

# INV Metals Announces Positive Preliminary Feasibility Study Results for the Loma Larga Gold Project

04.02.2015 | [Marketwired](#)

TORONTO, ONTARIO--(Marketwired - Feb 4, 2015) - [INV Metals Inc.](#) ("INV Metals" or the "Company") (TSX:INV) is pleased to announce the results of a Preliminary Feasibility Study ("PFS" or the "Study") prepared pursuant to National Instrument 43-101 ("NI 43-101") on its 100% owned Loma Larga gold project ("Loma Larga" or the "Project") in Ecuador. The Study contemplates an underground mine with a daily production rate of approximately 1,000 tonnes per day ("tpd") and an average annual gold production of 80,000 ounces with an initial life of mine ("LOM") of 13.25 years. A NI 43-101 technical report summarizing the PFS (the "Technical Report") will be available on SEDAR no later than March 23, 2015.

## PFS Highlights

The PFS economics are based on a production rate of 1,000 tpd which classifies the Project within the medium-scale mining regime established under the Ecuadorian mining law. The PFS incorporates the various mining and tax laws and regulations applicable to medium-scale mining. Companies operating a project under the medium-scale classification are not subject to negotiating an exploitation agreement, advanced royalties or windfall taxes. The economics of the Project detailed below incorporate a corporate income tax rate of 22%, a 4% state royalty on metal sales, a 15% profit tax for state and employee participation, and a sovereign adjustment payable to the Ecuador tax authority based on a net benefit of 50% to both the Company and the government of Ecuador. All references to "\$" herein are to U.S. dollars.

Mr. Terry MacGibbon, Chairman of the Company's Board of Directors, stated "We are pleased to announce that after incorporating the aggressive tax regime in Ecuador, the economics of the Project demonstrate the potential benefits to both the shareholders of INV Metals and the people of Ecuador. We are committed to the development of Loma Larga and will evaluate in the next few months the appropriate course of action to achieve that goal after we have held discussions with officials of the government of Ecuador to determine their support for the Project."

## Summary of PFS Highlights

Estimated Mine Life	13.25 years
Average Mine Production Rate	948 tpd
Tonnes Processed	4.6 million
Average Grade of Mined Mineral Reserve	7.67 g/t Au, 0.46% Cu, 38.38 g/t Ag
Average Recoveries	90% Au, 82% Cu, 94% Ag
Average Annual Gold Production	80,000 oz
Total Gold Production	1.024 million oz
Total Copper Production	38.2 million lbs
Total Silver Production	5.3 million oz
Adjusted Operating Costs	\$526/oz Au sold
All-in Sustaining Costs	\$592/oz Au sold
Initial Capital Costs	\$218.9 million
Sustaining Capital and Closure Costs	\$25.8 million
Pre-Tax IRR	23.2%
After-Tax IRR	16.0%
Pre-Tax NPV @ 5%	\$288.4 million
After-Tax NPV @ 5%	\$153.8 million
Pre-Tax Payback Period	3.3 years
After-Tax Payback Period	4.4 years

Gold Price	\$1,350/oz
Silver Price	\$23/oz
Copper Price	\$3/lb

The financial model assumes 100% equity financing, however the Company plans to pursue various financing alternatives upon the completion of a feasibility study.

## PFS Description

The Study was led by Roscoe Postle Associates Inc. ("RPA") in association with Samuel Engineering, Inc. and Klohn Crippen Berger Ltd. The Project is located 30 km southwest of the city of Cuenca, and consists of approximately 8,000 hectares. The deposit is located within the Rio Falso concession and the property holds considerable exploration potential. A 21 km site access road will be upgraded and constructed from the main road from Cuenca, which is suitable for both importing goods and exporting concentrate. Power will be accessed through a connection to the local Cuenca substation, with an additional 25 km 138 kV power line to be constructed to tie to the grid.

