves restated after GCA data review. Farm-out process opens.

Table 8: A brief timeline of the major events to this point in Cadogan's relatively short history.

It is worth expanding on some of the actions taken by the new management team, led by the current CEO lan Baron because they do appear to be fundamental to prospects of success going forward.

Prior to re-organisation Cadogan's digital data was held, processed and interpreted by a cadre of outside consultants as Cadogan did not have sufficient hardware, software or skills in-house to curate their own dataset. This is quite frankly unthinkable in a modern data-hungry E&P organisation. The ability to quickly review both commercial and operational data without signalling intent to outside entities is essential in today's competitive commercial environment. Cadogan is now able to function as a modern data-hungry E&P organisation.

Digital data and processing brought inhouse



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There appears to have been two parallel management structures in the old company with consultants effectively holding operational authority in some situations. This was exacerbated by there being no single agreed corporate language. Decisions made by one 'management stream' were not necessarily understood or communicated to operational staff, who were effectively reporting to another 'management stream'. This situation has been resolved by implementing English as the corporate language and removing the consultants from the ad hoc management structure.

Reporting structures rationalised

Operational practices were apparently established local techniques, rather than modern western empirically tested practices. While the following practices were not necessarily undertaken by Cadogan prior to the re-organisation there are a number of local practices that are of immediate concern. For example it is apparently standard local practice to pattern drill around a discovery rather than optimise recovery from a field by understanding the subsurface and placing wells deliberately. It also appears to have been standard practice to over-pump production wells causing water coning and effectively sterilising the surrounding area. Completions are another area of concern with completion strings placed at depth using questionable data and sized incorrectly. Open hole well tests are apparently the norm in some situations which is a safety concern to Hardman & Co unless it is accompanied by sufficient risk assessment and back-up processes.

Modern methods being sought

Irrespective of whether these practices are local standard, they shouldn't be western standard. Whether it be in protecting the formation integrity by optimising pump rates, maximising the cash return to shareholders by correctly placing completion strings or simply trying to keep staff safe by establishing pressure profiles on new wells, these are all things that we know how to do and that we do for good reason.

What these reports amount to is that 'old Cadogan' was probably operating more as a Ukrainian company rather than as a modern, western E&P company. The re-organisation has turned that around and has put in place policies, personnel and practices that should keep it, its employees and its physical assets safe and in prime condition to provide returns on investment going forward.

'Old' Cadogan re-born as a modern, western E&P company

Ukraine

Ukraine is a growing market, heavily dependent on imported gas, with a government that is eager to produce as much domestic oil and gas as possible. It is politically vulnerable to its main energy supplier, Russia and over the past decade we have regularly seen energy supplies overtly used as leverage in political discussions and disputes.

The importance of Ukraine as a gas pipeline to Western Europe is being eroded by the construction of the Nord Stream pipeline across the Baltic and the proposed South Stream pipelines, but it will remain an important gas corridor to Southern and Eastern Europe for many years to come. As a major gas transit country and gas consumer it has a well developed local distribution network and skills to support and develop it. Cadogan's assets are all within realistic distances of existing pipelines or infrastructure and the CAPEX & OPEX estimates used in this note all include the necessary tie-backs, conditioning (for gas), pumping and storage (for condensate).

Extensive infrastructure to support hydrocarbon development

Ukraine for Business

We take the view that business cultures are inherently compatible across the world. Business risk is therefore defined by the choices that entrants into new regions make. From personal experience of working overseas for international companies, including in former Eastern Bloc countries, we know that outsiders are not generally expected to play the local political games. Indeed incomers are not usually even aware of those games unless they wish to become aware of them.

So there is a choice, bring your own ethics and standards with your business and build trust or try and start from the position of being an outsider to become an insider.

It is rare that genuine inward investment is baulked by emerging economies, though local processes may be sedate by western standards, so it seems folly for a western business to



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try and be anything other than what it is; a shareholder controlled, legally constrained entity working to maximise return on investment and minimise risk to that capital.

