www.davy.ie
Bloomberg: DAVY<GO>
Research: +353 1 6148997
Institutional Equity Sales: +353 1 6792816

Davy Research

June 15, 2010

Equity Report: Company update

PetroNeft

Price: 32p

First oil production will fund further growth; raising valuation to 76p per share

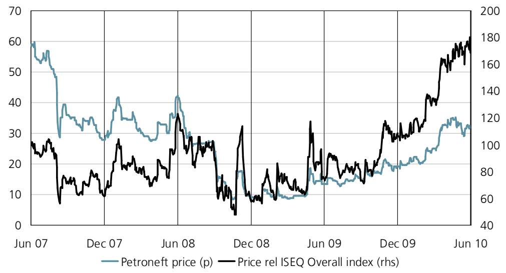
Rating: OUTPERFORM	*Issued 18/12/09*
Previous: NEUTRAL	*Issued 30/06/09*

James McCullough
james.mccullough@davy.ie / +353 1 6148921

Job Langbroek
job.langbroek@davy.ie / +353 1 6148914

Caren Crowley
caren.crowley@davy.ie / +353 1 6148923

Share Price Performance



Company data	
Reuters/Bloomberg/Xetra	PTR.L/PTR LN/P8ET
Sector	Resource
Shares (m)	347.7
Daily No. Shares Traded (m)	0.977
Free Float (%)	84.9
52 Week High/Low	35.25/12.75
Capital Structure	
Mkt. Cap (£m)	111.3
Net Debt/(Cash)	0.0
Deferred consideration/debt-related	N/A
Pref Shares/Non Eq Min	N/A
Minority interests	N/A
E.V. (£m)	N/A

Recent research and research resources
Recent research and financial data on *Petroneft*
Sector research and data on *Resource*

First production is imminent; cashflow will be reinvested

- PetroNeft is on track to commence oil production from its primary Russian licence in Q3 this year.
- We expect production of over 8,000 barrels of oil per day (bopd) in 2011, rising to over 18,000 bopd in 2014.
- Free cash flow of $12m next year, increasing to over $70m in 2014, will be reinvested in developing other reserves, exploring existing targets and expanding the portfolio.

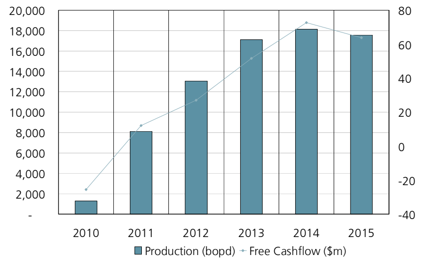
Scale of exploration assets can provide significant value lift

- On its main licence alone, PetroNeft has proven and probable reserves of 71 million barrels of oil and possible reserves of over 460 million barrels.
- Exploration drilling will commence in October this year and continue through next year, targeting up to 100 million barrels of the possible resource base.
- PetroNeft's average finding cost per barrel over the last four years is $0.65, while its enterprise value (EV) per reserve barrel is $2.28.

Retaining our 'outperform' rating with a valuation of 76p per share

- Our risked net asset value for PetroNeft is 76p per share based on a long-run oil price of $85 per barrel. This implies upside of 138% from the current share price.
- The stock is currently trading at an EV to forecast 2011 EBITDA ratio of just 2.6 times.
- First production is just the beginning; the real growth phase, driven by exploration, starts now.

Figure 1: Forecast production and free cash flow



Source: Davy

- **PetroNeft's 2P reserves are 71 million barrels of oil**
- **3P reserves are 531 million barrels**

- **PetroNeft is one of the few remaining independent, small oil and gas companies operating in Western Siberia**

Organic reserve and production growth

PetroNeft will start pumping oil from its main licence in Western Siberia, Licence 61, in Q3 this year. Making the transition organically from exploration to production is a rare achievement for any small-cap oil company, and PetroNeft's growth period is only beginning. Cash flow from production will now fund exploration, appraisal and development of its considerable existing resource base. This is a company that has the potential to find and develop material reserves without regular visits to the equity market, that can grow its production to mid-cap levels and that will probably be bought out (many of its local peers have already been acquired).

Second-half catalysts in production and exploration

Key catalysts for the stock in H2 are:

- First pipeline production from the Lineynoye oil field in Q3: the wells are being drilled; most of the construction work is complete; and testing and commissioning will take place over the next two months. We expect the current discount in the stock to narrow when first production is achieved.
- Recommencement of exploration drilling: PetroNeft will spud a well on the Arbuzovskaya target in October. Arbuzovskaya has three separate targets with possible reserves of 31 million barrels of oil; the October well will test the main target which has possible reserves of 16 million barrels. A successful well here would add 6p per share to our risked valuation as well as de-risking other prospects. Exploration will continue in 2011 with two to three wells expected, testing up to 100 million barrels of possible reserves.

Free cash flow positive from 2011

PetroNeft raised $27m in September 2009, which was the expected capital requirement to fund its development programme through to first oil. In fact, the development wells have been drilled faster than expected, and PetroNeft has secured a $30m debt facility to fund accelerated development that will materially increase 2011 cash flow.

We forecast free cash flow of $12m in 2011, rising to over $70m by 2014. This cash will be reinvested to develop more fields (we model for development of only three fields) and to carry out exploration and appraisal programmes on existing and new licences.

Regional M&A activity points to clear end game

PetroNeft is one of the few remaining independent, small oil and gas companies operating in Western Siberia since Imperial Energy, Malka and Sibir Energy were all acquired by larger companies looking to offset declining production and to add attractive exploration potential. We think the PetroNeft investment case stands up independent of the M&A argument, but we recognise the potential exit for investors.

- **We think the management team will continue to deliver operationally and that the company will grow steadily over the next five years**

- **Our risked valuation reflects the fact that not all exploration targets will prove successful and that some successful discoveries will not prove commercial**

Setting valuation at 76p per share

We think the management team will continue to deliver operationally and that the company will grow steadily over the next five years. Our risked valuation for PetroNeft, derived using a risked net asset value (NAV) approach, is 76p per share, suggesting upside of 138% from the current share price (32p).

Unrisked valuation in excess of 350p per share

Our risked valuation reflects the fact that not all exploration targets will prove successful and that some successful discoveries will not prove commercial. If all of PetroNeft's exploration worked, and all discoveries were developed, our valuation would rise to over 350p per share.

Table 1: PetroNeft NAV summary

P per share	*Risked*	*Unrisked*
Production	43.4	43.4
Development	10.1	17.5
Cash	3.0	3.0
Core	56.5	63.9
Exploration	19.6	287.7
Total NAV	76.1	351.7

Source: Davy

PetroNeft's barrels are undervalued versus peers

PetroNeft is valued at the low end of the peer-group range; we expect this rating to improve when production commences and for the overall number of barrels to be increased through exploration and appraisal.