The deposit will be accessed by a straight ramp approximately 520 m long, at a 15% incline. The mine development extends to 175 m below surface at an elevation of 3,560 metres. Mining at a rate of 1,000 tpd (the maximum allowed under Ecuador's medium-scale mining law) will be performed by longhole stoping and drift and fill, using cemented paste backfill. Average annual production is estimated at 350,000 tonnes. The ore will be trucked to the processing plant located approximately 7.5 km south of the portal where it will be processed through sequential flotation which will produce two concentrates: a pyrite-gold concentrate; and a copper-gold concentrate. The pyrite-gold concentrate will account for approximately 92% of concentrate shipments. The concentrates will be trucked 325 km to a storage facility at the port of Guayaquil for shipment to a third party for smelting and refining.

A summary of the estimated capital costs is provided below:

Capital Costs	Millions
Underground Mine	\$ 56.0
Process Plant	\$ 53.5
Infrastructure	\$ 25.6
Tailings	\$ 8.3
Indirect Costs	\$ 47.6
Contingency	\$ 27.9
Total Initial Capital	\$ 218.9
Sustaining Capital	\$ 21.6
Reclamation and Closure	\$ 4.2
Total Capital	\$ 244.7

## Mining

The high grades of the Loma Larga deposit justify a "maximum extraction" approach with no pillars. Mining will be performed by longhole stoping using paste backfill which provides good productivity, high extraction, and stable back support. High-grade areas too small to mine using longhole stoping will be extracted by drift and fill mining. Levels and accesses have been designed within low-grade mineralization to limit the amount of waste development. Waste will be used as backfill to the extent possible.

Mining will be carried out by mechanized equipment, working three eight-hour shifts per day to produce approximately 1,000 tpd, which will be trucked to surface and transported to the mill for processing.

A production summary is detailed below:

Production Summary	
Average Mine Production Rate	948 tpd
Estimated Mine Life	13.25 years
Tonnes Processed	4.6 million

Average Annual Gold Production	80,000 oz
Average Gold Mill Feed Grade	7.67 g/t
Average Gold Recoveries	90%
Total Gold Recovered	1.024 million oz
Average Silver Mill Feed Grade	38.38 g/t
Average Silver Recoveries	94%
Total Silver Recovered	5.3 million oz
Average Copper Mill Feed Grade	0.46%
Average Copper Recoveries	82%
Total Copper Recovered	38.2 million lbs

### All-in Sustaining and Operating Costs

The Company's adjusted operating costs are estimated at \$526/oz Au sold, net of by-product credits for copper and silver. All-in sustaining costs are estimated at \$592/oz Au sold.

	LOM \$/oz Au Sold
Mining	\$ 285
Processing	\$ 135
General and Administration	\$ 59
NPI Royalty	\$ 54
Smelter and Refining	\$ 224
By-Product Credits	\$ (231)
Adjusted Operating Costs	\$ 526
Sustaining Capital	\$ 23
Reclamation/Closure	\$ 5
Corporate General and Administration	\$ 38
All-in Sustaining Cost <sup>(1)</sup>	\$ 592

Notes:

1. All-in Sustaining Costs are calculated in accordance with the World Gold Council's Guidance on Non-GAAP Metrics - All-In Sustaining Costs

Operating Costs	\$/Tonne
Mining	\$ 57.31
Processing	\$ 27.16
General and Administration	\$ 11.94
Total Operating Costs	\$ 96.41

### Processing

INV Metals performed metallurgical test work in late 2013 which focused on the viability of the production of concentrates to be shipped to smelters for further processing. It was concluded that a production rate of 1,000 tpd does not support the volume of ore or the capital required for a previously contemplated pressure oxidation circuit. Therefore, the metallurgical test work focused on the development of a process with high gold, silver and copper recoveries and marketable concentrate grades. It was determined that a sequential flotation process with copper and pyrite rougher flotation circuits yielded the best overall results. The tailings from the copper rougher flotation circuit are the feed to the pyrite rougher flotation circuit.

