EDISON

Petromanas Energy

Initiation of coverage

Gaining traction in Albania

Oil & gas

Having successfully drilled and tested Shpirag-2 earlier this year, Petromanas (PMI) is now looking for a repeat win with Molisht-1, which is scheduled for testing in H214 and expected to be followed by Shpirag-3, which targets to reach total depth, completion and testing by Q315. Benefiting from Shell's analogous experience in Italy, we are expecting PMI's analysis of the results from these three wells to be key to determining the level of success of the Albanian assets, and have the potential to de-risk and increase current prospective resource estimates of 375mmboe. On the cusp of a potential re-rating, our RENAV models, which include acreage in Australia and France, point to a value of C$0.69/share.

Year end	Revenue (US$m)	EBITDA (US$m)	PBT (US$m)	Debt (US$m)	Net cash (US$m)	Capex (US$m)
12/12	0.0	(14.3)	(4.1)	0.0	23.3	(7.4)
12/13	0.0	(27.4)	(5.2)	0.0	36.2	(17.1)
12/14e	0.0	(3.6)	(5.2)	0.0	33.9	(1.0)
12/15e	0.0	(2.8)	(4.5)	0.0	24.3	(3.4)

Note: *PBT and EPS are normalised, excluding intangible amortisation, exceptional items and share-based payments.

Albania's Blocks 2-3: A likely game changer

Following on from a successful oil and gas discovery on Shpirag-2, Petromanas, along with Shell (75%), will complete two more wells on Albania's Berati thrust belt, beginning with Molisht-1, which is currently drilling ahead and expected to reach total depth by mid-2014, followed by Shpirag-3, which is set to spud in Q314. Assuming both of these new wells realise similar levels of success as those found in Shpirag-2, we are expecting upside from current reservoir estimates, and in turn, an uplift to our current NAV for Blocks 2-3, which we base on prospective resources estimate of 375mmboe on a 100% basis.

France and Australia yet to show full potential

In the south-west of France, Petromanas is exploring fractured carbonate plays, which are not affected by the current ban on fracking. We are expecting the release of a Ledeuix conventional gas resource assessment in the second half of 2014, to provide additional data points to our current valuation estimates. PMI currently holds 1.6 million acres in Australia's gas laden Canning Basin; we are looking to expected new news regarding farm-out partners in 2014, with these likely to add a concrete timeline to the potential of these assets.

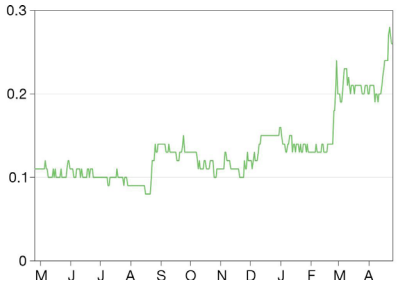
Valuation: Two Albanian triggers now in place

Our valuation models arrive at a risked exploration NAV of C$0.69/share by making use of resource estimates for Albania's Block 2-3 and D-E, with our models assigning a risked exploration value of US$363m to Petromanas's share of assets in Albania. Further to assets in Albania, acreage in Australia is valued at US$11.5/acre (US$19m), while gas assets in France realise an NPV of US$18m.

28 April 2014

Price	**C$0.26**
Market cap	**C$180m**
	C$1.11/US$
Net cash (US$m) at 31 Dec 2013	36
Shares in issue	693.7m
Free float	80%
Code	PMI
Primary exchange	TSX-V
Secondary exchange	N/A

Share price performance



%	1m	3m	12m
Abs	32.5	89.3	140.9
Rel (local)	30.4	78.7	104.4
52-week high/low		C$0.28	C$0.08

Business description

Petromanas Energy (PMI) operates in Albania where it holds a 100% interest in Blocks D and E and a 25% interest in Blocks 2 and 3, with Shell agreeing to farm-in to 75%. It also holds exploration assets in Aquitaine, France and Australia's Canning Basin.

Next events

Molisht-1 well test results	Q314
Shpirag-3 TD	H115
Shpirag-3 well test results	Q315

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Edison profile page

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Investment summary

Company description: Big game hunting in Albania

Currently drilling ahead and expected to reach total depth with Molisht-1 in July of 2014, Petromanas will follow on in Albania with Shpirag-3, which is set to spud in Q314. Petromanas has already confirmed an oil discovery in Shpirag-2, and assuming one of these two current wells realise similar levels of success as Shpirag-2, we are expecting the probability that these hydrocarbon accumulations share a single and larger reservoir will increase, and in turn, we would look to an uplift to unrisked prospective resources estimates, currently listed as 375mmboe.

Valuation: Exploration upside in Albania

Our valuation models make use of unrisked prospective resource estimates, which we risk by 35% and 25% for Shpirag and Molisht, respectively, as we account for the successes of Shpirag-1 and 2. For untested blocks D-E we use a higher risk factor of 12.5%, which we consider fair, given the lack of history. All in, we arrive at an NPV for Albania of US$363m by making use of our modelled NAV of US$7.8/boe, which we apply to risked prospective reserve estimates. Further adding to our modelled RENAV are gas assets in France, which are risked by 8% to realise an NPV of US$18m, while 1.6m of Australian acreage in the Canning basin is valued at US$11.5/acre, or US$19m.

