

Released : 29.03.2011

RNS Number : 7770D

Patagonia Gold PLC

29 March 2011

## PATAGONIA GOLD PLC

*29 March 2011*

### RESOURCE & PRELIMINARY ECONOMIC ASSESSMENT COSE GOLD-SILVER PROJECT SANTA CRUZ PROVINCE, ARGENTINA

#### Highlights:

- Mineral resource estimate completed on the COSE gold and silver deposit has defined a combined total of 34,395 tonnes at 60.06 grams per tonne (g/t) gold (Au) and 1,933.07 g/t silver (Ag) for 106,393 ounces of gold equivalent (AuEq).
- Preliminary Economic Assessment, estimates a base case NPV of US\$ 63.7m, using a gold price of US\$ 1,204 per ounce (oz) and silver US\$ 23.75/oz, over a life of mine of 23 months. Total direct (OPEX) and capital (CAPEX) costs for life of mine (LOM) US\$ 33m using the direct shipping option of the mined ore to smelter.
- NPV of US\$ 93.8m using a gold price of US\$ 1418/oz and a silver price of 35.00/oz.
- Patagonia Gold (PGSA) has so far delineated resources totalling 1,143,759oz AuEq on the Lomada, Cap-Oeste, COSE and Manchuria deposits, all NI 43-101 compliant.

#### E1 Tranquilo Property Block:

The El Tranquilo property block, covering over 60 square kilometres, contains the **COSE deposit**, the **Cap-Oeste gold and silver deposit**, the Pampa prospect and the Vetas Norte and Breccia Valentina structural trends. The property is located approximately 120km to the south east of the Lomada de Leiva gold project where development of a heap leach operation is currently in progress.

#### COSE deposit:

The COSE deposit is along strike and is associated with the larger Cap-Oeste gold-silver deposit located 2 kilometres to the north-west.

In November 2010, PGSA contracted Chlumsky, Armbrust & Meyer L.L.C. (CAM) of Lakewood, Colorado, to complete an audit and review of the maiden COSE resource and also to carry out a Preliminary Economic Assessment to define the potential viability for the construction, mining and processing of the COSE deposit.

CAM has completed the audit and review of the PGSA resource model and reports the following resources for COSE

project:

**NI 43-101 Compliant Resource Statement:**

Total INDICATED Resources Undiluted COSE Project						
Grade				Ounces Contained Metal		
Tonnes	Au (g/t)	Ag (g/t)	AuEq (g/t)	Au Metal (oz)	Ag Metal (oz)	AuEq Metal (oz)
20,637	60.06	1,933.07	96.21	39,847	1,283,412	63,836
Total INFERRED Resources Undiluted COSE Project						
Grade				Ounces Contained Metal		
Tonnes	Au (g/t)	Ag (g/t)	AuEq (g/t)	Au Metal (oz)	Ag Metal (oz)	AuEq Metal (oz)
13,758	60.06	1,933.07	96.21	26,565	855,050	42,557

# AuEq values are calculated at 53.5:1 Au;Ag ratio

Extract from CAM: "Resources were calculated by Matthew Boyes of Patagonia gold and reviewed and classified as indicated and inferred by Robert L. Sandefur PE of CAM through the use of statistical methods. Resources are based on 58 holes which intersect the COSE ore shoot. CAM classified the resource as indicated based on the criteria that there is a less than 10% chance than less than 85% of the contained ounces will actually be mined. Because this deposit has only been sampled by surface drilling there is greater uncertainty than if the deposit had been estimated on the basis of channels samples a meter apart in drifts separated by 25 m vertically. Approximately 70% of the contained ounces are carried on five of the 58 holes. The silver to gold equivalent ratio of 53.5:1 is based on a gold price of \$1204 per troy ounce and a silver price of \$23.75 per troy ounce and gold and silver recoveries of 95 and 90% respectively were applied when calculating AuEq metal content. Metals prices were calculated as the three-year past two-year future rolling average as of March 1, 2011. CAM believes additional drilling to confirm the area of influence of the five high-grade holes is prudent" End of extract.

**Preliminary Economic Assessment:**

The COSE deposit is located 150 metres below surface and will therefore be mined by underground methods with a decline access.

CAM have suggested a mechanized cut and fill mining method be adopted for the extraction of the COSE deposit, this style of mining method, although initially requiring greater quantities of sublevel development, is more appropriate for mining of narrow vein structurally controlled deposits such as COSE as dilution and ore-loss can be far better controlled. A total ore movement of 120T per day or 3600 T per month has been used as the base case production forecast for the mine.

**Mineable Reserves:**

Diluted Mineable Reserves applying 98% Recovery Factor							
Classification	Tonnes	Au (g/t)	Ag (g/t)	AuEq(g/t)	Au (Oz)	Ag (Oz)	AuEq (Oz)
Probable	39,111	51.76	1,665	82.88	65,081	2,094,235	104,225

Base case metal prices used for Preliminary Economic Assessment are Au \$1204/oz, Ag \$23.75/oz, with recoveries of 95% and 90% respectively. The "Probable" mining reserve estimates are in part based on Inferred resources as a scoping level assessment and are therefore non compliant under the NI 43-101. All cash flow calculations are based upon an undiscounted model due to total project timeline of 23 months and include a 10% royalty payable for exported concentrates. Dilution of 0.25 metres either side of the stope and a 98% recovery factor was applied to calculate the diluted mineable reserves.