The sequential flotation process will produce two saleable concentrates: a pyrite-gold concentrate grading approximately 37 g/t Au, 126 g/t Ag, and 0.44% Cu; and a copper-gold concentrate grading approximately 107 g/t Au, 1,356 g/t Ag, and 30.0% Cu. The pyrite-gold concentrate will account for approximately 92% of concentrate shipments. Preliminary discussions with commodity traders and smelters indicate that both concentrates are likely marketable.

### Mineral Resource Estimates

The Loma Larga deposit occurs as a flat-lying lens extending in a north-south direction, dipping gently to the

south with the top of the deposit varying from about 100 to 175 m below surface. Within a 3 g/t Au cut-off grade shell, the deposit is approximately 1,150 m long (north-south), and up to 250 m wide (east-west). The majority of the ore body is between 15 and 50 m thick.

Gold mineralization occurs within three zones. The Main Zone, which is classified as Indicated Mineral Resources, has been converted into Mineral Reserves and used as the Base Case for the PFS. Two smaller zones, the Upper Zone and the Lower Zone, are classified as Inferred Mineral Resources. The Main Zone is the largest zone, is relatively flat-lying, undulates along strike and varies in thickness from five to 50 metres. The Mineral Reserves consist of selected portions of the Indicated Mineral Resources that are above a 5.0 g/t Au cut-off grade.

The Upper and Lower Zones are estimated to be 280,000 tonnes, at an average grade of 15.14 g/t Au, containing 140,000 ounces. Further infill drilling is required to convert the Inferred Mineral Resources within the Upper and Lower Zones to Indicated Mineral Resources. Future infill drilling within the Upper and Lower Zones will also focus on exploration to expand high grade zones which are still open to the north and south. These zones indicate the potential to extend the mine life beyond that described by the PFS.

RPA estimated Mineral Resources for Loma Larga using all drill hole data available as of July 31, 2014. The Mineral Resource estimate is based on an underground mining scenario and a \$100 NSR cut-off value. The Technical Report will describe the Mineral Resource estimation methodology and the assumptions used, to which this estimate is subject. There is also no certainty that the Inferred Mineral Resources will be converted to the Measured and Indicated categories through further drilling.

Mineral Resources Estimate as of December 31, 2014							
Resource Classification	Tonnage (Mt)	Grade (Au g/t)	Contained Au (M oz)	Grade (Ag g/t)	Contained Ag (M oz)	Grade (% Cu)	Contained Cu (M lb)
Indicated	10.17	6.24	2.04	35.2	11.5	0.36	81.1
Inferred	0.28	15.14	0.14	123.6	1.1	1.67	10.4

Notes:

1. CIM Definition Standards were followed for Mineral Resources.
2. Mineral Resources are reported at an NSR cut-off value of \$100/tonne.
3. Mineral Resources are estimated using average long-term prices of \$1,500/oz Au, \$25/oz Ag, and \$3.50/lb Cu.
4. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
5. Mineral Resources are inclusive of Mineral Reserves.

Mineral Reserves for Loma Larga are based on the Indicated Mineral Resources, mine designs, and external dilution and extraction factors. The Mineral Reserves consist of selected portions of the Indicated Resources that are above a 5.0 g/t Au cut-off grade. All Mineral Reserves are classified as Probable Mineral Reserves. The Technical Report will describe the Mineral Reserve estimation methodology and the assumptions used, to which this estimate is subject.

