

# PATAGONIA GOLD

15 October 2007

## Over the Hurdle

The leap from an exploration company to a resource company is the most fundamental a miner can make. Patagonia has just made that leap, which we estimate should warrant a 40% increase in its share price, with further upside if pending drilling results in 2008 exceed expectations or if the gold price remains high.

- Patagonia has just announced a NI43-101 compliant resource of 235,000 oz of gold at its Lomada de Leiva prospect in Santa Cruz Province, Argentina. This is the first resource figure for the company and marks its official transition from exploration company to resource company. Drilling has just commenced on several other advanced projects in the area with the view to confirming another 250,000 oz by early-2008, with potential for movement to 1m oz later in 2008.
- As noted above, moving from being an exploration company to being a resource company is probably the most fundamental shift that a junior miner can make, as it immediately differentiates it from the pack. Following this change in status, we value Patagonia at 11p per share on a risked-NPV basis, assuming a gold price of \$600/oz. Further uplift to this valuation would be warranted if the gold price remains above \$700/oz.
- Despite the recent resource announcement, Patagonia is trading some 60% below its peak of 20p achieved in March 2006, primarily because of political risk concerns over its previous projects in the Chubut Province of Argentina. We regard these political considerations as local and transitory and given that the company's activities are now centred in the neighbouring Santa Cruz province, we no longer view political risk as a major discount factor.
- The announcement of a resource figure, with promise of more to come, should encourage the market to move beyond these political issues and begin to value the company more positively.
- The Patagonia team of Richard Prickett and Bill Humphries have a proven record in Argentina, being the team that discovered the 3m oz Esquel deposit under Brancote, which was subsequently sold to Meridian for \$368m despite the gold price being at historic lows. We see them as well placed to repeat the exercise and have the backing of major local interests in Carlos Miguens, as well as major shareholders, Barrick Gold.
- The next round of fund raising should enable it to move towards the feasibility-study phase.

<b>Rating</b>	<b>BUY</b>
<b>Target price (p)</b>	<b>11</b>
<b>Price (9/10/07) (p)</b>	<b>7.75</b>
<b>Market cap. (£m)</b>	<b>27</b>
Sector	Mining and Metals
Reuters/Bloomberg	PGD.L/PGD.LN
AIM	1128

PGD £\$'000s			
Year	2006	2007E	2008E
Au \$/oz	600	600	600
Au oz			
EBITDA	(17,929)	(2,500)	(3,500)
EBIT	(17,929)	(2,500)	(3,500)
Tax	0	0	0
Net Earnings	(17,003)	(2,500)	(4,200)
EPS p	(1.10)	(0.79)	(1.00)
NAV	1,220	4,550	
NAV/share p	0.44	1.44	

52 week range	5-11.38
Free float (%)	60
Number of shares (m)	358
Daily volume (m)	20000



Performance over	1mth	3mths	12mths
Absolute (%)	-21	-29	22

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## Executive Summary

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Patagonia Gold has just passed through a fundamental stage in the life of a mining company: the jump from exploration company to resource company.

*Passed a major re-rating point*

The company has just released a resource statement on its Lomada de Leiva Project, in Santa Cruz Province, Argentina, defining over 235,000 oz of gold. This resource, while small, nonetheless marks the official movement of Patagonia out of the “explorer” category and, when coupled with results anticipated in February 2008, should in our view warrant a re-rating on the basis of the significant movement up the value curve that this change represents.

Although the company remains an early stage opportunity, the move out of “explorer” status is fundamental. On a risked-NPV basis, taking into account the recent results and the advanced stages of the company’s other projects, we calculate a value of 11p per share – a 42% uplift from current levels. Additional upside to 13p could be warranted if the gold price remains high into 2008 or if the drilling results expected in 2008 take the global resource base beyond 500,000 oz at the first pass, thereby providing an indication of greater resource potential.

*Political risk is oversold*

Patagonia Gold represents a value opportunity as it still finds itself not only in the grey zone between explorer and resource company, but continues to suffer from political risk indigestion from past events, despite having moved on. The stock is currently trading at a 60% discount to highs reached in early-2006, although it now has arguably a superior exploration and resource portfolio. Patagonia is no longer an explorer in the strict sense, as it now has a compliant resource and a number of other advanced projects with ore-grade intersections that in our view are a very positive indicator of the presence of economic gold resources. As a result, we see a significant proportion of the exploration risk as being overcome,

The Patagonia team is experienced in the region, has the backing of influential local business interests (Carlos Miguens and family, 42%) and has a supportive share register including Barrick Gold at 9%. It has just raised capital sourced primarily from directors, related parties and Argentinean investors, to fund a drilling programme aimed at converting several other advanced projects to resource status by early-2008. When the company then comes back to the market in 2008, it should be to fund feasibility and development programmes on the back of a substantial resource base.