It is clear from all relevant developmental indices and benchmarks that open and honest business is best for all concerned in the long run, so we welcome 'new' Cadogan's position on business practices and believe that it is a position that is essential to secure the long term prospects of a company operating in a competitive overseas environment.

We at Hardman & Co believe that there is a great deal to be said for being a smart & honest.

Description of Assets

Cadogan's assets fall in to three main groups; the Pirkovskoe and Zagoryanskoe gas/condensate fields and the Pokrovskoe prospect in the Dneiper-Donets Basin in Eastern Ukraine, the Bitlya and Borynya gas/condensate discoveries in the Carpathian Basin in Western Ukraine, and the minor producing oil & gas fields also in the Carpathian Basin.

General Stratigraphy



Figure 6: Map of Ukraine showing the location of Cadogan Petroleum assets and the approximate boundaries of the three hydrocarbon prospective sedimentary basins. Source Cadogan Petroleum.

There are three hydrocarbon-bearing basins in Ukraine. The two main areas of production are the Dnieper-Donets Basin in the north-east and the Carpathian Basin in the west. The Azov Kuban basin extends offshore into the Black Sea and has not been fully explored. Cadogan currently has no assets in the Azov-Kuban Basin. The Dnieper-Donets Basin is Ukraine's most prolific hydrocarbon province and it currently produces some 75% of domestic production.

Operations in two of three Ukrainian Basins

Dnieper-Donets Basin

The Dnieper-Donets Basin (also known as the Dnieper-Donets Graben or DDG) is a NW-SE trending graben. Along its 500km length it varies between 65 and 150km in width and has syn-rift sedimentary packages from the mid-Devonian, followed by post-rift Carboniferous sediments through to a major unconformity in the Permian. Above that unconformity sediments show little deformation. Total sedimentary package may be up to 15km thick in the south-east portion of the basin with Carboniferous and Lower Permian sediments occupying the bulk of the volume allowed by post-rift thermal sag.

A wide range of sedimentary facies are represented with shallow marine carbonates, clastics and evaporates dominating the Lower Carboniferous (Tournaisian), thick clastics, coastal and deltaic sequences in the Upper Visean with marine transgressive events oscillating along the graben from the south-east.

Dnieper-Donets Basin is mature hydrocarbon province with known Stratigraphy.



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Syst	System/Series/Stage		Lithology	Maximum thickness (m)	Sequence
Tert	Tertiary/Quaternary			700	
	Cre	etaceous		950	Postrift
	J	urassic		650	platform
	T	riassic		900	
Per	rmia	an Lower	7 7 7 7 7 7 7 4 7 4 7 7 7 7 7 4	1,400	
		Upper	ranginasi in	1,500	
sn	Middle	Moscovian		1,200	
Carboniferous		Bashkirian	AND DESCRIPTION	1,200	Postrift sag
arbor		Serpukhovian	RANKS AVERS	800	
S	Lower	Visean		1,700	
		Tournaisian		750	
ian	Upper	Famennian		3,600	Synrift
Devonian	Ų	Frasnian	7,17,17,1	2,000	Prerift
Middle			180	platform	
	EXPLANATION				
Shale, mudstone Salt, anhydrite Principal unconformity					
		andstone, sand	Volcanic	s	
	Carbonate rock Coal				

Figure 7: Stratigraphy of the Dnieper-Donets Basin. Source; US Geological Survey Bulletin 2210-E. Column after Law and others (1998).

All known source rocks are of Visean or Devonian and most known reservoirs are Carboniferous to Lower Permian, though reservoirs are also possible into the Devonian.

The Upper Visean is made up of interbedded shallow marine, fluvio-deltaic and sub-aerial sediments with individual sandstone units typically being 5-10m thick. Average porosity of hydrocarbon bearing lithologies is reported at around 10% (range 6-14%).

The Lower Visean lies unconformably below the Upper Visean and is mainly comprised of shallow marine carbonates interbedded with minor sands, silts and shales. Typical porosities are 8-16% and average around 12%. However, where carbonates have been sub-aerially exposed porosities and permeabilities can, locally, be far higher.