Table 2: Enterprise value per 2P reserve barrel ($/boe)

Peers	*2P reserves*	*EV*	*EV/2P*	*Comment*
Dragon	610	1750	2.87	DGO bid for by ENOC at $4.34/bbl
Exillon	137	300.0	2.19	Exillon floated in December
Imperial	946	2600	2.75	IEC bought by ONGC
Malka	43	118	2.74	Malka bought by GazpromNeft
PetroNeft	71	162	2.28	

Source: Company data

Significant cash generation from next year

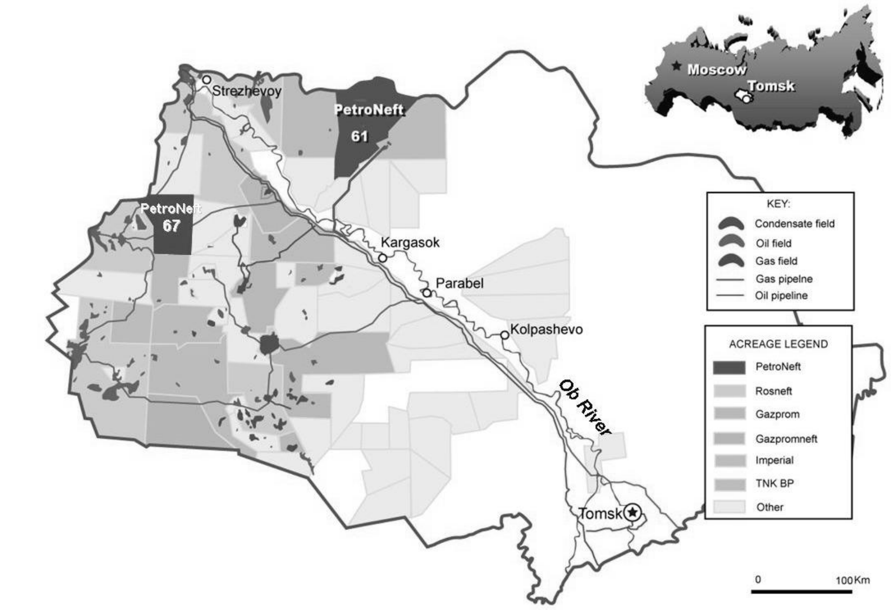
PetroNeft is trading on an EV to forecast 2011 EBITDA of 2.6x, falling to 1.6x for 2012. It is trading on an EV to free cash flow ratio of 13.4x for 2011 and 6x for 2012.

Assets – two licences in Western Siberia

- PetroNeft holds 100% of Licence 61 and 50% of Licence 67, both located in the Tomsk Oblast in Russia

PetroNeft holds 100% of Licence 61 and 50% of Licence 67, located in the Tomsk Oblast in Russia, c.4,500km east of Moscow. The licences lie in the southeast of the West Siberian Oil and Gas Basin, one of the world's most prolific oil and gas basins. The area was drilled in the Soviet era, and many small discoveries were made, but targets needed to be hundreds of millions of barrels of oil to be of interest at that time. These discoveries are large enough to be material to PetroNeft and other companies.

Figure 2: Location of Licences 61 and 67 within the Tomsk Oblast



Source: PetroNeft

Licence 61

PetroNeft has 71 million barrels of 2P reserves in Licence 61. The reserves are spread between four oil fields, all located within 25km of each other. The licence is connected to the regional Transneft oil pipeline system by a 60km pipeline recently built by PetroNeft that joins a 152km pipeline owned by Imperial Energy. Surrounding licences are owned by TNK-BP and Imperial Energy (bought by India's ONGC in 2008).

As well as the four proven fields on Licence 61, PetroNeft has identified over 25 further prospects and leads with potential to add another 460 million barrels of oil. The top five of these prospects could contain up to 200 million barrels of this potential. The first of these will be drilled in Q4 this year.

- Fraccing, or fracturing, is a technique commonly used to increase the flow rate of oil from a well. It does so by creating fractures within the reservoir rock around the well, either mechanically or chemically, that allow more oil to drain into the well

The oil discovered to date is situated in 2-15 metre thick Jurassic sandstone reservoirs, approximately 2,500 metres deep. These sorts of reservoirs are typical of producing fields in the region. Production tests have been carried out, with and without electronic submersible pumps, and reservoir parameters are in line with expectations. Fraccing will be used but not until next winter when winter roads can be used to transport the required equipment to location.

Figure 3: Licence 61

Source: PetroNeft

Table 3: Petroneft reserve summary (Licence 61 only)

Reserves (mmbbls)	*Proved (1P)*	*Proved and probable (2P)*	*Proved, probable and possible (3P)*
Lineynoye	5.69	23.88	29.82
West Lineynoye	2.71	23.32	29.19
Kondrashevskoye	0.61	8.12	26.11
Tungolskoye	1.38	15.51	19.66
Total	10.39	70.83	104.78
Upper Jurassic - 24 prospects			207.29
Cretaceous - 10 prospects			156.17
Lower to Middle Jurassic - 11 prospects			63.06
Total	10.39	70.83	531.3

Source: PetroNeft

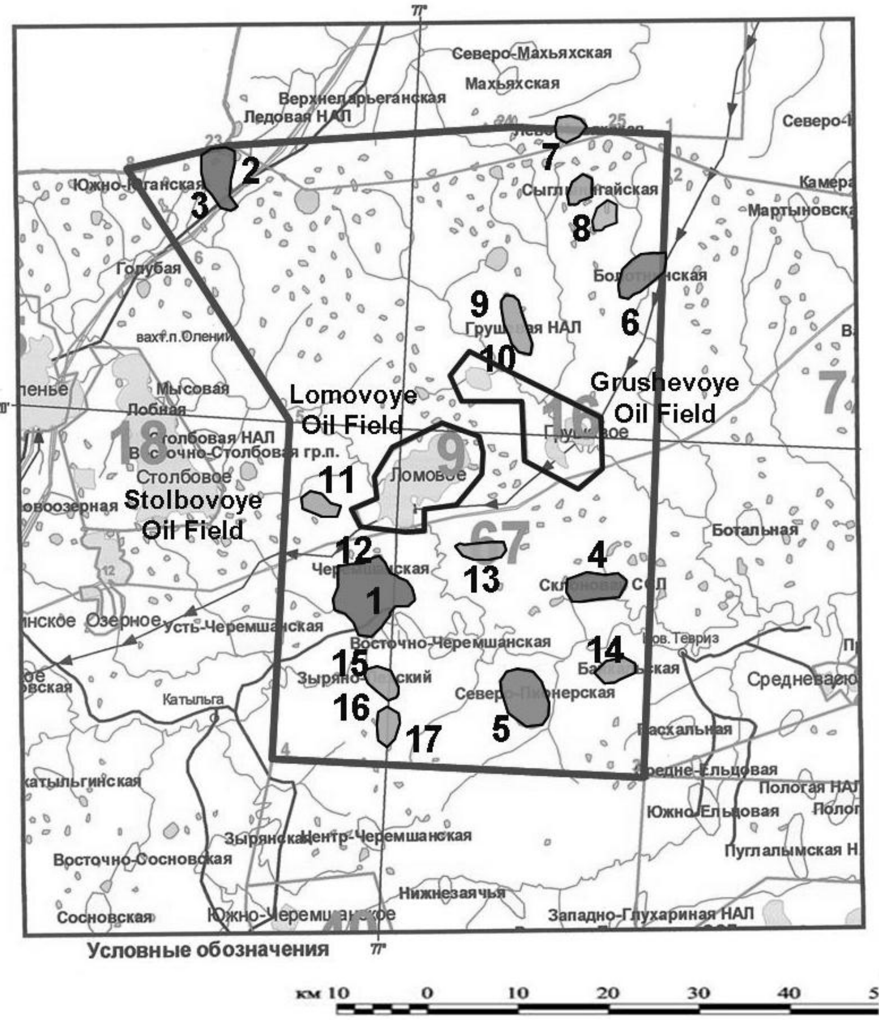
Licence 67

Licence 67, which PetroNeft acquired in December last year, has 55 million barrels of Russian C3 reserves – roughly equivalent to possible reserves. PetroNeft believes there is significant upside to this figure within existing discoveries, potentially by-passed pay on historic wells, and new exploration prospects.