## History

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*Proven management team*

Patagonia is exploring a large portfolio of prospective ground in Southern Argentina, has a strong and influential shareholder base and a management team with a proven record of discovery in Argentina. Patagonia Gold is a company operated by the former management team of Brancote Holdings, that had successfully discovered the 3m oz Esquel gold deposit in Argentina, subsequently bought by mid-tier US miner Meridian Gold in 2002 for \$368m.

Patagonia listed on AIM in 2003 on the back of resources and exploration ground in the Chubut province of Argentina, adjacent to Esquel. However in mid-2006, the Chubut provincial government placed a temporary embargo on all mining projects following heightened tensions between local communities and Meridian Gold that were amplified by foreign environmental groups protesting against the use of cyanide in gold processing. Meridian put the development on hold, wrote down the value of the project and redirected its efforts elsewhere. Patagonia, without the luxury of alternative assets, suffered a significant hit to its share price.

*Small resource in Chubut*

Most of the projects in Chubut are grassroots exploration, but the company still owns a 125,000 oz, high grade resource at the Huemules prospect. These resources and land positions in Chubut remain secure, but no further work is allowed until new regulations are put in place. The stance of the Chubut government has since softened and the environmental protestors have moved on.

Patagonia immediately sought to overcome these problems by diversifying out of the province. The company moved south to the neighbouring province of Santa Cruz and acquired a large exploration portfolio from Barrick Gold, in return for cash, convertible shares (which have since been converted) plus the right to buy back 70% equity in the projects at 3x money spent. Although we would prefer it if this claw-back were on better terms, as it could be seen as capping the upside, we regard it as unlikely that Barrick would exercise this option unless a minimum of 5m oz were proven, in which case Patagonia would end up with a minority holding of a major asset.

Barrick had carried out extensive drilling across the projects and handed Patagonia a portfolio of assets close to the resource category, thus allowing the company to short-circuit the grassroots exploration stage.

Patagonia has carried out drilling programmes in its own right during 2006 and the early part of 2007; results from this programme have largely been positive and have led to the recently released resource figure and upgrading of the remaining projects to the point where they could be converted to resources in the next drilling round.

## Projects

*Acquired old Barrick ground with advanced projects*

Patagonia holds roughly 2,000 sq km of exploration ground in the Santa Cruz province, purchased from Barrick in early-2007 upon Barrick's decision to exit Argentina. Previous Barrick drilling had identified three low-sulphidation epithermal vein systems that in our view each have the potential to be readily converted into +250,000 oz resources – this has just been demonstrated at Lomada de Leiva, providing us comfort for the remaining projects. The company's stated objective for the next six months is to convert these intersections into compliant resources that we would then expect to underpin a feasibility study and future development of at least two of these projects.

**Figure 1 Projects and Resource Potential**

<b>Project</b>	<b>Target</b>	<b>Potential</b>
Lomada de Leiva and Breccia Sofia	Two adjacent vein systems, that can be combined.	+500,000 oz
La Manchuria	Large vein system around a Rhyolite sequence, bonanza grades.	+250,000 oz
El Tranquilo	Low sulphidation epithermal system, breccia related.	?

*Source: Patagonia Gold, Matrix Corporate Capital*

Lomada de Leiva and Breccia Sofia (make up the Paloma project).

The project comprises two vein swarms immediately adjacent to one another, which have been the subject of a recent drill programme. A resource figure of 235,000 oz was recently announced at Lomada de Leiva, with a drilling programme about to commence at the adjacent Breccia Sofia prospect.

**Figure 2. Resource statement, Lomada de Leiva**

Resource Type	Cut-off (g/t)	Tonnes	Au Grade (g/t)	Contained Au (oz)
Measured	0.3	1,427,628	1.125	51,633
Indicated	0.3	3,574,388	0.955	109,713
Inferred	0.3	3,412,271	0.627	73,725

Source: Patagonia

Drilling at both prospects has been specifically designed by Patagonia for resource conversion and was thus largely internal to previous drilling, rather than being targeted externally to expand the size of the prospect. As a result the mineralization at both prospects remains open in all directions. 235,000oz has been defined at Lomada de Leiva, and on the basis of the size of the vein system and grades reported to date, we anticipate an additional 250,000 oz being defined at Breccia Sofia in 2008.

A combined 500,000 oz on this prospect should then provide Patagonia with sufficient resources to begin examining mining options while also starting work on expanding the resource.

The vein systems are near the surface, in good ground and should present a reasonably straightforward open-cut mining opportunity, which should in turn translate into reduced mining costs.