The Tournaisian lies unconformably below the Lower Visean and is dominated carbonates. Its porosities and permeabilities are similar to the Lower Visean, however lateral continuities appear to be lower.

Trapping mechanisms in the Dnieper-Donets Basin include both structural and stratigraphic elements, with the influence of salt movement having significant control over structures.

One Total Petroleum System (TPS) has been recognised within the basin with a graphical summary shown below in Figure 8.

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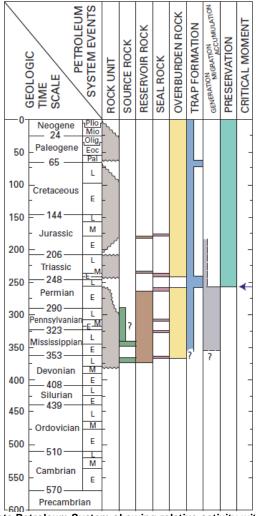


Figure 8: Dnieper-Donets Petroleum System showing relative activity within each portion of the system against time. The major unconformity at the end of the Permian effectively closes the system and has been seen to form the seal in some reservoirs. Note; this stratigraphic column uses US definitions for the Carboniferous (Mississippian & Pensylvanian). Source USGS Bulletin 2210-E.

Pirkovskoe

The Pirkovskoe Licence currently holds the majority of Cadogan's 3P reserves and should be able to produce gas, from a single well, at a significant rate by the end of 2011. The licence covers 71.6km² and hosts two potential reservoir targets. The primary targets are Visean fluvio-deltaic sandstones. The secondary targets are deeper Tournasian carbonates.

Pirkovskoe holds both 3P and probabilistic 3C estimates

History

Prior to Cadogan's acquisition of this licence, four wells had been drilled in the 1980s and 90s. These showed successful tests in the V19, V23 and T3 horizons and a maximum gas flow of 5.3MMcf/d. However it is understood that local production techniques damaged the reservoir formations and production had long-since ceased before Cadogan drilled its first well on the licence.

In 2008/9 Cadogan drilled two new exploration wells and attempted to re-enter and re-test the Pirk-460 well that had previously produced the 5.3MMcf/d gas. The first well, Pirk-1, tested 2.8MMcf/d gas from the Lower Visean (V26 horizon) and also showed light oil in the Upper Visean (V16-17 horizon). This well was farmed out into an extended well test in June 2009 and has been producing 60-90bopd from the Upper Visean.

Pirk-1 extended well test ongoing



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The second well, Pirk-2, was suspended before reaching its target depth due to mechanical problems in the open hole section. Re-entry into Pirk-460 established that aggressive drilling and production practices by previous operators had probably caused irreparable damage to the formation immediately surrounding the well. Going forward recent 3D seismic work has greatly enhanced sub-surface understanding of this licence.

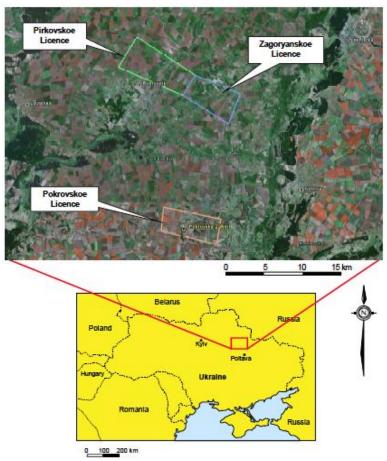
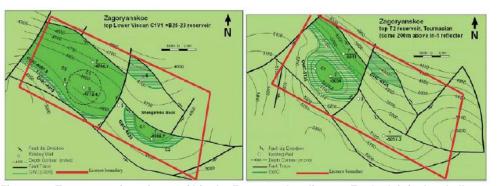


Figure 9: Schematic Map of the Dneiper-Donets Basin licences. Source Cadogan Petroleum.

Zagoryanskoe



Two reservoirs stacked

Figure 10: Two reservoir surfaces within the Zagoryanskoe licence. To the left is the shallower Lower Visean horizon and the right is the deeper Tournaisian Reservoir. Source Cadogan Petroleum.