Financials: Sustained by cash and Shell's cost carry

We find Petromanas to be well positioned over our forecast period. It is currently holding US$36m in cash (as of year-end 2013), and our forecasts point to a net cash position of US$24m by year end 2015. Greatly contributing to Petromanas's cash flow are amended farm-out terms with Shell, which came into effect in June 2013, and ensure that the Molisht -1 exploration cost will be carried to gross US$50m, and Shpirag-3 to a gross US$42.5m. On blocks D-E, we are expecting the Paper exploration well on block E to spud in 2015/16, while in France, Ger and Ledeuix commitment costs add up to US$4m and US$8m, respectively, for the next five-year term. Plans to spud a first well on Ledeuix are currently in the works, with permits expected over the next 12 months. Total spend for France and Australia is estimated by Petromanas as US$1.8m for FY13, with our estimates allowing for a sum of US$1.0m in 2014 and US$2.9m in 2015, as preparations and the search for a farm-out partner in Australia continue.

Sensitivities: Leveraged by drilling results over the next 12 months

The biggest levers to our NAV estimates are expected to be drilling results from Albania's Blocks 2-3, with these expected over the next 12 months. Specifically, we expect positive drilling results from Molisht-1 and Shpirag-3 to trigger upward revisions to current unrisked prospective resource estimates. Other key sensitivities to be expected are likely linked to announcements related to the construction and commissioning of the Trans Adriatic gas pipeline (TAP), with delays to completion having the effect of reducing gas sales modelled currently from Blocks 2-3. Further, on the farm-in of partner(s) for Australian assets, we are expecting negotiations to begin to move forward, and in turn, develop a more concrete market value for the current acreage. As far as assets in France are concerned, we are expecting more data to be released to the markets, as Petromanas concludes preparations of an independent evaluation of the Ledeuix resources.

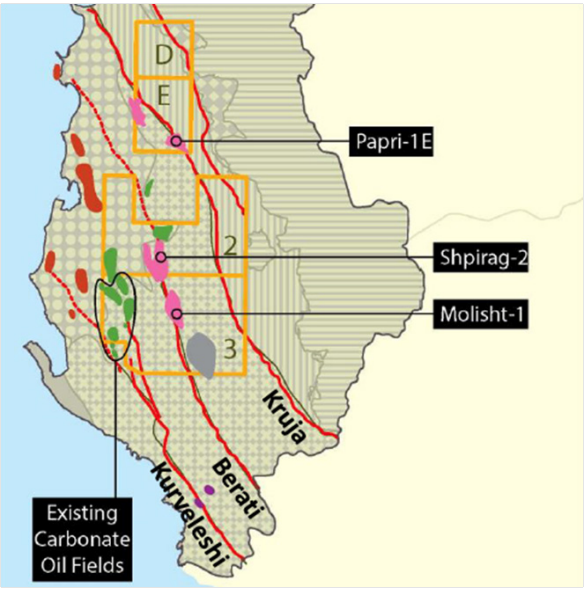
Company description: De-risking deep on-shore wells

Petromanas's core operations are based in Albania, where its assets and history date back to 2007 when the vendor of the Albanian assets was granted production sharing contracts (PSCs) for Blocks A-B and D-E, and for Blocks 2-3 in 2009. In 2010, Petromanas listed on the TSX-Venture exchange, which allowed the company to raise US$100m through two private placement transactions, and in turn, purchase Albanian Blocks A-B, D-E, and 2-3 from the vendor. Well equipped with a list of ready-to-drill prospects in Albania, and cash-in-hand from recent private placements, Petromanas successfully negotiated a farm-out agreement with Shell in 2012. This original farm-out entailed a 50% stake in Blocks 2-3 in exchange for cash and carried costs up to US$50.3m, which was later modified in 2013 to include a further 25% stake, on similar terms as those agreed in the original agreement.

Today, Petromanas holds a 25% stake in Blocks 2-3, and a 100% stake in blocks D-E. Successfully drilling Shpirag-2 in June 2013, the well tested at rates between 1,500-2,200boe/d, with over half of these volumes consisting of light, slightly sour crude (35-37 °API). The first of three planned wells on Blocks 2-3, Shpirag-2 was followed by the spudding of Molisht-1 in August 2013, expected to reach a total depth in Q314. Following Molisht, we are expecting Shpirag-3 (the third of three wells) to spud in Q314. Beyond Shpirag and Molisht, Petromanas is planning to drill additional Block 2-3 wells and the Paper-1E well on blocks D-E over the next two years.

Outside of Albania, Petromanas holds 170,000 exploration acres in south-western France in the foothills of the Pyrenees, as well as 1.6 million acres in Australia's Canning Basin and in the north-western gas-laden part of the country.