Probable Mineral Reserves Estimate as of December 31, 2014							
Lens	Tonnes (000)	Grade (Au g/t)	Contained Au (000 oz)	Grade (Ag g/t)	Contained Ag (M oz)	Grade (% Cu)	Contained Cu (M lb)
Stopes	2,946	8.33	789	40.7	3.9	0.54	34.8
Drift and Fill	952	6.11	187	34.7	1.1	0.29	6.1
Ore Development	706	4.01	159	33.5	0.7	0.35	5.5
Total	4,603	7.67	1,135	38.4	5.7	0.46	46.4

Notes:

1. CIM definitions were followed for Mineral Reserves.
2. Mineral Reserves include stopes and drift and fill mining estimated at a cut-off grade of 5.0 g/t Au, and associated development estimated at an incremental cut-off grade of 3.0 g/t Au. Cut-off grades include consideration for copper and silver contributions.
3. Mineral Reserves are estimated using average long-term prices of \$1,100/oz Au, \$23/oz Ag and \$3/lb Cu.
4. A minimum mining width of 4 m was used.

5. Bulk density is 2.7 t/m<sup>3</sup>.
6. Numbers may not add due to rounding.

The Company's annual information form (the "AIF") includes details of certain risk factors that could materially affect the potential development of the Mineral Resources and Mineral Reserves and should be considered carefully. A discussion of these and other factors is contained under the heading "Risk Factors" and elsewhere in the AIF, which was filed on SEDAR on March 11, 2014.

Please refer to INV Metals' management's discussion and analysis in respect of the 2013 year filed on SEDAR on March 11, 2014, for the Company's quality and control and quality assurance procedures used in its exploration programs.

## **Exploration**

The Loma Larga property continues to hold considerable exploration potential. The Company completed a drill program in 2013, wherein hole LLD-367 intersected 4.9 g/t Au, 48.7 g/t Ag, and 0.51% Cu over a core length of 25.1 m, including 11.9 g/t Au, 78.7 g/t Ag and 0.33% Cu over 6.2 m. The intersection is located approximately 165 m north of the northern limits of the resource and additional drilling is required to determine if the mineralization is a continuous extension of the main resource (see INV Metals' press release dated October 1, 2013).

There appears to be multiple feeder structures along the north-south length of the deposit, possibly associated with north-northeast en echelon structures. Further drilling is required to test for deeper extensions of these feeder zones, which are hypothesized to be associated with areas of higher grade mineralization. Previous drilling has not been focused at depth. A comprehensive exploration program is warranted to follow up on both previous drill results and to make new discoveries elsewhere on the Loma Larga property.

## **Permitting**

The Company still awaits the publication of the regulations that will govern medium-scale mining within Ecuador. Once the regulations are published, the Company will seek to obtain the necessary permits and approvals required to advance the Project.

## **Potential Optimizations**

The following opportunities were identified during the course of the PFS as potential optimizations to be considered during a feasibility study:

- drilling to upgrade Mineral Resources from Inferred to Indicated for inclusion in the mine plan and Mineral Reserves;
- evaluate a bulk copper concentrate flotation followed by a copper cleaner flotation process which may produce similar results at potentially lower costs than the currently contemplated sequential flotation process with two circuits;
- additional mine development evaluation to further reduce up-front development costs and increase efficiencies;
- further evaluation of processing lower grade ore to extend the mine life; and
- co-ordinate with other mining companies within Ecuador regarding any potential synergies with in-country processing options.

## **Qualified Persons**

The technical information in this press release has been prepared by independent Qualified Persons employed by RPA, including Katharine Masun, P.Geo. (Mineral Resources), Jason Cox, P.Eng. (Mineral Reserves and economics), and Kathleen Altman, Ph.D., P.E. (metallurgy and processing). By virtue of education and relevant experience, the aforementioned are "Qualified Persons" for the purpose of NI 43-101.

For readers to fully understand the information in this press release, they should read the Technical Report in its entirety, including all qualifications, assumptions and exclusions that relate to the information set out in the Technical Report which qualifies the technical information contained in the Technical Report. The Technical Report is intended to be read as a whole, and sections should not be read or relied upon out of context.