La Manchuria

The project hosts a structurally controlled set of veins within a rhyolitic tuff sequence. The veins are thin, but contain bonanza grades in places (up to 160g/tonne) and are stacked across a 200m width starting at surface, therefore also suggesting an attractive open-cut option. The strike length is limited; however Patagonia regards the brittle underlying basalt/andesite to be a more attractive host and plans to target a component of the next drilling phase to this deeper level. A reasonable resource is likely to be defined around the shallow system at La Manchuria but the deeper sections may provide the main potential.

El Tranquilo

This project is a more grassroots play, but with possibly more potential. This large land package is covered by recent volcanic ash and is to a large extent blind to surface exploration. Work in the limited erosional windows has identified a significant epithermal system. The project is largely conceptual at this stage, but the exploration model put forward by Patagonia's consultants, is for the mapped surface geology to represent the less-mineralised upper levels of a large breccia pipe, with the more mineralised section at depth.

This conceptual model is supported by the surface evidence, however this does not guarantee that a mineralised base exists. Thus, while of significant interest, it remains an exploration project that is to be drilled later in 2007. The scale of the system is impressive in our view, on the basis of the limited information available to this point and so the upside could be considerable.

Bonanza grades

## Plans for 2007

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*Looking to prove up 500,000 oz by early-2008*

The company's stated objective for the remainder of 2007 is to undertake the work necessary to convert the three main project areas into 43-101 compliant resources by early-2008. The Santa Cruz province is very southerly and access to the remote field areas is difficult in winter due to snow, limiting the field season to the summer months. Drill rigs have been secured and drilling is scheduled to commence when access is cleared in October.

A 3,500m drilling programme is planned for the La Manchuria project, to expand the shallow resource and to test the deeper basalt sections.

A 2,500m drilling programme is planned for El Tranquilo, with shallow drilling on two main outcrops within the project area: Cap Oeste and Breccia Valentina.

Additional surface exploration will be carried out across the projects in order to expand existing prospects and identify new areas, however the resource conversions are the company's prime objective.

### ***Future Funding Requirements***

*Capital raising in 2008 to carry out feasibility*

The company has just completed a capital raising to provide funds for the current drilling round. Further funding should then be required to take Patagonia through to feasibility and permitting, to the point of commencing construction if results warrant.

Given Patagonia's intention of starting development quickly on a small scale and in order to construct base case projections, we have assumed a £10m fund-raising in 2008 to fund feasibility and an additional £10m in 2009 to fund the equity portion of construction. It would be hoped that these funds would be raised at a significant premium to current price levels, however we assumed only a 10% premium in each event to form a prudent base case.

## Valuation

Although Patagonia has recently announced a compliant resource, it is not in itself sufficient to underpin a mining operation of any significance. Instead, we view this step as encouragement that the surrounding projects will be able to expand the company's resource portfolio on the basis of shared geology and existing ore-grade intersections. We regard the probability of further resources in early-2008 as high, and therefore develop our valuation from estimated revenues that could flow from a mining operation based on our projected resource base.

*Valuation based on the risk hurdle of demonstrated resources*

Of significance is the likelihood that Patagonia will become a very low-cost producer. Both the Paloma and La Manchuria projects are high-grade, near-surface deposits, with free milling mineralization. Feasibility studies from the mothballed Esquel development suggested indicative cash costs of approximately \$90/oz due to the combination of grade, favourable metallurgy, and low local cost base. The Patagonia projects would likely be smaller in scale and thus higher cost, but still share the same inherent cost advantages. The company would seek to bring forward development as quickly as possible on a small scale, allowing scope for ramp-up with operational cash flow, so start-up capital would be kept to a minimum.

Revenue projections in the absence of resources and feasibility studies are speculative at best. However as an indicative example, we have modelled a 50,000 oz p.a. scenario commencing in 2010, increasing to 100,000 oz p.a. on the back of a total capital cost of \$100m and a cash cost of \$200/oz.

On the basis of this rudimentary model, assuming additional share issues required to maintain a 30:70 debt to equity mix, we may see the company producing net earnings of 0.2p per share in 2010, increasing quickly towards 2p per share from there, underlying our NPV10 valuation of £111m.