Exhibit 1: Petromanas Blocks D, E, 2 and 3 in Albania



Source: Petromanas

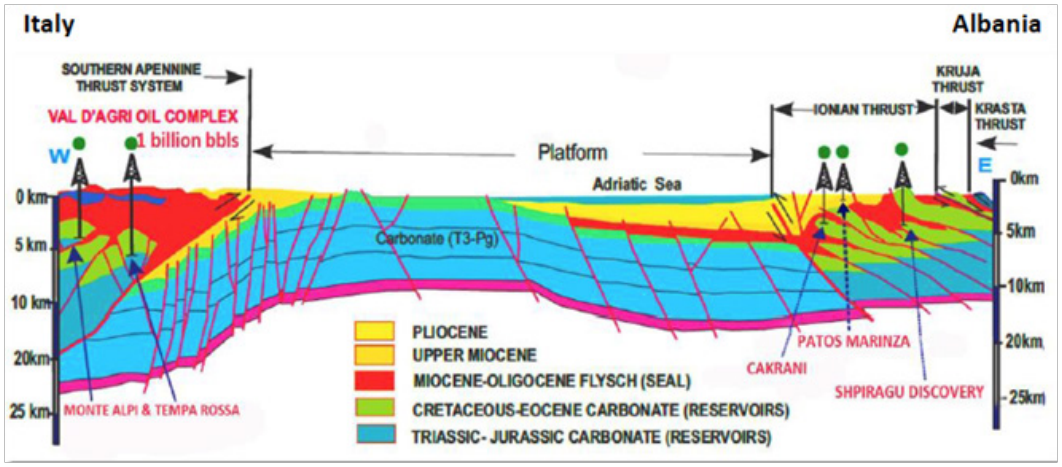
Exploration required to unlock Albania's potential

While historically Albania has not been known as a significant oil and gas producer and/or exporter, there are signs that these perceptions might change. The first of these signs is the success of the Bankers Petroleum operated Patos-Marinza field, currently producing over 18,000b/d of heavy crude from Albania's Block 3 (ie the same block where Petromanas is currently drilling the Molisht-1 exploration well). The second, and likely a stronger signal to global investors, pertains to the shared

thrust system geology between Albania and Southern Italy, across the Adriatic Sea. Similarities in oil gravity, water cuts, sulphur levels, as well as depth of reservoirs all verify that similarities and analogies do apply, with an added advantage that Albanian oil and gas politics are expected to be less bureaucratic than Italy's. This said, while sharing a fold and thrust setting with Italy does not necessarily increase Petromanas's chance of success in Albania, it does, however, increase the potential size of the prize, especially because global fold and thrust geology has yielded some of the world's largest oil and gas reserves to date. Examples of these include discoveries in Alberta and Wyoming in North America, Zagros in the Middle East, Andean gas fields in Bolivia and Peru, and Italian onshore oil and gas fields east of the South Apennines.

While the fold and thrust settings can be quite busy, complex, and often yield seismic data that is difficult to interpret, it is the very nature of thick source rock layers, and repeated folds, which allows for large and well sought after accumulations along these complex structural traps.

Exhibit 2: Albania and Italy shared thrust system



Source: Petromanas

Well understood by Eni, Total and Shell in Italy's South Apennines fold and thrust setting, this geology has been the subject of numerous studies, with over 35 wells drilled with Shell as a partner and technical consultant over the past 15 years. While Albania has seen much less work, and only three deep wells have been drilled to date, we are expecting Shell's Italian experience to be of great value to Petromanas as the company steps into a drilling programme that entails two more exploration wells on Blocks 2-3 in FY14-15.

Petromanas and Shell discover oil in Shpirag

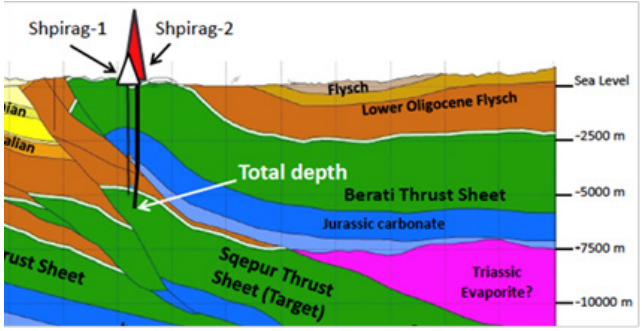
Originally drilled by Occidental Petroleum (Oxy) in 2001, Shpirag-1 reached the Sqepur thrust structure target at a depth of 5,200m, testing light 37-40 °API sour crude (2.3% sulphur) at an average rate of 400-1,200b/d. Well tests also showed significant volumes of natural gas and carbon monoxide, as well as hydrogen-sulphide, all of which were recorded at a gas to oil ratio of 2,000-5,000scf/bbl (ie total volumes of c 533-2,200boe/d). Declared the first light oil discovery made on onshore Albania, Shpirag-1 came with some complications, the likes of which included flow problems from the freezing of hydrates, along with conclusions from the reservoir study, which showed that inclined or horizontal wells would be required in order to maximise flow from the structure (source: Manas Petroleum, November 2008). Concerned at the time with the outlook of Albania's fiscal regime, as well as export pricing during testing, Oxy decided to abandon Shpirag-1, estimating at the time 1bnbbls of recoverable oil resources (P50) with a recovery factor of 25-35% and a 70% chance of success.

While some oil and gas developments have moved ahead in Albania since Shpirag-1 in 2001, it took over 10 years to make a second attempt at Shpirag. In June of 2012, the Shpirag-2 exploration well was spudded by operator Petromanas, and Shell as an equity partner.