The Zagoryanskoe licence covers 49.6km² and lies immediately to the east of Pirkovskoe. There have been five wells drilled on the licence. The current geological model shows several tilted fault blocks, though the precise number remains uncertain. This interpretation



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is based on regional 2D data and the maps will be updated on completion of the revised 3D seismic interpretation. Five wells have been drilled on the licence with the exploration well, Zag-3, under test from the V18 horizon since the early part of 2010.

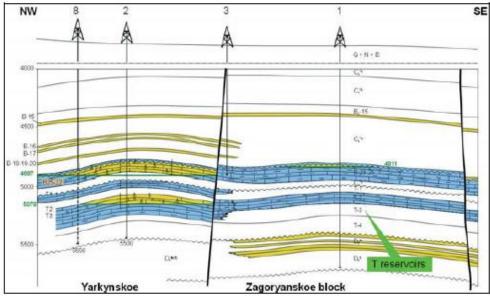


Figure 11: Interpreted cross-section that stretches into the Pirkovskoe licence (Yarkynskoe Block) to the NW. Source Cadogan Petroleum.

Re-estimation of Reserves

As part of the company's re-organisation strategy a full review of the data from the Dnieper-Donets fields and its interpretation was undertaken. This included acquisition and initial processing of 3D seismic over both the Pirkovskoe and Zagaryanskoe licences.

This process highlighted the problems with the original interpretation of the structural complexity of Pirkovskoe based on 2D seismic data and demonstrated that previous estimations of 3P Reserves could not be supported under new probabilistic models. Simply put, the previous estimates had assumed reservoir closure along faults that may not be present and that could not be demonstrated in either seismic profiles or suggested by the results of well tests.

The current Pirk-1 3P reserve estimate is therefore a deterministic estimate, based mainly on the well test with the majority of the remaining 3P reserves relegated to 3C Contingent Resources until the structural. There is currently no suggestion that gas is not present within each of the reservoirs but there remains uncertainty over the structural geometry on both licences.

Reserve restatement as a result of poor test work and uncertainty about structural interpretation

Pokrovskoe Licence

The Pokrovskoe licence covers 49.5km² and lies down-dip from the depleted Solochovskoe (Solokha) gas field, part of which is currently used for gas storage by Uktransgas.

There are currently two wells drilled into the Pokrovskoe structure and Cadogan is in negotiations to farm-out re-entry into Pok-1 (the second well to be drilled) in order to deepen it and deviate it towards a structural high identified during 3D interpretation in 2010. This structure is at an early stage of exploration but it is highly prospective on the basis that is it separated from the Solokha structure by 'a subtle saddle' that could be a spill point.

Pok licence next to large gas field

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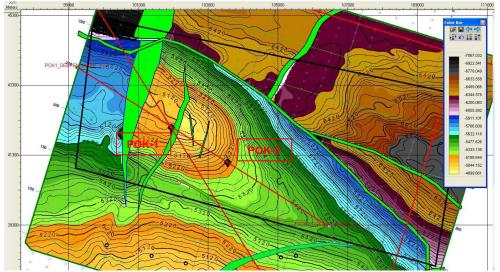


Figure 12: Interpreted geology of the hydrocarbon source rock for the Pokrovskoe prospect. Well locations marked by black squares. Source Cadogan Petroleum.

Carpathian Stratigraphy

The stratigraphy in Western Ukraine is extremely complex due to the collisional setting of the Carpathian Basin. There are several potential source rocks and, depending on exactly where within the accretionary wedge they reside, there has been several opportunities for the oil window to have been entered (and exited). In fact the US Geological Survey recognises three separate Total Petroleum Systems that overlap within Ukrainian portion of the flysch belt that makes up the bulk of the geological province.

Carpathisn Basin structurally complex

As we can see in Figure 7 the closure of the Magura, Silesian and Skole sub-basins has created a classic accretionary wedge. This wedge continues in a broad arc surrounding the eastern end of The Alps extending from Belgrade in the south-east, through Romania, Ukraine, Poland, Slovakia, The Czech Republic and into Austria. Cadogan's licences are located in the Silesian Nappe, locally known as the Krosno Nappe.