- Arawak Energy is a4% shareholder in Petroneft.
- Arawak is a wholly-owned subsidiary of the Vitol group. It is an independent oil and gas company with exploration, development and production assets in Russia, Kazakhstan and Azerbaijan
- In 2009, Arawak produced at 13,420 bopd

Its 50% partner in the licence is Arawak Energy. The licence has three structures that have previously shown or tested oil, and there are already two producing oil fields within its extents (but not included in the licence). PetroNeft has 2D seismic data on the licence, which it is now reprocessing. It will shoot more seismic on the licence in 2011 and will start exploration drilling in either late 2011 or 2012.

Figure 4: Licence 67



Source: PetroNeft

Growth potential in portfolio expansion

- PetroNeft uses its local knowledge and relations to expand its portfolio

PetroNeft will continue to use its local knowledge and relations to expand its portfolio, as it did last year with Licence 67. There are licence auctions from time to time in which PetroNeft will bid; based on its successful and entirely compliant and transparent development of Licence 61, it will be looked on favourably as a bidder.

The general level of industry activity in the region has slowed over recent years, primarily due to lack of capital. PetroNeft may see further opportunities either as a credible partner (with access to 'Western' capital) for other licence-holders in the region or by asset acquisition from cash-strapped local private companies.

Phase 1 development of two fields

The Lineynoye and West Lineynoye oil fields on Licence 61 are being developed in Phase 1, with production set to commence in Q3 this year. Together, these two fields contain 47.2 million barrels of 2P reserves (66% of PetroNeft's current 2P reserve base).

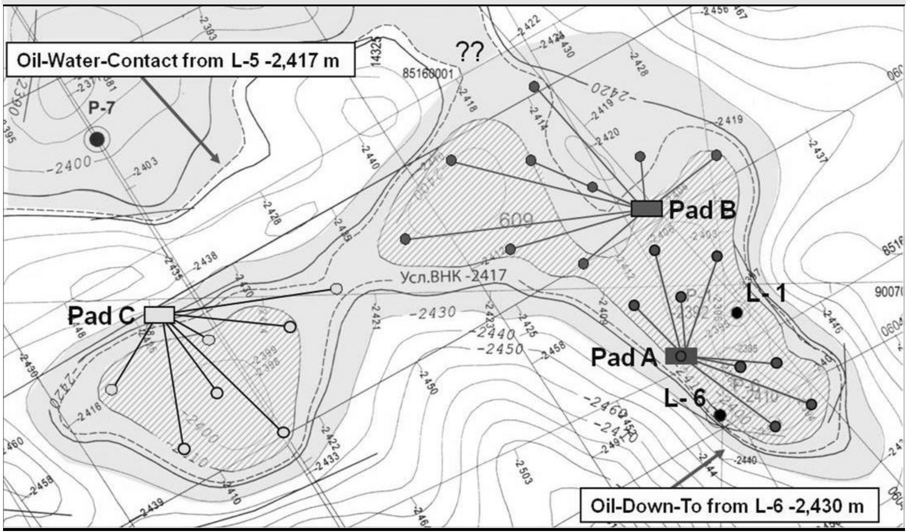
PetroNeft has drilled three successful exploration/appraisal wells on the two fields since 2007, and there are five other existing wells on the fields from Soviet drilling in the early 1970s. Two of the Soviet wells tested oil, and the remaining three intersected the reservoir interval below the oil-water contact.

Natural (unstimulated) flow rates measured range from 100 barrels per day to 271 barrels per day. With pumps, initial production rates are expected to be significantly higher; pumps generally result in a 200-250% increase, and the combination of fraccing generally gives a 300-500% increase. Our assumed initial flow rates depend on reservoir thickness and range from 375-750 bopd.

Development drilling underway

Development well drilling commenced in March on the Lineynoye field. A single drilling rig is being used in 2010 to drill nine wells (Pad A in Figure 5); a second rig will be added next year to drill nine more wells in both the Lineynoye and West Lineynoye fields (Pad B and a pad located near the Lineynoye 8 well, out of picture, respectively).

Figure 5: Phase 1 development drilling



Source: PetroNeft

Wells take 18-20 days to complete. Given that they were expected to take 30 days to complete, this is progressing substantially faster than anticipated. Well completion is carried out with a work-over rig once the production rig has moved to the next well.

Reservoir intersection to date has been in line with expectations.
This year, wells will be fitted with electrical submersible pumps. Batch fraccing will be carried out in Q1 2011.

Table 4: Development well data (at June 8th 2010)

Well no.	*Top of reservoir (vertical subsea depth, m)*	*Gross hydrocarbon interval (m)*	*Net oil pay (m)*	*Comments*
109	2,392	14	10.2	Interval is completely saturated with oil
110	2,395	13	8.9	Interval is completely saturated with oil, bottom 2.7m appears to be tight reservoir
112	2,401	16.2	12	Interval is completely saturated with oil

Source: Company data

Field facilities being installed

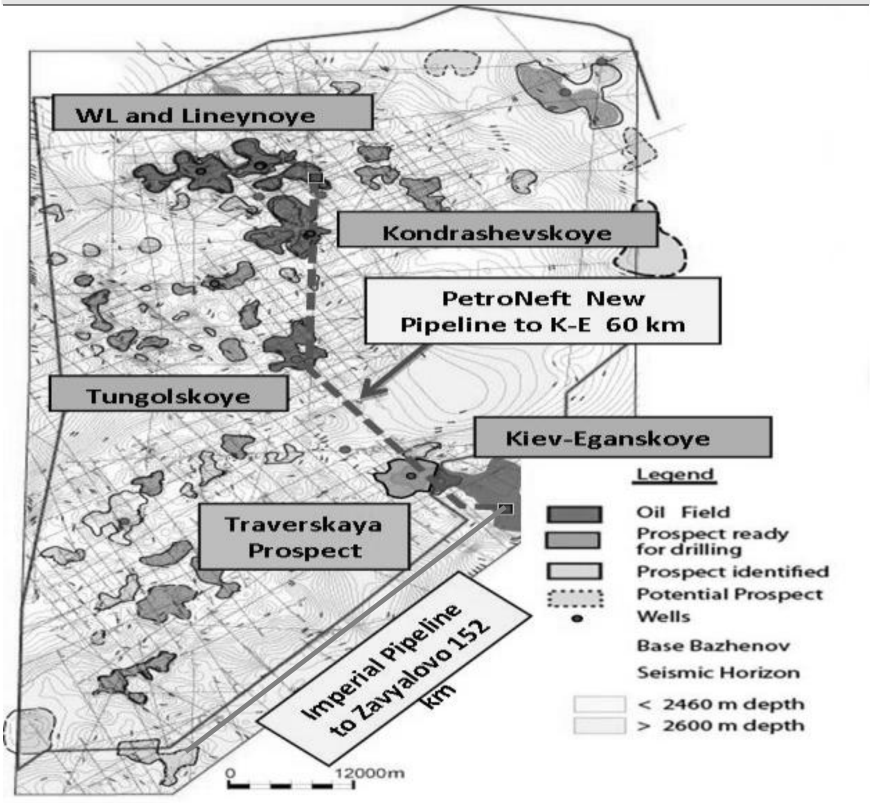
The facilities required at the oil fields are relatively basic:

- Two gas separation stages: a high pressure stage followed by a low pressure stage will strip the gas from the oil (PetroNeft's gas-oil ratio is 50 cubic metres of gas per cubic metre of oil). Gas will be used to power generators for field facilities and in-reservoir pumps.
- Separation tank: after gas separation, the oil flows into a 12,000 barrel holding tank, and any water in the oil is separated out under gravity. The oil is then moved to a 6,000 barrel storage tank.
- Connection to pipeline: following the storage tank, the oil will be fed into the pipeline for transport to market.

Pipeline complete, contracts in place

- PetroNeft has agreed with its easterly neighbours, Imperial Energy, a 25-year transportation agreement whereby Imperial will accept PetroNeft's oil into existing tank facilities at Kiev Eganskoye and use its pipeline to transport the oil to its custody transfer point on the Transneft pipeline system 152km to the southwest.
- In order to deliver its oil to Kiev Eganskoye, PetroNeft has built a 60km pipeline from the Lineynoye field facility location to Kiev Eganskoye, passing by the Tungolskoye field en route. The initial pipeline capacity is approximately 20,000 bopd, but this can be expanded in the future as necessary.
- The pipeline is now awaiting hydro-testing (checking it for leaks by pumping water into it), following which it will be connected to the facilities at each end.

Figure 6: Licence 61 pipeline to Kiev Eganskoye



Source: PetroNeft

Production to commence in Q3

All work is on-track for production to start in August this year. Any problems that may arise are unlikely to lead to significant delay as all work that requires a weather window is now complete.

- We expect year-end production to be in the region of 4,500 bopd and for 2011 production to average over 8,000 bopd

We expect year-end production to be in the region of 4,500 bopd and for 2011 production to average over 8,000 bopd.

Phase 2 to come on-stream in 2012

PetroNeft will invest cash flow from Phase 1 into the development of its other proven fields. We think the next most likely development will be at Tungolskoye, where the net pay is approximately 10 metres (versus 5 metres at Korchegskaya). This may change based on the results of exploration drilling on other prospects over the next 12 months.

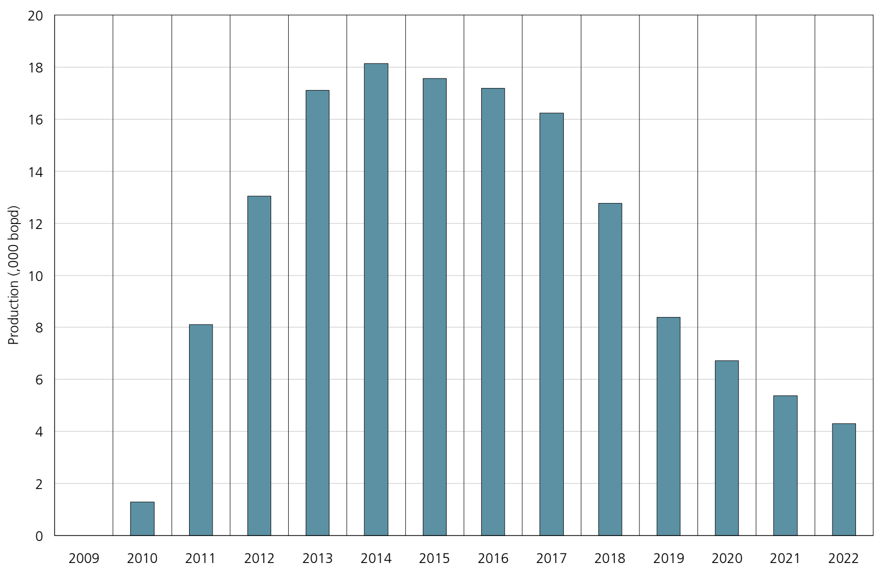
Production to grow to 18,000 barrels per day

- Based on the development of three existing fields only, we think PetroNeft can grow its production to over 18,000 bopd over the next five years

Based on the development of three existing fields only, we think PetroNeft can grow its production to over 18,000 bopd over the next five years. Our production forecasts are shown in Figure 7.

Production growth from 2014 out is reliant on further phases of development. Current reserves are sufficient to warrant two further phases; additional phases will require exploration success or other licence acquisition.

Figure 7: PetroNeft production forecasts



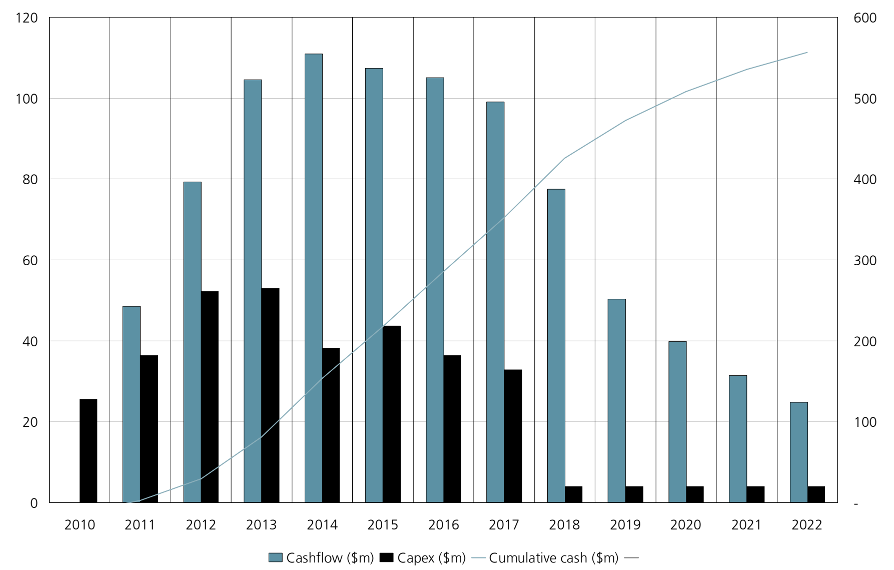
Source: Davy

Cash flow will fund further growth

- **One of the strongest parts of the PetroNeft investment thesis is that it has the potential to fund material reserve and production growth through organic cash flow**

One of the strongest parts of the PetroNeft investment thesis is that it has the potential to fund material reserve and production growth through organic cash flow (all going well). While further equity issuance is always a possibility, PetroNeft should be able to avoid the small-cap E&P norm of funding growth opportunities through dilution.