As far as drilling costs were concerned, cost overruns did come into play, with these somewhat responsible for Petromanas's eventual need to revise its farm-out agreement with Shell. Costs to drill Shpirag-2, originally estimated as US$31m, increased to over US$70m as a result of severe wellbore stability issues related to loose flysch shale, which in turn repeatedly slowed down drilling operations as incidents emerged, which included a stuck drill-bit, as well as the loss of drilling fluid and circulation, all of which set the timetable back. In the end, Petromanas resolved stability issues by setting the casing at 4,750m (just ahead of the Sqepur thrust sheet), which in effect put the lower zone of unstable flysch shale behind pipe. From the depth of 4,810m, Petromanas drilled ahead with a smaller than originally anticipated diameter, penetrating the Sqepur thrust sheet and testing the targeted reservoir. Overcoming difficulties, Shpirag-2 reached its target depth of 5,553m in July 2013 and later in Q3 began an extended production test, which delivered rates of 1,500-2,200boe/d. Test results were mostly in line with expectations for a small wellbore and a problematic well, as well as analogous wells in Southern Italy. We note that a smaller side-track diameter than originally planned most likely affected test flow rates. Pressure build-up data over the following quarter provided further insights into the reservoir.

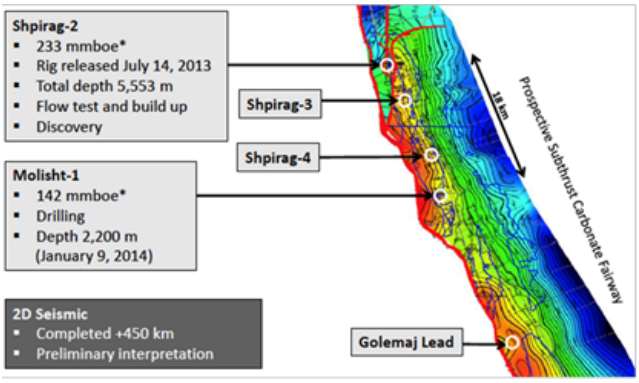
Shpirag-2 test results also confirmed light sour crude (35-37°API) contributions for over half of the tested volumes (30/70 gas-to-oil ratio), with gas production showing hydrogen sulphide levels of 5,000ppm, lower than expected, and also very much in line with Italian analogies and previous drilling results. Overall, Shpirag-2 production tests were seen as positive, with confirmation of the well's ability to flow light oil, which along with a reported 0% water cut ratio, are all seen as encouraging. Nevertheless, further testing and drilling is required to improve on Shpirag's current unrisked prospective resource estimate of 233mmboe.

Exhibit 3: Shpirag wells 1 and 2 – a cross-section of the Berati thrust belt



Source: Petromanas

Exhibit 4: Blocks 2-3 exploration wells



Source: Petromanas

Next steps in Albania

Petromanas's work commitments on Blocks 2-3 entail three more high-impact wells, starting with Molisht-1 exploration well on Block 3, spudded in August 2013 and currently drilling forward to a total depth of 5,500m and expected to reach TD in Q214, with testing scheduled for Q314. We are also expecting Shpirag-3 on Block 2 to spud in Q314 with results from this well expected into 2015. In total, Petromanas and Shell are committed to drilling three wells (Shpirag-3 being the third), as well as undertaking geophysics studies on Blocks 2-3, which include the analysis of 450km of 2D seismic shot in 2013, with processing and interpretation set to continue into 2014.

It is worth highlighting that results from Molisht-1 and Shpirag-3 are crucial, both expected to get a better wellbore into the formation, potentially improving on current drilling costs as the company moves through the learning curve, and, more importantly, providing some insight into the possibility that both of these wells on the Berati thrust system share a common reservoir. The potential of sharing a common reservoir is a key catalyst as it would imply an increase in the length of this reservoir to 18km, and potentially increasing current unrisked mean resource estimates of Shpirag (233mmboe) and Molisht (142mmboe), given that added volumes would be required to connect both of these fields into a single reservoir.

Exhibit 5: Unrisked prospective resources

Prospect	Block	Oil (mmboe)	Gas (bcf)	Total (mmboe)
Shpirag	2-3	136	581	233
Molisht-1	2-3	87	331	142
Paper	D-E	45	129	67
West Rova	D-E	49	136	72

Source: Petromanas; Note: prospective resource volumes for Shpirag (mmboe): P90= 16 P10= 588 Pm= 233.

Oil giants and analogies abound in Italy

Analogous fields are deemed useful in gauging the potential size of the prize, as well as providing a better understanding of the future and potential development of Shpirag/Molisht; we look to analogous fields both across the Adriatic where deep sub-thrust carbonates containing oil are in production, and nearby, on Albania's Block 3. Both in Italy and Albania, these include:

- **Val d'Agri (1P reserves of 420mmboe):** Operated by Eni, holder of a 60% stake in the project. Val d'Agri entails two large onshore oil discoveries located in the Southern Appenine mountains of the Val d'Agri area, some 30km south of Potenza (Basilicata region). The oil fields extend over two concessions (Grumento Nova and Volturino). Val d'Agri wells are productive from multiple zones in a variety of carbonate facies, with oil columns of 600-1,000m. Reservoir properties of the productive limestones and dolomites are deemed to be above average. Similarly to geology witnessed in Shpirag-2, sections of the producing wells are characterised by large, open fracture systems. In operation since 1996, production is currently c 85,000b/d of sour crude (ranging from 17-46 °API) from over 25 wells. Total investment cost approximated as €1.5bn. Shell owns a 40% stake in the project.
- **Tempa Rossa oil field (1P reserves of 200mmboe):** Operated by Total, holder of a 50% stake in the project. Discovered in 1988 and began development in 2012, field production is scheduled for 2016. Tempa Rossa is 25% owned by Shell and has estimated development total costs of US$2bn. Infrastructure is expected to include eight deep wells, a processing facility and a gas and liquefied petroleum gas (LPG) storage centre, and a capacity to produce 55,000b/d. Located in the southern Apennines, the field contains reservoirs of heavy sulphur oil, which will be heated to 150°C so it can be separated from the associated gas and production water. The oil will then be stripped or fractionated, removing any final quantities of H_2S that are still dissolved in it. Shell and Mitsui have a 25% stake each in this heavy sulphur oil project. With an estimated original 6-10bnbbls of oil in place, the Tempa Rossa field is the largest undeveloped onshore oil field in Western Europe.
- **Patos-Marinza (2P reserves of 224mmboe):** While not a particularly deep development, nor is it an Italian oil field, Patos-Marinza is of interest due to its large size (7.5bnbbls OOIP; 140mmbbls produced to date), range in oil quality (6-24 °API), and its location on Albania's Block 3, which it shares with Petromanas's Molisht-1 exploration well. Patos-Marinza is also part of the same petroleum system (source rock) as the carbonate sub-thrust structure Petromanas is currently exploring. Petromanas has the right to explore and produce oil below and adjacent to the existing Patos-Marinza oil fields. Operated by Bankers Petroleum with a

100% stake, Patos-Marinza is an older field and is currently producing over 18,000b/d of heavy crude through primary recovery methods.

Exhibit 6: Shpirag analogies in Italy and Albania

	Shpirag	Molisht	Val d'Agri	Tempa Rossa	Patos Marinza
	Albania (Block-2)	Albania (Block-3)	Italy	Italy	Albania (Block-3)
Operator	PMI (25%)	PMI (25%)	Eni (60%)	Total (50%)	BNK (100%)
Other stakeholders	Shell (75%)	Shell (75%)	Shell (40%)	Shell (25%)/Mitsui (25%)	-
1P reserves (mmboe)	-	-	420	200	224*
Unrisked Pmean (mmboe)	233	142	-	-	-
Oil gravity (°API)	35-37	-	17-46	10-22	6-22
Sulphur (%)	0.5%	-	2.0%	5.4%	-
Natural gas (% of total)	30%	30%	60%	7%	-
Reservoir depth	5.0km	4.5km	3-4km	6.1km	1.2km
Number of wells	-	-	25-30	6-8	>500
Production/capacity (boe/d)	-	-	85,000	50,000	18,000

Source: Petromanas, Bankers Petroleum, Shell, Edison Investment Research estimates. Note: *Patos-Marinza reserves stated as 2P.

We conclude from the comparison with Val d'Agri and Tempa Rossa, as well as test results already seen from Shpirag, that slightly sour gas could make up to 30-50% of total production. Further, we can also sum up from oil produced at Val d'Agri that some range in oil API is possible as more wells are drilled in Albania's Block 2-3.

As far as costs are concerned, we look to Tempa Rossa, which is set to begin production in 2016, and has guided markets towards a total field cost of €1.6bn (including sunk cost and a new 20" diameter pipeline to the existing Taranto export terminal pipeline). Making use of Tempa Rossa's total recoverable reserves of 440mmboe, we can approximate total costs on a per boe of reserve basis as approximately €3.6/boe (US$5.0/boe). We can also estimate a likely number of wells based on Tempa Rossa, which has planned eight in total, along with a peak production rate of 50,000boe/d, realising flow rates of 6,250boe/d per well, on average.

Albanian risks and rewards surrounding deep wells

While Albania's oil industry has been in existence since 1920 when heavy oil was discovered from shallow sandstone, current demand from a population of 3.2 million is not large enough to consume the potential oil production our models are suggesting. Furthermore, most of the country's current energy needs are already well met by hydroelectricity, which is supplied by the Drin river.

We conclude that some, if not most, of Shpirag and Molisht production would have to be exported, and in turn, fiscal terms offered to Petromanas and Shell do allow for 100% export of oil and gas. Current infrastructure allows for oil to be trucked to the southern port of Vlore, which has two refineries in the vicinity, as well as storage and tanker loading/unloading facilities. As far as gas is concerned, we would expect some gas could be consumed domestically, with our models assuming European export pricing and access to the proposed TAP from 2018.

With regards to the TAP, it is worth mentioning that this pipeline is expected to bring 10bcm of gas from Shah Deniz II gas field in Azerbaijan, across Greece and Albania, and into Southern Italy. Construction is expected to begin in early 2015, with first deliveries to Europe planned for 2018. It is worth noting that the project is co-financed by the European Union's trans-European transport network budget, and the project will receive financial support from the IFC.

With regard to taxes, we note that terms for each of the licensed blocks are negotiated and can vary with each agreement. Our models take into account a 10% royalty before cost recovery, followed by a second royalty ranging between 0% and 5%, in addition, and depending on an R factor. Further to these two royalties, the contract entails a 0-15% share of profit oil, which is applied post cost recovery and modelled prior to Albanian profit taxes of 50%.