**CAPEX Assumptions:**

**Mining Capex:**

Mining CAPEX and OPEX is estimated at \$US 24,439,943, which includes the 1980m of main decline ramp access, ore development, cross cuts and stoping of the ore. Total cost per tonne for Production during the 11 month production period are estimated at US\$167/t and total Development cost is estimated at US\$ 14,252,000.

**Process Capex:**

3 main treatment or process routes were considered for the treatment of the COSE ore:

- 1) Direct Shipping, involves mining and crushing of the material on site and then shipping the ore via road and sea to a suitable smelter for direct smelting to recover the gold and silver and Ag
- 2) Construction of a crushing and Cyanide leaching circuit at the La Bajada property and processing through a Merrill Crowe circuit and production of Dore' on site
- 3) Gravity separation and smelting of Au and Ag on site to produce Dore'

Process facility CAPEX estimates and metal recoveries are tabled below for the 3 separate treatment routes

Treatment Route	CAPEX Requirement (000's)	Metal Recoveries Au;Ag
-----------------	---------------------------	------------------------

Direct Shipping	2,700	93;90
High NaCN Leach Merrill Crowe	8,100	87;65
Gravity concentrate-Smelting	5,900	60;50

**Cash-flow Assumptions:**

Cash-flow calculations for 3 different scenarios and a sensitivity analysis for adjusted Au and Ag prices are shown below. All cash-flow sensitivities were run on the *Direct Shipping* option treatment route due to the smaller initial CAPEX (US\$ 2,768,000) and higher potential revenue.

Base case metal price assumptions were provided by CAM and represent a trailing 36 month and Future looking 24 months calculated price giving a base case Au Price of \$US 1204/oz and base case Silver Price of \$US 23.75/oz.

Au-Ag Price sensitivity analysis was run for the following metal Prices:

Au Price (US\$)	Ag Price (US\$)	NPV (\$US M)
1,203	23.75	63.7
1,000	20	46.5
1,100	22	55.2
1,400	30	84.7
1,418	35	93.8

**Payback:**

68% of contained Au and Ag will be mined within the first 4 months of production enabling payback of capital after just 14 months from commencement of the decline.

**Planning:**

PGSA has already received approval within the El Tranquilo Environmental Impact report (EIR) from the State Secretary of Mining for the development of a decline access for underground drilling at COSE as well as a bulk sampling for metallurgical test works.

With the receipt of the Resource and the Preliminary Economic Assessment, PGD can now finalise the permit application for the mining of the entire ore-body and the construction of infrastructure and processing facilities on site at the COSE project for approval.

The mineralised structure containing the COSE deposit remains open at depth and along strike. Future deeper drilling in order to expand the deposit will be carried out from underground. Additional drilling is planned between COSE and the Cap-Oeste deposit to the north-west.

The full Resource and Preliminary Economic Assessment report will be posted on the website, [www.patagoniagold.com](http://www.patagoniagold.com), as soon as practicable.

**Robert L. Sandefur B.S., M.S., P.E., Senior Geostatistician of Chlumsky, Armbrust & Meyer L.L.C. (CAM) of Lakewood, Colorado, a Qualified Person as defined in Canadian National Instrument 43-101, and responsible for the audit, review and calculation of the COSE resource estimate, has reviewed and verified all scientific or technical mining disclosure contained in this press release**

**Greg Chlumsky B.S., Principal Process Engineer of Chlumsky, Armbrust & Meyer L.L.C. (CAM) of Lakewood, Colorado, a Qualified Person as defined in Canadian National Instrument 43-101, and responsible for the estimation of required capital and process operating costs and Cash-flow projections has reviewed and verified all scientific or technical mining disclosure contained in this press release.**

**Steve L. Milne. P.E, Senior Mining Engineer of Chlumsky, Armbrust & Meyer L.L.C. (CAM) of Lakewood, Colorado, a Qualified Person as defined in Canadian National Instrument 43-101, and responsible for the audit, review and estimation of all costs and design associated with the Mining section of the PEA has reviewed and verified all scientific or technical mining disclosure contained in this press release**

**Matthew Boyes, (BSC. Geology, member AusIMM) Development Manager for Patagonia Gold PGSA and a qualified person as defined in Canadian National Instrument 43-101, has reviewed and verified all scientific or technical mining disclosure contained in this press release.**

**ENDS**

*For more information, please contact:*

Bill Humphries/Richard Prickett  
Patagonia Gold Plc  
Tel: +44(0)20 7409 7444

David Bick / Mark Longson  
Square 1 Consulting  
Tel : +44(0)20 7929 5599

Simon Raggett / Angela Peace  
Strand Hanson Ltd

Robin Henshall / Tim Graham  
Matrix Corporate Capital LLP

Tel: +44(0)20 7409 3494

Tel : +44(0)20 3206 7172 / +44(0)20 3206 7206

This information is provided by RNS  
The company news service from the London Stock Exchange

END

DRLKMGZFVRVGMZM