Figure 8: PetroNeft cash forecast



Source: Davy

- **We estimate that PetroNeft can accumulate over $80m by the end of 2013 after all capital spending on Phase 1 and 2 (ex-drilling) is complete**

We estimate that PetroNeft can accumulate over $80m by the end of 2013 after all capital spending on Phase 1 and 2 (ex-drilling) is complete. This level of cash generation will be sufficient to fund very aggressive development of existing reserves as well as exploration for new reserves on existing and yet-to-be acquired licences. A new phase of development will cost in the region of $25m, including drilling costs, while exploration wells cost approximately $3m each.

Our forecasts assume a long-run international oil price of $85, a 2:1 sales ratio of domestic to international sales and a long-run domestic oil price of $41 per barrel. Valuation and forecast sensitivities are provided at the end of this note.

Exploration – assets to invest in

PetroNeft's Phase 3 development will probably depend on the results of exploration drilling over the next two years. The Kondrashevskoye field, which has 8 million barrels of 2P reserves close to the Lineynoye fields, is the obvious choice right now. However, exploration drilling due to commence in October this year will test other targets on Licence 61 that may skip the development queue.

Track record demonstrates potential to add value

Since its IPO in 2006, PetroNeft has drilled six wells on its Licence 61 and has increased its 2P reserves from 33.5 million barrels to 71 million barrels. We view two of these as appraisal wells and four as exploration wells.

- **The oil water contact at Lineynoye was found to be deeper than expected**

Some of the reserve uplift came from a greater-than-expected volume at the Lineynoye field, but most came from exploration success. The total 2P reserves added through exploration was 32 million barrels, giving a conversion rate for 3P targets to 2P reserves of 28%.

Table 5: PetroNeft drilling track record to date

Well name	*Field name*	*Date*	*Pre-drill estimate (mmbbls)*	*Post-drill estimate (mmbbls)*	*Post-drill estimate (mmbbls)*
Appraisal			2P	2P	3P
Lineynoye 6	Lineynoye	2007	16	24	30
Tungolskoye 4	Tungolskoye	2007	16	15	20
Total Appraisal			32	39	50
Exploration			3P	2P	3P
Lineynoye 7	West Lineynoye	2007	67	23	29
Korchegskaya 1 *	Kondrashevskoye	2008	36	8	26
Lineynoye 8 **	West Lineynoye	2008			
West Korchegskaya 1 ***	West Korchegskaya	2008	11	0	7
Total Exploration			114	31	62
Total			146	71	112

* As the oil-water contact at Kondrashevskoye is not defined, only 8 million barrels of the 3P estimate were moved to the 2P category
** Lineynoye 8 results are included with Lineynoye 7 as they both target the West Lineynoye field
*** The primary target of this well failed to find hydrocarbons, but there is still untested 3P potential in lower Jurassic horizons
Source: Company data

Thinner-than-expected reservoirs were the primary reason for the discovered reserves being below pre-drill expectations. Only one of the wells drilled failed to find hydrocarbons; sandstones at the target level at West Korchegskaya were poorly developed.

The total spend on drilling was approximately $30m, with $20m of that on the exploration wells. This implies a cost per 2P barrel discovered of $0.65.

The market currently values PetroNeft at approximately $2.3 per 2P barrel.

Top five exploration targets could contain up to 200 million barrels of oil

PetroNeft has identified potential for up to 200 million barrels of oil in its top five Licence 61 prospects alone. The total potential reserves on the licence, on top of the existing 2P reserves, are over 460 million barrels of oil.

The Arbuzovskaya prospect will be drilled in October this year. Arbuzovskaya itself is a 16 million barrel target that lies very close to the Arbuzovskaya North and Upper targets, which have possible reserves of 6 million barrels and 9 million barrels of oil respectively. In total therefore, the Arbuzovskaya targets could contain 31 million barrels of oil. Success at Arbuzovskaya main would substantially de-risk the Upper and North targets. The prospectivity is in the Jurassic level, as at the nearby Lineynoye field, and the expectation is for 5-10 metres of net pay. Exploration success here would add approximately 6p per share to our valuation.

If Arbuzovskaya is proven as an oil field, it may be developed ahead of Tungolskoye or Korchegskaya. The pay and productivity will be the influencing factors.

- Data from previous wells, which may have been targeting different horizons, sometimes show changes in rock properties that are consistent with oil discoveries.
- PetroNeft believes that some of this bypassed pay may contain oil

Other large targets in Licence 61 include:

- Sibkrayevskaya (44m barrels), located 25km northeast of Lineynoye, has a previous well that shows 8.4 metres of bypassed pay in the Jurassic horizon.
- Tuganskaya, which has potential bypassed pay at both the Middle Jurassic (42 mmbbls) and Cretaceous (92 mmbbls) horizons, lies 40km west of the field facilities at Kiev Eganskoye.
- Traverskaya (24 mmbbls) is an extension of the Kiev Eganskoye field in the adjacent block and has additional prospectivity and potential bypassed pay at the Cretaceous and Middle Jurassic levels.
- Kirillovskaya (55-118 mmbbls) is a series of targets with potential for up to 118 million barrels at Jurassic and Cretaceous levels, located 45km southwest of the field facilities at Kiev Eganskoye.

- Imperial Energy made a discovery in the Cretaceous horizon at Kiev Eganskoye in June 2008
- This was a game changer in that it showed shallower prospectivity but also flowed at a rate in excess of 1,000 bopd, which is materially higher than flow rates from Jurassic reservoirs

Exit is clearly marked

Over the past two years, three of PetroNeft's Western-listed peers have been bought out. Two of these were significantly larger than PetroNeft, and one was smaller.

Imperial Energy

Imperial Energy was bought in December 2008 by India's ONGC for $2.6bn. Imperial has seven licences in the Tomsk region, with 2P reserves of 946 million barrels of oil equivalent and production of approximately 15,000 bopd. The rationale for the purchase was that it gave ONGC access to Russian reserves and production to counter dwindling production output in India.

Sibir Energy

Sibir Energy was bought by Gazprom Neft in mid-2009 to help battle falling output from its ageing fields. Sibir had net production of approximately 90,000 barrels of oil per day and reserves of approximately 700 million barrels.

Malka

Malka was also bought by Gazprom Neft in February 2010 for $118m. Malka has 2P reserves of 43 million barrels and production of 2,000 barrels per day in the Tomsk region. The rationale for the purchase was two-fold: to secure supply to local refining operations and to access exploration acreage.

We think the investment case for PetroNeft stands up independent of the M&A argument, but we recognise the potential exit for investors.

Valuation and forecasts

We value PetroNeft at 76p per share. Our valuation is based on a discounted cash flow model for the first two phases of development to determine a net present value per reserve barrel, which we then apply across the portfolio on a risked basis.

Net present value per developed barrel

Assumptions summary:

- $85 long-run Brent price and 5% discount to Brent
- 33% of oil exported
- $5 per barrel operating costs
- $4.5 per barrel export costs
- $1.8m per development well drilled and $350k per km of pipeline
- 10% discount rate used

Based on our forecasts out to 2025, we estimate that the net present value of each undeveloped barrel in the ground is $4.9. We apply this value to fields coming into production this year.

For later stages of development and exploration, we discount the value at 10% per year to development and subtract any additional finding and appraisal costs. We assume existing discoveries will take two years to develop and that exploration targets will take four years.