At this point much further detail on the geology of the Carpathian Basin would mostly be of academic interest, except to point out that tectonic setting will result in pore pressure variations out of balance with normal pore pressure gradients. This is not unusual in geologically younger oil and gas fields, for example in the Rockies, but it can make exploration and production more hazardous and we were pleased to hear from Cadogan's new management that one of the first actions that they carried out with their streamlined technical team was to carry out a pressure section, effectively mapping the pore pressure variations so that drilling operations could be risk assessed to western standards. The other beneficial result of this action is that future wells can be designed to accommodate more modern down-hole tools such as mud motors and a full MWD suite.

Recent moves towards development of European shale gas resources are being reflected along the border between Ukraine and Poland with Total entering into an agreement with regional E&P EuroGas Inc concerning licences within Ukrainian portion of the Lublin Trough. That structure, within Poland, is subject to exploration by ExxonMobil and Chevron.

Is likely target for use of western standard rigs to enable greater control of down-hole pressure



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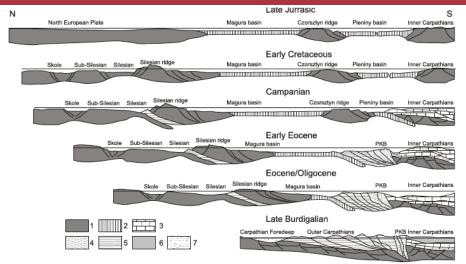


Figure 13: Schematic of the closure of the Carpathian Basin from Oszczypko et al (2002) showing the accretionary wedge now host to hydrocarbon province of western Ukraine. Source Oszczypko et at

The Bitlyanska Licence

The Bitlyanska licence hosts three elongate roll-over anticlines known to hold hydrocarbons including a small, shallow oilfield for which there are no plans to develop at this time. As we described above the area is structurally complex with potential traps lying within faulted thrust belts.

Gas is found in relatively thin sandstone formations within thicker Oligocene shale packages that probably provide both the source rock and the trapping mechanism, though both reservoir continuity and the degree of stratigraphic trapping is uncertain. Unfortunately current 2D seismic data is considered poor quality and low resolution, so significant exploration is required to give confidence to the current probabilistic contingent resource calculations (Shown below in Table 9).

Requires more seismic data before next drilling

Further seismic work is planned as part of the farm-out of these licences before a round of three wells planned for late 2011 and through 2012.

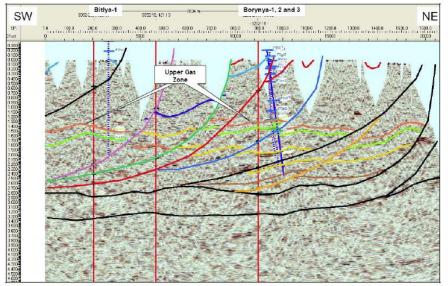


Figure 14: Reprocessed seismic across the Bitlyanska licence showing the structural complexity and location of the existing Bitly-1 and Borynya-1, 2 & 3exploration wells. Source Cadogan Petroleum

New in-house seismic shows thrusted fault blocks

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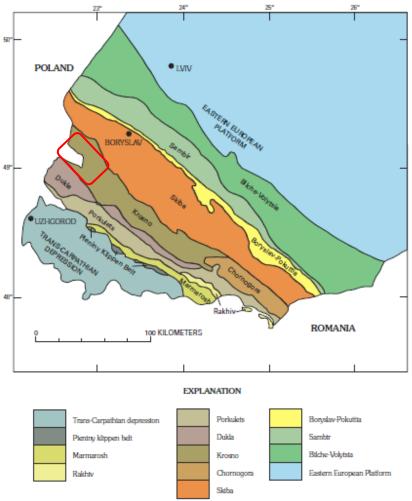


Figure 15: Schematic showing the main flysch nappes in the Ukrainian portion of the Carpathian Basin. Red box shows the approximate position of the Bitlyanska licence. Source USGS Bulletin 2204-D. Overlay Hardman & Co.

