
SILVER
STANDARD

Forward-Looking Statements

This presentation includes certain “forward-looking statements” within the meaning of the United States Private Securities Litigation Reform Act of 1995 and forward-looking information within the meaning of Canadian securities laws (collectively, "forward-looking statements"). All statements, other than statements of historical fact, included herein, including without limitation, statements regarding potential mineralization and resources, exploration results, production, cost estimates and future plans and objectives of the Company, are forward-looking statements that involve various risks and uncertainties. There can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. Our forward-looking statements are based on the beliefs, expectations and opinions of management on the date these statements are made, and we do not intend and do not assume any obligation to update any forward-looking statements, other than as required by applicable law.

For the reasons set forth above, you should not place undue reliance on forward-looking statements. See "Risks and Uncertainties" and “Risk Factors” in our most recently filed Management Discussion & Analysis and our Annual Report on Form 20-F, as amended, for the year ended December 31, 2009.

We have not independently verified the accuracy of the information regarding the mining industry and other market data set forth herein. This information is not intended to provide and should not be relied upon for accounting, legal or tax advice or investment recommendations. You should consult your own advisors as to the accounting, legal, tax, regulatory, business, financial and related aspects of making an investment in the Company.

Cautionary Note to U.S. Investors

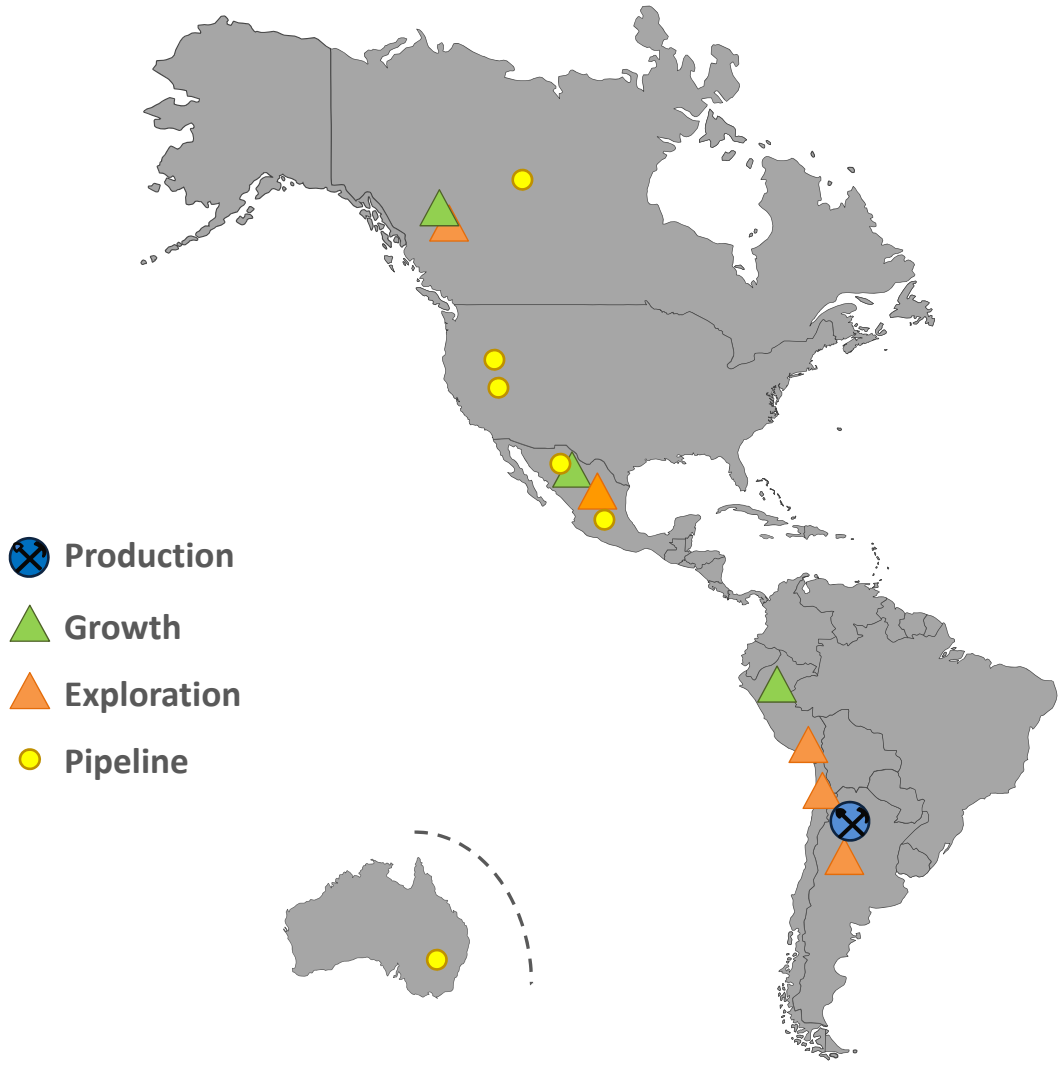
National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. Unless otherwise indicated, all reserve and resource estimates contained or incorporated by reference in this presentation have been prepared in accordance with NI 43-101 and the Canadian Institute of Mining Metallurgy and Petroleum Classification System. These standards differ significantly from the requirements of the SEC, and reserve and resource information contained herein and incorporated by reference into this presentation may not be comparable to similar information disclosed by U.S. companies.