Exploration targets are risked with a 20% change of technical success. To contextualise this, PetroNeft has drilled three exploration targets and had success with two of them (67% success rate), converting 28% of the pre-drill 3P reserve estimate into 2P reserves. We use a lower chance of success to allow for the fact that PetroNeft probably drilled the lowest-risk targets first.

The breakdown of our NAV by asset-stage is shown below.

Table 6: PetroNeft NAV summary

Pence per share	*Risked*	*Unrisked*
Production	43.4	43.4
Development	10.1	17.5
Cash*	3.0	3.0
Core	56.5	63.9
Exploration	19.6	287.7
Total NAV	76.1	351.7

*Cash of $15.7m at December 31st 2009; much of this has been spent on development. Our NPV per barrel is net of development spending.
Source: Davy

Sensitivities

Oil prices, production rates and costs are three key variables for the PetroNeft valuation. The sensitivity of our valuation to each of these is shown below.

Oil price sensitivity

PetroNeft's valuation is highly geared to the oil price. The current share price suggests that the market is applying a long-run oil price of approximately $60 per barrel; based on our long-run assumption of $85 per barrel, there is over 100% upside in the stock from here. The increasing contribution of exploration is a key factor in this. At an oil price of $50 or lower, we think the return on investment in exploration becomes unattractive – it makes no contribution to our NAV until the oil price is over $50 per barrel.

Table 7: NAV sensitivity to oil price ($ Brent)

P per share	*30*	*40*	*50*	*60*	*70*	*80*	*85*	*90*	*100*	*110*	*120*
Core	3.0	6.0	17.3	28.6	39.7	50.9	56.5	62.0	73.2	84.3	95.5
Exploration	0.0	0.0	0.0	5.0	10.8	16.7	19.6	22.5	28.4	34.2	40.1
Total	3.0	6.0	17.3	33.5	50.6	67.6	76.1	84.6	101.6	118.6	135.6

Source: Davy

Production rates

We think the key remaining technical risk for PetroNeft is achieving its target production rates. So far, the highest flow rate achieved on the licence has been 271 bopd, while production flow rates are expected to range from 350-750 bopd. The increase will come from the use of fraccing and submersible pumps, both of which are reasonably common practices in this sort or reservoir. However, they still need to be shown to work on these reservoirs.

Table 8: NAV sensitivity to production rate

% of production rate target achieved	*40%*	*50%*	*60%*	*70%*	*80%*	*90%*	*100%*	*110%*	*120%*	*130%*
NAV (p per share)	3.0	9.7	28.7	45.7	58.4	68.2	76.1	82.5	87.9	92.4

Source: Davy

Costs

Russia is one of the only places in the world where oil industry costs are not dollar-denominated. The oil services industry is large enough to price in local currency. This has played very much to PetroNeft's advantage over the last 18 months as industry costs in local currency (roubles) fell, and the dollar significantly strengthened against the rouble. However, we recognise that it may also swing against the company. The table below shows the sensitivity of our valuation to percentage changes in operating costs per barrel. Our assumption is $5 per barrel.

Table 9: NAV sensitivity to changes in operating costs

Change in operating costs	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%	50%
NAV (p per share)	90.5	86.9	83.3	79.7	76.1	72.5	68.9	65.3	61.6	58.0

Source: Davy

We note that looking at single-variable sensitivities is facile and see it as an indicator of valuation moves only. In reality, moves in one variable will be accompanied by moves in one or more other variables, often offsetting changes to valuation. For example, the reduction in valuation from a lower international oil price will be somewhat offset by the effect of a weaker rouble on dollar-denominated operating costs.

Discount rate applied

The final sensitivity we look at is the discount rate applied to future cash flows. We note that there is a very small amount of debt relative both to total capital employed and to forecast EBITDA, so the vast majority of cash flow will be available for reinvestment or distribution to shareholders.

- **Note that technical risks, such as exploration success, or chance of development, are not accounted for by varying the discount rate**
- **PetroNeft's assets are not big enough to be considered as Russian strategic assets**

We apply a 10% discount rate in our valuation, in line with our valuations for other E&P companies. The most common rationale for applying a higher discount rate to cash flows from Russia is the perceived geopolitical risks. Given the good relations between PetroNeft management and the local government, the track record of adhering strictly to regulations and the relatively small scale of the assets, we do not see any reason to discount PetroNeft's future cash flow at a higher-than-average rate.

Table 10: NAV sensitivity to discount rate

Discount rate applied to future cash flow	6%	8%	10%	12%	14%	16%	18%	20%
NAV (p/share)	109.3	91.0	76.1	63.9	53.9	45.6	38.7	32.9

Source: Davy

Potential changes to tax regime

Mineral Extraction Tax (MET) is charged on every barrel produced at a rate proportional to the international oil price (details in Appendix 2). Recent lobbying from within the Russian oil industry (notably from Tatneft) is pushing for a reduction in taxes on small fields (fields of up to 73m barrels) as a way to stem Russia's production decline. Tatneft reckons small fields make up 14% of Russia's reserves.

A reduction in MET of up to 30% is apparently being considered, and the energy ministry reportedly plans to submit the proposals to parliament for a decision before the end of 2010.

If this change is achieved, it would lead to a significant value uplift for PetroNeft; our valuation would rise to 107p per share.

Forecasts – cash generator

If PetroNeft can hit its production targets over the next three years and assuming the oil price remains firm, it will generate a significant amount of cash – probably more than it would be able to invest in its existing assets. This will give the company flexibility to accelerate exploration and development of its existing resource base, to further broaden its portfolio and perhaps to even consider paying dividends.

Table 11: PetroNeft forecast summary (at $85 Brent oil)

$m	*2010*	*2011*	*2012*	*2013*	*2014*
Production (bopd)	1,291	8,106	13,048	17,114	18,132
Revenue	20.1	165.2	265.9	348.8	369.6
EBITDA	3.9	63.1	101.6	133.2	141.1
EBIT	-5.7	50.6	84.9	112.6	118.5
Earnings	-7.1	38.5	65.1	86.5	90.9
Cash flow	0.0	48.5	79.3	104.6	111.0
Capital spending*	25	36	52	53	38
Free cash flow	-25.5	12.1	27.1	51.6	72.8
Net cash	-12.8	2.3	29.4	81.0	153.7

*Capital spending on Licence 61 development only, excludes spending on exploration or other licence costs
Source: Davy

- **Macquarie holds 21m shares, or 6% of PetroNeft's issued shares, and was granted 5.7m warrants ranging from 30p to 37.8p as part payment for the debt facility**

Debt facility

PetroNeft's $30m debt facility with Macquarie Bank has a duration of up to three years. It will provide working capital and capital to advance exploration and development activities on both licences. A total of $12m of debt is available immediately; if more than $15m is drawn down, Macquarie will be granted additional warrants to purchase shares in PetroNeft.

It is important to note that this debt facility will allow PetroNeft to continue with its accelerated development programme; funds raised in September 2009 to pay for development would be sufficient to get PetroNeft through to first oil but with a slower production ramp-up. The additional wells drilled in the accelerated programme will lead to an increase in 2011 EBITDA from $45m to $63m.