Exploration assets in Australia and France

Assets in Australia's Canning Basin include a 100% working interest in both the EP 464 licence, which covers 608,700 acres, and the EP 486, which spans one million acres. These assets are located in Northwestern Australia, home to large gas basins and Australia's LNG export projects. Relatively underexplored, actual wells drilled in the Canning Basin come in the single digits on a per 10,000sqkm basis versus in the hundreds for more developed basins. Australian E&P companies with acreage in Canning point to prospective shale gas, shale oil and tight gas both for domestic consumption, and LNG exports. Petromanas has reprocessed aeromagnetic data in order to gain a better understanding of the basin's potential, and is searching for a farm-in partner for the exploration phase.

In France, Petromanas holds 100% of the Ger and Ledeuix licences (169,760 acres), which are adjacent to the Lacq gas field, a 9tcf discovery, which began producing in the 1950s. Currently, the general area is a regional centre for natural gas and petrochemical production, and as such, these permits have favourable fiscal terms, which include zero royalties on the first 10.6bcf/field/year. Plans to spud the first well on the Ledeuix permit are in the works for 2015. It is worth noting that these assets are fractured carbonate plays, which cannot be fracked, and will not be affected by France's current ban on fracking.

Management

- **Glenn McNamara, CEO and director:** Mr McNamara has more than 30 years of oil and gas exploration and production experience in Canada, the US, South America, and the Asia-Pacific region. From 2005 to 2010, he was the president of BG Canada. Before that, he held senior positions with ExxonMobil.
- **Peter Sider, VP engineering, operations and business development:** Mr Sider is a professional engineer with more than 30 years of domestic and international oil and gas experience focusing on operations. From 2006 to 2012 he served as MD and then VP, European operations with Vermillion Energy.
- **Bill Cummins, CFO and corporate secretary:** Mr Cummins is a chartered accountant with over 25 years of experience. His international background has spanned 16 years, including nearly three years as CFO of a TSX-listed oil and gas company with operations in Yemen.
- **Steve Farner, VP of exploration:** Mr Farner is a geoscientist with more than 30 years of global oil and gas experience. From 2003 to 2011, he was a founder in three successful exploration companies. Over 21 years, from 1982 to 2003, he held positions of increasing responsibility with Superior Oil, Mobil Oil and ExxonMobil Canada.

Sensitivities

One of the larger unknowns regarding operations in Albania relates to the sale of gas, and while our models account for the sale of gas beginning in 2018, there is the possibility that construction will be delayed. Positive near-term levers to our core NAV include revisions to reported unrisked prospective resources, which we could expect over the next 12 months as results of Molisht-1 come in and the upside potential of both Shpirag and Molisht sharing the same reservoir can be analysed. With the drilling of Molisht-1, we also look to a better wellbore, which will increase the company's ability to log and test the wellbore, as well as reduced drilling costs and overruns over the following wells, as Petromanas wells move up the learning curve. Other key sensitivities are linked to announcements of farm-in partner(s) for Australian assets, which we expect will move the project

forward, developing a more concrete value on the current acreage. Finally, we are expecting assets in France to potentially see a revision in upside, as Ledeuix resources are being prepared for an independent evaluation, with regulatory issues a potential source of risk.

Valuation

Putting all the valuation pieces in place, we begin with Shpirag and Molisht's combined 375mmboe of unrisked Pmean, along with our estimates of risked recoverable reserves of 94mmboe. We assume our standard price deck (US$80/bbl real, inflated at 2.5% after a fade from near-term pricing expectations) with amendments made for gas pricing. Our calculations account for the current PSC agreements in Albania plus transportation cost of US$5/boe, which assumes oil production will be trucked to the export port of Vlore, and gas (modelled as 30% of sales volume on a boe basis) will be sold into the TAP beginning from 2018. Overall, we are making use of Albania's PSC's tax regime, which calls on taxes to be paid on profit oil, after royalties, government allocation and after all costs are recovered (including operating costs, capital and G&A in Albania). Our Albanian models also account for capex of US$11.7/boe and opex estimates of US$15/boe in order to arrive at a present value of US$7.8/boe.

Including all assets in Albania, France and Australia, we arrive at a risked exploration NAV of C$0.69/share. In these estimates, we assume GLJ's unrisked prospective resource estimates in Albania, which we risk by 35% for Shpirag wells and by 25% for Molisht. Further, we apply a higher risk factor of 12.5% to Albania's yet-to-be-tested Blocks D-E. To arrive at our NPV estimates, we make use of our calculated of NPV of US$7.8/boe, which we apply to risked prospective reserve estimates.

In France, we make use of published Ger gas reserves of 131mmboe of Pmean (as per GLJ, these are undiscovered petroleum initially-in-place), which we risk by 25% to realise unrisked prospective resources of 32.8mmboe, and further risked by a 8% chance of success and value at US$5 per boe, in line with our European NPVs which take into account infrastructure in-place and the potential premium natural gas pricing. Ledeuix resources, on the other hand, have not been assigned an independent gas reserve estimate, and we value these by making use of company guidance, which points to potential reserves in place of similar size as Ger, with our conservative estimates assigning a value of half that of Ger. It is worth noting that while fracking has been banned in France, Petromanas is chasing fractured carbonate, which cannot be fracked and will be developed making use of conventional methods. As far as valuing acreage in Australia's Canning Basin, we look at historical transactions, and make use of New Standard Energy's (NSE:AU) farm-out of 75% of its Goldwyer Project's 11m gross acres for US$110m, or approximately US$10-13/acre, which values EP 464 and 486s 1.6m acres at US$19m.