The Borynya Field

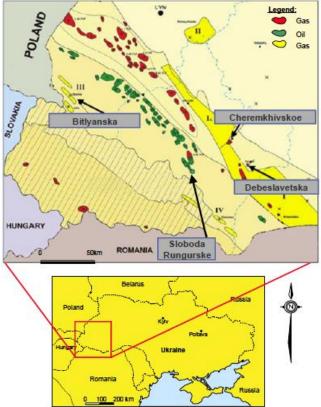
The Borynya gas field has had three wells drilled on it. The first two were Soviet era and though significant gas flows were recorded from the second well (14MMcf/d), drilling techniques are thought to have damaged the formation and impacted the reservoir's viability in the immediate vicinity of those wells. Indeed the first well is reported to have suffered a blow-out.

In December 2007 Cadogan drilled Borynya-3 at a 1km step-out from the old wells and logged it to 4514.7m. Three DSTs were carried out over two separate intervals, one of which was 90.7m vertical and the other 78m vertical. Both intervals flowed gas.

Borynya-3 was deepened to close to 5150m in the 3rd quarter of 2009 using an upgraded drilling rig. With the more modern rig a mud-motor and LWD string could be run effectively, so cutting drilling time and increasing data acquisition opportunities. However, the mechanical integrity of the well had been compromised by previous poor drilling practices and a large gas kick meant that drilling and further logging of the deeper section was suspended on safety grounds.

Borynya-3 shows two separate gas reservoirs

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Different nappes are known for different hydrocarbon products

Figure 16: Regional location of the Carpathian Basin showing Cadogan's minor fields and the Bitlyanska license. Source Cadogan Petroleum

The Bitlya Field

Only a single well, Bitlya-1, has been drilled on this field. This appears to have been poorly executed, but did test gas at 0.22MMcf from one interval at around 3,000m. Re-examination of the data from this well showed indicates 33m net gas pay with 11% porosity.

The primary source rock for the area, a Miocene shale with up to 18.5% kerogen, is considered over mature for oil. As previously stated there are three overlapping petroleum systems in the area, so secondary and tertiary sources and reservoirs are not impossible. Primarily though both Bitlya and Borynya are Oligocene gas plays.

Field Name	1C (Bcf)	2C (Bcf)	3C (Bcf)
Borynya	473	1,008	1,688
Bitlaya	236	539	944
Total	709	1,547	2,632

Table 9: 3C Contingent and Possible Resources booked to the Bitlyanska Licence. Source Cadogan Petroleum

Minor Fields

From a valuation point of view the Pirkovskoe field is the most important to Cadogan in our opinion since the current production from the minor Carpathian fields is only really sufficient to offset the company's current operating costs. Useful though this is for an exploration company these fields will never produce enough to materially alter the company's prospects of providing shareholder value, positively or negatively. We understand that current gas and condensate sales cover the company's general and administrative expenses (excluding any costs still outstanding for litigation) for the time being, but obviously depletion will erode that offset with time and we expect G&A to exceed sales from these wells within three years.

Current minor production useful but not sustaining in the long-term

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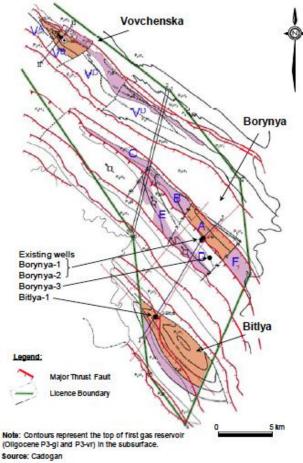


Figure 17: The Bitlyanska licence. Vovchenska is a small oil field that is currently shut in. Borynya and Bitlya are the main gas targets. The dominant NW-SE thrust structure can be seen shown by the red fault lines. Source Cadogan Petroleum

Conclusions

Investors who took part in the London IPO of Cadogan will have seen their investment eroded by some 90%. That is unfortunate, however those who wish to sell out have had ample opportunity to do so since the re-organisation so we must assume that current holders do so in full acceptance of both the risks and opportunities of hydrocarbon exploration and production.