Production forecasts

Our production forecasts, provided on page 10, are driven by the number of development wells drilled and the thickness of the reservoir. We assume flow is assisted with electronic submersible pumps, and we use first year and subsequent year decline rates that are typical for these sorts of reservoirs (40% and 20% respectively). We assume two drilling rigs are available for Phase 1 and an additional rig for Phase 2.

Capital spending forecasts

We assume each development well costs $1.8m to drill. In fact, wells in Phase 1 have come in below this figure. We allow $350,000 per kilometre of installed pipeline and ongoing capital spending of $4m per year to cover fracturing, field facility and other expenses.

Revenue and cost assumptions

PetroNeft expects to be able to sell approximately one-third of its oil into the international market. The remainder will be sold to the domestic market, where the oil price is typically 55% of the Urals export price. The actual proportion of oil exported will be determined on a month-by-month basis, depending on the relative net-back available when export duty is taken into account. There are no plans to hedge oil sales at this stage.

We assume Brent crude will average $65 per barrel in 2010 ($79 average year-to-date) and $85 in the long run. We assume Urals crude trades at a 5% discount to Brent (3% average over the last three years).

We assume a $5 per barrel operating cost, including transport through the Imperial pipeline into the Transneft system. For domestic sales, we assume a further $0.75 per barrel transport cost; for exports, we assume a $4.50 transport and marketing cost.

- Imperial Energy suffered technical issues in oil fields in the Tomsk region in early 2008 that caused it to miss its production ramp-up on new field developments
- The issues related to sand ingress into the well bore from the surrounding formation, resulting in greater-than-expected depletion.

Risks – reservoir performance is key

Much has been made of the risks of doing business in Russia over the last number of years, but the experience of companies in the small- and mid-cap E&P space has been trouble-free for the most part and certainly a lot more straightforward than in many other countries. PetroNeft's licences are in good standing having been bought directly from state auction rather than from prior owners; it has easily met its work requirements; it is employing locals at management level; and it has excellent relations at local government level. We do not expect PetroNeft to run into significant geopolitical problems specific to it.

Beyond standard E&P risks (oil price, exploration failure, adverse currency moves), we think the key risk to our valuation is reservoir performance and production rate. PetroNeft's expectations are based on well-established reservoir modelling techniques; however, until the rates are seen in the field, and are seen to be sustainable, risk will remain.

Imperial Energy suffered technical issues in oil fields in the Tomsk region in early 2008 that caused it to miss its production ramp-up. The issues related to sand ingress into the well bore from the surrounding formation, resulting in greater-than-expected depletion.

As a result of Imperial's problems, there is likely to be a certain amount of wariness regarding PetroNeft's production guidance until the rates are achieved.

Appendix 1 – management

Key personnel

- Dennis Francis: Chief Executive Officer and co-founder, Executive Director. Francis, a geophysical engineer and geologist, headed Marathon Oil's business development activities in Russia from 1989 to 2003 and was Director of the Sakhalin Energy Investment Company. He received the Sakhalin Governor's award for his involvement in the Sakhalin II project.
- Paul Dowling: Chief Financial Officer, Executive Director. Dowling was appointed as CFO and to oversee relationships with the capital markets on October 1st 2007, having previously been a Partner with Dublin Accounting firm LHM Casey McGrath. He is a Chartered Certified Accountant and a member of the Irish Taxation Institute with 18 years experience in the finance arena, including significant experience in the natural resources sector.
- Karl Johnson: Vice President for Business Development and Operations. Johnson joined the company on January 1st 2010 as VP of Business Development and Operations. He has 30 years of experience in the petroleum industry and worked with Marathon for over 27 years. He started with Marathon as a reservoir/production engineer and has worked primarily on international projects. In 1991, he co-ordinated the preparation of a feasibility study for the development of a field in Western Siberia. In 1992, he led the economic analysis of the Sakhalin II Project during the feasibility study and later became part of the team that negotiated the first Production Sharing Agreement in Russia. Johnson was then seconded to Sakhalin Energy Investment Company and held positions of Approvals Manager in Moscow and Russian Content Manager in Sakhalin. After Marathon left the Sakhalin II Project, he headed up Marathon’s Moscow office as VP of Business Development.
- David Sanders: Executive Director, Secretary and General Counsel, and co-founder. Sanders has over 15 years of Russian business experience, particularly in the legislative field. He was very closely involved in drafting Marathon's ground-breaking agreements on the Sakhalin II project, among others.
- David Golder: Non-executive Chairman. Golder has 34 years of industry experience with Marathon among others. He is a former Senior Vice President of Marathon and former Executive Vice President of the Upstream Sakhalin Energy Investment Company.
- Also on the Board are Tom Hickey (ex-Chief Financial Officer and ex-Director of Tullow Oil) and Vakha Sobraliev (30-plus years experience in the West Siberian petroleum industry and control of region's largest drilling company).
- On the ground in Russia, the management of Stimul-T has over 100 years of combined experience. Alexey Balyasnikov, General Director, is a former Head of Representation for Marathon in Moscow; Alexander

Frenovsky, Managing Director of Stimul-T, is the former General Director and Chief Engineer of the Tomsk region exploration company Tomskneftegazgeologia and has participated directly in the development of 15 oil fields in the Tomsk Oblast; Nikolay Karapuzov, Chief Geophysicist/Geologist of Stimul-T, is the former Chief Geophysicist/Geologist of Tomskneftegazgeologia and has participated directly in the development of 17 oil fields in the Tomsk Oblast; Valery Solovyev, Chief Engineer of Stimul-T, has over 32 years experience in the Russian oil and gas industry having worked for Lukoil, Gazprom, Rosneft and Imperial Energy among others on facilities construction and field development.

Appendix 2 – Russian tax system

PetroNeft will pay four taxes on its oil production:

- Mineral Extraction Tax (MET) – this tax is levied on every barrel produced, whether sold domestically or internationally. The basic rate is 419 roubles per tonne of oil produced, adjusted using a coefficient that reflects the international oil price and the rouble-dollar exchange rate. It is set every month based on the data for the preceding month. The coefficient is a ratio in which the numerator is the product of the rouble-dollar exchange rate and the difference between the average monthly Urals oil price and $15, and the denominator is 261.
- export tariff – this is a tariff on all oil exported from Russia. In dollar terms, the tax is $4 plus 65% of the difference between the Urals price and $25.
- profit tax – this is charged at 20%.
- property tax – this is charged at 2.2% of depreciated capex.

Important disclosures

Analyst certification

Each research analyst primarily responsible for the content of this research report certifies that : (1) the views expressed in this research report accurately reflect his or her personal views about any or all of the subject securities or issuers referred to in this report and (2) no part of his or her compensation was, is, or will be, directly or indirectly related to the specific recommendations or views expressed in this report.

Investment ratings definitions

Davy ratings are indicators of the expected performance of the stock relative to its sector index (FTSE E300) over the next 12 months. At times, the performance might fall outside the general ranges stated below due to near-term events, market conditions, stock volatility or – in some cases – company-specific issues. Research reports and ratings should not be relied upon as individual investment advice. As always, an investor's decision to buy or sell a security must depend on individual circumstances, including existing holdings, time horizons and risk tolerance.

Our ratings are based on the following parameters:

Outperform: Outperforms the relevant E300 sector by 10% or more over the next 12 months.