Exhibit 7: Petromanas valuation table

Asset				Recoverable reserves			Net risked	Value per share
	Country	Diluted WI	CoS	Gross	Net	NPV/boe	Value	Risked
		%	%	mmboe	mmboe	US$/boe	US$m	/share (C$)
Net cash FY13	CN	100%	100%				36	0.06
G&A	CN	100%	100%				(7)	(0.01)
Exploration assets								
Shpirag (Blocks 2-3)	Albania	25%	35%	233	58	7.8	159	0.25
Molisht (Blocks 2-3)	Albania	25%	25%	142	35	7.8	69	0.11
Paper (Blocks D-E)	Albania	100%	13%	67	67	7.8	65	0.10
West Rova (Blocks D-E)	Albania	100%	13%	72	72	7.8	70	0.11
Ger (Aquitaine)	FR	100%	8%	33	33	5.0	13	0.02
Ledeuix (Aquitaine)	FR	100%					5	0.01
EP464 and 486 (Canning)	AU	100%					19	0.03
RENAV							**429**	**0.69**

Source: Company data, Edison Investment Research. Note: Exchange rate C$1.11/US$.

Valuation sensitivities

Export of gas is more dependent on planned export infrastructure as local markets cannot provide demand, with the proposed TAP a key variable. For sensitivity, we have modelled a scenario in which no gas can be exported and sold (we assume it is re-injected as local markets cannot provide demand). Given the European demand for gas and Italy's high gas prices, we do not envisage this in our base case, but an oil-only scenario would cut our unrisked Shpirag NPV by over 50%.

Examining the effect of varying realised oil prices reveals that a US$2/bbl increase in realised oil prices increases the NAV by c 3%.

Exhibit 8: Sensitivity (C$ per share) to Brent premium/discount

Premium/discount to Brent, US$/bbl					
-6	-4	-2	0	2	4
0.65	0.67	0.69	0.70	0.72	0.74

Source: Edison Investment Research

Financials

Exhibit 9: Petromanas's capex commitments (US$m)

	2012	2013	2014e	2015e
Molisht-1 (25%) – Shell to carry to US$50m gross		-	-	-
Shpirag-3 (25%) – Shell to carry to US$42.5m gross		-	-	-
Paper-1 (100%)		-	-	-
Australia (100%)		-	(500)	(500)
France Ger and Ledeuix (100%)		-	(500)	(2,400)
Albania Geo/Seismic – Shell to carry to max US$39m		-	-	(500)
Total organic capex	**(7,382)**	**(17,054)**	**(1,000)**	**(3,400)**

Source: Petromanas, Edison Investment Research estimates

Currently holding US$36m in cash (as of year-end 2013), we forecast that Petromanas will end our forecast period to end 2015 with a net cash position of US$24m. Amended farm-out terms put in place in June 2013 ensured that the Molisht-1 well will be carried by Shell to a gross US$50m, and Shpirag-3 to a gross US$42.5m, for a total of US$200m, which includes a carry-on for Shpirag-2. New terms also allow for technical support from Shell to a gross US$2m. On Blocks D-E, we are expecting the Paper exploration well on Block E to spud in 2016, for a commitment of US$25.0m. In France, Ger and Ledeuix work commitments are US$4m and US$8m, respectively, for the next five-year term. Plans to spud the first well on the Ledeuix permit are in the works, and expected over the next 18 months. Total capital needs for France and Australia are indicated by Petromanas as US$1.6m in 2013, with our estimates allowing for a sum of US$1.0m in 2014 and US$2.9m in 2015 as preparations continue in the search for farm-out partners in the Australian acreage.

As far as capitalisation is concerned, Petromanas has 100m warrants (exercise price of C$0.45, expiring February 2015); 46m options with an average exercise price of C$0.27, and 50m performance shares issuable on milestones related to Albanian licences, which include 25m shares on confirmation of 2P reserves greater than 50mmboe and 5m shares for each 50mmboe over and above, with a maximum dilution achieved at 2.55bnboe.

Long-term strategy, beyond Shpirag and Molisht

With respect to the company's strategy beyond Albanian Blocks 2-3 and its 'operator' partnership with Shell, we expect Petromanas to develop Albanian assets beyond a discovery phase, which in turn will provide Petromanas with a production base and cash flow to fund future growth and opportunities, which we expect will include current assets in Australia and France.