### **Non-IFRS Performance Measures**

"Adjusted Operating Costs", "All-in Sustaining Costs", and "Total Operating Costs per Tonne" are non-International Financial Reporting Standards ("IFRS") Performance Measures. These performance measures are included because these statistics are key performance measures that management uses to monitor performance. Management uses these statistics to assess how the Project ranks against its peer projects and to assess the overall effectiveness and efficiency of the contemplated mining operations. These performance measures do not have a meaning within IFRS and, therefore, amounts presented may not be comparable to similar data presented by other mining companies. These performance measures should not be considered in isolation as a substitute for measures of performance in accordance with IFRS.

### **About INV#8482; Metals**

INV#8482; Metals is an international mineral resource company focused on the acquisition, exploration and development of base and precious metal projects in Ecuador and Namibia. Currently, INV#8482; Metals' primary assets are: (1) its 100% interest in the Loma Larga (formerly Quimsacocha) gold property in Ecuador, and (2) its 35% interest in the Kaoko property, located in Namibia.

### **Forward-Looking Statement**

*This press release contains certain forward-looking statements. Forward looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievement of INV Metals to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Such factors include, among others, risks related to the actual results of exploration activities, conclusions of economic evaluations and the industry-wide risks and Project-specific risks identified in the Technical Report, risks associated with mining and mineral exploration activities, uncertainty in the estimation of Mineral Resources and Mineral Reserves, including, without limitation, the assumptions on which such estimates are based, changes in Project parameters as plans continue to be refined, uncertainty surrounding metallurgical test results, future prices of metals, economic and political stability in Ecuador and Canada, the results of discussions with the Ecuador government, the risk of future unfavourable tax law or regulation changes in Ecuador, environmental risks and hazards, increased infrastructure and/or operating costs, availability of future financing, labour and employment matters, and government regulation. There is no guarantee that any drill targets or economic mineral deposits will be found on INV Metals' properties. For a more detailed discussion of such risks and other factors, refer to INV Metals' AIF filed with Canadian securities regulators available on [www.sedar.com](http://www.sedar.com). Except as required by law, the Company does not assume any obligation to release publicly any revisions to forward-looking statements contained in this press release to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.*

### **Contact**

[INV Metals Inc.](http://www.invmetals.com)  
Candace MacGibbon  
President and Chief Financial Officer  
(416) 703-8416  
[cmacgibbon@invmetals.com](mailto:cmacgibbon@invmetals.com)

Dieser Artikel stammt von [Rohstoff-Welt.de](https://www.rohstoff-welt.de)

Die URL für diesen Artikel lautet:

<https://www.rohstoff-welt.de/news/191329--INV-Metals-Announces-Positive-Preliminary-Feasibility-Study-Results-for-the-Loma-Larga-Gold-Project.html>

Für den Inhalt des Beitrages ist allein der Autor verantwortlich bzw. die aufgeführte Quelle. Bild- oder Filmrechte liegen beim Autor/Quelle bzw. bei der vom ihm benannten Quelle. Bei Übersetzungen können Fehler nicht ausgeschlossen werden. Der vertretene Standpunkt eines Autors spiegelt generell nicht die Meinung des Webseiten-Betreibers wieder. Mittels der Veröffentlichung will dieser lediglich ein pluralistisches Meinungsbild darstellen. Direkte oder indirekte Aussagen in einem Beitrag stellen keinerlei Aufforderung zum Kauf-/Verkauf von Wertpapieren dar. Wir wehren uns gegen jede Form von Hass, Diskriminierung und Verletzung der Menschenwürde. Beachten Sie bitte auch unsere [AGB/Disclaimer!](#)

---

Die Reproduktion, Modifikation oder Verwendung der Inhalte ganz oder teilweise ohne schriftliche Genehmigung ist untersagt!  
Alle Angaben ohne Gewähr! Copyright © by Rohstoff-Welt.de -1999-2026. Es gelten unsere [AGB](#) und [Datenschutzrichtlinien](#).