As stated in the 2009 Annual Results the current Cadogan management estimate that a liquidation of the company as it currently stands would net between 17 and 26p per share (£39.3m - £60.1m). The vast bulk of that is held in cash (~£30m) and receivable for sale of some gas processing plant of somewhere over \$36m (~£24m). This already gives Cadogan an implied book value of around 23.4p (compared to its current price of 16.5p).

Estimated liquidation price 23.4p/share

However the value of hydrocarbon exploration and production company should not be solely justified on the basis of the quality of its accountancy department or efficiency of its liquidators.

Geological exploration is the raison d'etre of E&P companies and realising value through geological and engineering expertise should be the core proposition when analysing this type of company. Cadogan's licences have been shown to host significant amounts of gas and condensate. Oddly, the market perceives no value in those in-situ reserves and resources, despite there being appreciable revenue due from multiple assets for several years to come.



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It is a given that the current revenue is not the company-making cash-flow that investors would wish for, but it is enabling the company to approach operational break-even and, barring unforeseen circumstances, should see revenues from the Pirkovskoe field ramp up once the current extended well-test is completed.

The farm-out process is scheduled to end before the AGM and any interested parties will have sent in their bids. This will show exactly what value the competition places on the licences that Cadogan holds, but for our part we believe that onward development of the current assets is well justified on the basis that the cash-flow derived, even from a minority holding of these assets, should provide support for material uplift to Cadogan's share value.

We do not believe that there is a significant risk of the local gas or condensate markets drying up in the foreseeable future, though in the long term low carbon energy sources will inevitably replace hydrocarbons in energy systems. The risk for gas in this situation is lower than that for oil and in the context of Ukraine we do not see this as a substantial threat to Cadogan's current assets or their onward value.

The perceived, indirect legal threat to ownership of the Pirkrovskoe and Zagoryanskoe licences has, we understand, receded with the election of the new government and statements from the relevant Ministry. Though we are not in a position to say that no threat exists, it seems to us that the risk is now in the territory of general sovereign risk rather than a specific defined attack on legal entitlement.

As regards geological risk Cadogan's assets are in well known and long studied hydrocarbon provinces, so we agree with the USGS that these areas constitute a low risk environment as far as locating hydrocarbons is concerned. We would however suggest that the continuation of local drilling and completion practices may increase the degree of risk exposure, especially in the Carpathian Basin where over-pressured strata are more likely to be encountered. We welcome Cadogan's proposed move towards western standard rigs and down-hole techniques given the reports of previous reservoir damage and poor test technique.

Cadogan will not be a multi-bagger this year or next, unless something very strange happens, however it should reach break-even by the end of 2010 and in 2013 it should become profitable. Thereafter, depending on drilling success, it is in a very strong position to provide excellent returns.

Our FMV for Cadogan's assets, cash and receivables is £82.2m or 35.2p/share fully diluted with the note that this does not include any value added through the farm-out of currently defined contingent resources or earlier stage prospects.

Major Shareholders Management Non-exec Chairman Simon Duffy Weiss Capital LLC 60,848,498 26.33% CEO Ian Baron **QVT Financial** Commercial Director Nicholas Corby LP 37,241,501 16.12% Non-exec Director Philip Dayer **HBK Capital** Non-exec Director Alan Cole Management 7.15% 16.525.999 Non-exec Director James Donaldson Lloyds TSB Non-exec Director Nicholas Hooke Group 14,841,482 6.42% EBRD Ltd 11,632,866 5.03% JP Morgan 11,625,000 5.03% **Key Dates Key Milestones for 2010** 30th Quarterly Reports March. Farm-out process Closes 31 May 2010 September AGM 2 June 2010 31st December Half Yearly Report 30th June Annual Report 31st October Full Year Results

Table 10: Key company data.

Farm-out process will demonstrate industry valuation of 2C resources

Geologically a low risk environment

Risked NAV based on DCF10 is 35.2p/share



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