Exhibit 10: Financial summary

US$000s	2012	2013	2014e	2015e
Year end 31 December				
PROFIT & LOSS				
Revenue	0	0	0	0
Cost of Sales	0	0	0	0
Gross Profit	0	0	0	0
EBITDA	(14,313)	(27,382)	(3,561)	(2,849)
Operating Profit (before amort. and except.)	(4,832)	(3,923)	(3,893)	(3,181)
Intangible Amortisation	0	0	0	0
Exceptionals	(9,304)	(22,392)	0	0
Other	0	0	0	0
Operating Profit	(14,136)	(26,315)	(3,893)	(3,181)
Net Financial Items	693	(1,313)	(1,313)	(1,313)
Profit Before Tax (norm)	(4,139)	(5,236)	(5,206)	(4,494)
Profit Before Tax (FRS 3)	(13,443)	(27,628)	(5,206)	(4,494)
Tax	0	0	0	0
Profit After Tax (norm)	(4,139)	(5,236)	(5,206)	(4,494)
Profit After Tax (FRS 3)	(13,443)	(27,628)	(5,206)	(4,494)
Average Number of Shares Outstanding (m)	631.0	693.7	693.7	693.7
EPS - normalised (US$)	(0.01)	(0.01)	(0.01)	(0.01)
EPS - normalised and fully diluted (US$)	(0.01)	(0.01)	(0.00)	(0.00)
EPS - Reported (US$)	(0.02)	(0.04)	(0.01)	(0.01)
Dividend per share (US$)	0.000	0.000	0.000	0.000
Gross Margin (%)	N/A	N/A	N/A	N/A
EBITDA Margin (%)	N/A	N/A	N/A	N/A
Operating Margin (before GW and except.) (%)	N/A	N/A	N/A	N/A
BALANCE SHEET				
Fixed Assets	103,236	96,197	97,529	101,261
Intangible Assets	102,664	95,785	95,785	95,785
Tangible Assets	572	412	1,744	5,476
Investments	0	0	0	0
Current Assets	72,314	61,031	58,629	49,061
Stocks	0	0	0	0
Debtors	1,268	896	834	854
Cash	23,325	36,208	33,868	24,279
Other	47,721	23,927	23,927	23,927
Current Liabilities	(22,795)	(32,504)	(27,719)	(28,412)
Creditors	(22,795)	(32,504)	(27,719)	(28,412)
Short term borrowings	0	0	0	0
Long Term Liabilities	(3,517)	(2,054)	(2,054)	(2,054)
Long term borrowings	0	0	0	0
Other long term liabilities	(3,517)	(2,054)	(2,054)	(2,054)
Net Assets	149,238	122,670	126,385	119,856
CASH FLOW				
Operating Cash Flow	(4,507)	(4,290)	(27)	(4,876)
Net Interest	693	158	(1,313)	(1,313)
Tax	0	0	0	0
Capex	(7,382)	(17,054)	(1,000)	(3,400)
Acquisitions/disposals	0	0	0	0
Equity Financing	0	0	0	0
Other cash flow	27,250	34,053	0	0
Net Cash Flow	16,054	12,867	(2,340)	(9,589)
Opening net (debt)/cash	7,387	23,325	36,208	33,868
HP finance leases initiated	0	0	0	0
Other	(116)	16	0	0
Closing net (debt)/cash	23,325	36,208	33,868	24,279

Source: Petromanas accounts, Edison Investment Research

EDISON

Contact details	Revenue by geography
Petromanas Energy Suite 1720, Life Plaza Calgar, Alberta Canada +1 403 457 4400 www.petromanas.com	N/A

CAGR metrics		Profitability metrics		Balance sheet metrics		Sensitivities evaluation	
EPS 11-15e	-	ROCE 14e	-	Gearing 14e	12.4%	Litigation/regulatory	○
EPS 13-15e	-	Avg ROCE 11-15e	-	Interest cover 14e	-	Pensions	○
EBITDA 22-15e	-	ROE 14e	-	CA/CL 14e	-3.3	Currency	○
EBITDA 13-15e	-	Gross margin 14e	-	Stock days 14e	-	Stock overhang	○
Sales 11-15e	-	Operating margin 14e	-	Debtor days 14e	-	Interest rates	○
Sales 13-15e	-	Gr mgn / Op mgn 14e	-	Creditor days 14e	-	Oil/commodity prices	◖

Management team

CEO and director: Glenn McNamara

Mr McNamara has more than 30 years of oil and gas exploration and production experience in Canada, the US, South America, and the Asia-Pacific region. From 2005 to 2010, he was the president of BG Canada. Before that, he held several senior executive positions with ExxonMobil.

VP of operations and business development: Peter Sider, vice president

Mr Sider is a professional engineer with more than 30 years of domestic and international oil and gas experience focusing on operations. From 2006 to 2012 he served as MD and then VP, European operations with Vermillion Energy.

CFO and corporate secretary: Bill Cummins

Mr Cummins is a chartered accountant with over 25 years of experience. His international background has spanned 16 years, including nearly three years as CFO of a TSX-listed oil and gas company with operations in Yemen.

VP of exploration: Steve Farner

Mr Farner is a geoscientist with more than 30 years of global oil and gas experience. From 2003 to 2011, he was a founder in three successful exploration companies. Over 21 years, from 1982 to 2003, he held positions of increasing responsibility with Superior Oil, Mobil Oil, and ExxonMobil Canada.

Principal shareholders	(%)
Management and directors	13
Columbia Wanger	11
DWM Petroleum AG	1.1

Companies named in this report

New Standard Energy (NSE:AU); Bankers Petroleum (BNK:CN); Shell (RDSA:LN); Total (TOT:US); ENI (E:US)

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