Neutral: Performs in-line with the relevant E300 sector (+/-10%) over the next 12 months.

Underperform: Underperforms the relevant E300 sector by 10% or more over the next 12 months.

Under Review: Rating is actively under review.

Suspended: Rating is suspended until further notice.

Restricted: The rating has been removed in accordance with Davy policy and/or applicable law and regulations where Davy is engaged in an investment banking transaction and in certain other circumstances.

Distribution of ratings/investment banking relationships

			Investment banking services/Past 12 months	
Rating	*Count*	*Percent*	*Count*	*Percent*
Outperform	49	58	23	62
Neutral	26	30	11	29
Underperform	6	7	0	0
Under Review	1	1	1	2
Suspended	0	0	0	0
Restricted	2	2	2	5

This is a summary of Davy ratings for all companies under research coverage, including those companies under coverage to which Davy has provided material investment banking services in the previous 12 months. This summary is updated on a quarterly basis. The term 'material investment banking services' includes Davy acting as broker as well as the provision of corporate finance services, such as underwriting and managing or advising on a public offer.

Regulatory and other important information

Davy is regulated by the Financial Regulator and is a member of the Irish Stock Exchange, the London Stock Exchange and Euronext. Davy is authorised by the Irish Financial Regulator and regulated by the Financial Services Authority for the conduct of business in the UK. No part of this document is to be reproduced without our written permission. This publication is solely for information purposes and does not constitute an offer or solicitation to buy or sell securities. This document does not constitute investment advice and has been prepared without regard to the individual financial circumstances and objectives of persons who receive it. The securities/strategy discussed in this report may not be suitable or appropriate for all investors. The value of investments can fall as well as rise and there is no guarantee that investors will receive back their capital invested. Past performance and simulated performance is not a reliable guide to future performance. Projected returns are estimates only and are not a reliable guide to the future performance of this investment. Forecasted returns depend on assumptions that involve subjective judgment and on analysis that may or may not be correct. Any information related to the tax status of the securities discussed herein is not intended to provide tax advice or to be used as tax advice. You should consult your tax adviser about the rules that apply in your individual circumstances.

This document has been prepared and issued by Davy on the basis of publicly available information, internally developed data and other sources believed to be reliable. Whilst all reasonable care has been taken in the preparation of this document, we do not guarantee the accuracy or completeness of the information contained herein. Any opinion expressed (including estimates and forecasts) may be subject to change without notice. We or any of our connected or affiliated companies or their employees may have a position in any of the securities or may have provided, within the last twelve months, significant advice or investment services in relation to any of the securities or related investments referred to in this document.

While reasonable care has been taken in the preparation of the information contained in this document, no warranty or representation, express or implied, is or will be provided by Davy or any of its shareholders, subsidiaries or affiliated entities or any person, firm or body corporate under its control or under common control or by any of their respective directors, officers, employees, agents, advisers and representatives, all of whom expressly disclaim any and all liability for the contents of, or omissions from, this document, the information or opinions on which it is based and/or whether it is a reasonable summary of the securities in this document and for any other written or oral communication transmitted or made available to the recipient or any of its officers, employees, agents or representatives.

Neither Davy nor any of its shareholders, subsidiaries, affiliated entities or any person, form or body corporate under its control or under common control or their respective directors, officers, agents, employees, advisors, representatives or any associated entities (each an "Indemnified Party") will be responsible or liable for any costs, losses or expenses incurred by investors in connection with the information contained in this document. The investor indemnifies and holds harmless Davy and each Indemnified Party for any losses, liabilities or claims, joint or several, howsoever arising, except upon such Indemnified Party's bad faith or gross negligence.

Share ownership policy

Davy allows analysts to own shares in companies they issue recommendations on, subject to strict compliance with our internal rules governing own-account trading by staff members.

We would like to advise you that: James McCullough holds shares in Petroneft.

We would like to advise you that: Job Langbroek holds shares in Petroneft.

We are satisfied that our internal policy on share ownership does not compromise the objectivity of analysts in issuing recommendations.

Conflicts of interest

Our conflicts of interest management policy is available at www.davy.ie/ConflictsOfInterest.

Davy acts as stockbroker to Petroneft.

Investors should be aware that this research has been disclosed to the issuer(s) in advance of publication in order to correct factual inaccuracies. We are satisfied that this has not compromised the report's objectivity. The remuneration of the analyst(s) who prepared this report is based on various factors including company profitability, which may be affected to some extent by revenues derived from investment banking.

Davy is a registered market-maker in the securities of Petroneft on the Irish Stock Exchange.

Davy is a registered market-maker in the securities of Petroneft on the London Stock Exchange.

Davy may have acted, in the past 12 months, as lead manager/co-lead manager of a publicly disclosed offer of the securities in Petroneft.

Investors should be aware that Davy may have provided investment banking services to, and received compensation from Petroneft in the past 12 months or may provide such services in the future. The term investment banking services includes acting as broker as well as the provision of corporate finance services, such as underwriting and managing or advising on a public offer. From time to time, Davy may hold a position or deal in the securities referred to in this report. Should an instance arise where Davy has a holding that exceeds 5% of the issued share capital of a company, this will be disclosed in this report.

Other important disclosures

A description of this company is available at www.davy.ie/RegulatoryDisclosures.

A summary of our standard valuation methods is available at www.davy.ie/ValuationMethodologies. All prices used in this report are as of close of business June 11th unless otherwise indicated. A summary of existing and previous ratings for each company under coverage, together with an indication of which of these companies Davy has provided investment banking services to is available at www.davy.ie/ratings.

Please note that in accordance with the Financial Regulator's Market Abuse Rules, no person, other than a market-maker, may enter into any transaction or arrangement which would have the effect of generating a net economic benefit arising from a fall in the price of the following shares: the Governor and Company of Bank of Ireland, Allied Irish Banks plc, Irish Life & Permanent plc and Anglo Irish Bank Corporation plc. Please refer to the Market Abuse Rules for full details.

US Securities Exchange Act, 1934

This report is only distributed in the US to major institutional investors as defined by S15a-6 of the Securities Exchange Act, 1934 as amended. By accepting this report, a US recipient warrants that it is a major institutional investor as defined and shall not distribute or provide this report or any part thereof, to any other person.

Distribution of research to clients of Davy Securities in the US

Davy Securities distributes third-party research produced by its affiliate, J & E Davy.

Davy Securities is a member of FINRA and SIPC and is regulated by the Financial Regulator.

Davy Securities does not act as a market-maker.

Davy Securities or an affiliate holds a proprietary position and/or controls on a discretionary basis more than 1% of the total issued share capital of Petroneft.

This information was current as of the last business day of the month preceding the date of the report.

An affiliate of Davy Securities may have acted, in the past 12 months, as lead manager/co-lead manager of a publicly disclosed offer of the securities in Petroneft.

Investors should be aware that an affiliate of Davy Securities may have provided investment banking or non-investment-banking services to, and received compensation from, Petroneft in the past 12 months or may provide such services in the next three months. The term investment banking services includes acting as broker as well as the provision of corporate finance services, such as underwriting and managing or advising on a public offer.

Confidentiality and copyright statement

Davy, Research Department, Davy House, 49 Dawson St., Dublin 2, Ireland.