**Figure 3. Cash Flow Projections**

### Summary Table

	2007	2008E	2009E	2010E	2011E
Gold Price	600	600	600	600	600
Sales £'000s	0	0	0	15,000	30,000
EBITDA £'000s	(2,119)	(2,875)	(2,500)	12,500	27,500
EBIT £'000s	(2,500)	(3,500)	(2,500)	3,539	12,089
Net Earnings £'000s	(2,500)	(3,500)	(2,500)	1,089	10,339
<b>EPS UK p</b>	<b>(0.79)</b>	<b>(1.00)</b>	<b>(0.85)</b>	<b>0.18</b>	<b>1.74</b>
<b>Diluted EPS UK p</b>	<b>(0.75)</b>	<b>(0.96)</b>	<b>(0.83)</b>	<b>0.18</b>	<b>1.69</b>
NPV10 £'000s	111,000				
Per share p	34				
IRR	35.7%				

*Source: Matrix Corporate Capital*

This scenario, however, is purely speculative, but based upon a 1,000,000 oz resource which we view as achievable on the basis of the geology and results to date.

*Four main milestones*

Valuation today therefore will depend on the future milestones and the degree to which these reduce the risks of moving to a mining operation. This is a very early-stage development and the path is uncertain, however in a gold development scenario there are four fundamental risk hurdles:

- ore grade and ore width intersection;
- confirmation of a compliant resource;
- completion of feasibility studies; and
- construction and commissioning.

*Risk is loaded toward the front end*

We hold the view that the degree to which a milestone represents a reduction in risk is not proportional to the money invested to reach that milestone. Risk reduction will vary from project to project, depending on the complexity of the operation, however in the instance of an early-stage gold operation with reasonably simple mining and metallurgy, the risks are loaded toward the front end. Exact probabilities are debatable, however we have offered an estimate based on our experience.

**Figure 4. Risk Milestones**

Milestone	% of total development risk
Ore grade and ore width intersection	30%
Compliant resource	30%
Feasibility studies	25%
Construction and Commissioning	15%

*Source: Matrix Corporate Capital*

Confirmation of a compliant resource is the most significant step in reducing risk and moving along the value curve. The first resource figure has just been released, with further figures due early in 2008 following a drilling programme that is about to commence.

Therefore, on the basis of this risk scheme, we have already seen the first milestone reached before the company started work, as these results were inherited from Barrick. The second hurdle has fallen, albeit in a small way, but with the likelihood of further resources to follow. Given these results, we would regard it as unlikely that a mining operation of some sort would not develop from this work; the prime question being how big.

*Resources will grow gradually*

Looking at the quality of the results to date and the scale of the mineralised systems, there would seem to be scope for several million oz to be ultimately proved in this field, however it will likely be done in a gradual way, with most attention being given to delineating a starting resource of 500,000 oz, sufficient to commence production and to then expand from there.

As a result of this staged growth, we would not be comfortable valuing Patagonia on an in-situ value basis as this number is going to be a moving target. Instead, we would prefer to value the company on the basis of projected earnings, as reflected in the NPV.

*Value on risked revenue projections rather than in-situ resources.*

In Figure 5 we have outlined our NPV valuations, discounted for the various risk hurdles to be overcome, using a base-case gold price of £600/oz and an upside case of \$700/oz. From this calculation, we argue that at the current gold price, and in light of the recent change in risk profile, a valuation of 11p would be justified now, with further uplift in early-2008 if results are better than expected, and if a global resource in excess of 500,000 oz is defined.

Figure 5. Risked Valuation table (\$600/oz)

Milestone	Cumulative Risk	NPV at \$600/oz	Risked NPV per share p	NPV at \$700/oz	Risked NPV per share p
		£m		£m	
Ore Grade and Ore Width	30%	111	5.5	137	6.7
<b>Compliant Resource</b>	<b>60%</b>	<b>111</b>	<b>11.0</b>	<b>137</b>	<b>13.4</b>
Feasibility Study	85%	111	15.5	137	19.0
Commissioning	100%	111	18.3	137	22.4

Source: Matrix Corporate Capital

As any production would only be in some years' time, the company is not immediately exposed to the gold price, however, applying a longer-term price of \$700/oz increases our NPV valuation by 20% at this stage of the company's development, and therefore an additional price premium could be argued if the gold price remains high into 2008

## Summary

These calculations are very much a base case around which a real operation might vary. However on the basis of the geology and drill intersections recorded to date, we view the probability of Patagonia defining a resource capable of supporting such a production base as high. Variations to this basic valuation may stem from upcoming drilling results that could provide greater confidence in the resource base leading to enhanced revenue projections. Positive news flow has just commenced with a resource announcement, and should continue as drilling is starting now, with further resource figures anticipated in February 2008.

*Chubut remains on the books*

We are also mindful of the suspended leases in the Chubut province. High-grade resources exist in these licences, to which we have ascribed no value. We regard it as likely that these projects will be freed up in time, as the Chubut government works through its concerns, which should further enhance the company's valuation.

The quality of the advanced resources is sufficient to offer us comfort of a reasonable mining operation being likely in the medium term as well as offering potential for significant expansion in the longer term via further discoveries or acquisitions.





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