In this presentation, we use the terms "measured", "indicated" and "inferred" resources. U.S. investors are cautioned that, while such terms are recognized and required by Canadian securities laws, the SEC does not recognize them. Under U.S. standards, mineralization may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. U.S. investors are cautioned not to assume that all or any part of measured or indicated resources will ever be converted into reserves.

U.S. investors should also understand that "inferred resources" have a great amount of uncertainty as to their existence and as to whether they can be mined legally or economically. It cannot be assumed that all or any part of the "inferred resources" will ever be upgraded to a higher category. Therefore, U.S. investors are also cautioned not to assume that all or any part of the inferred resources exist, or that they can be mined legally or economically. Disclosure of "contained ounces" is permitted disclosure under Canadian regulations; however, the SEC only permits issuers to report "resources" as in place tonnage and grade without reference to unit measures. Accordingly, information concerning descriptions of mineralization and resources contained in this presentation, including the documents incorporated by reference therein, may not be comparable to information made public by U.S. companies subject to the reporting and disclosure requirements of the SEC.

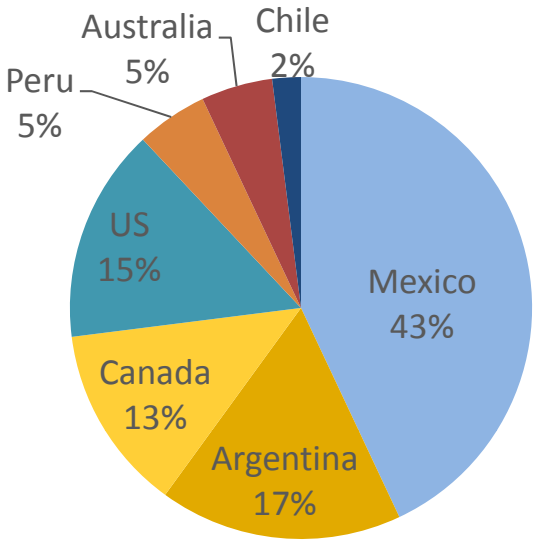
NI 43-101 also permits an historical estimate made prior to the adoption of NI 43-101 that does not comply with NI 43-101 to be disclosed using the historical terminology if the disclosure: (a) identifies the source and date of the historical estimate; (b) comments on the relevance and reliability of the historical estimate; (c) states whether the historical estimate uses categories other than those prescribed by NI 43-101, and if so, includes an explanation of the differences; and (d) includes any more recent estimates or data available.

Silver Producer Focused On the Americas

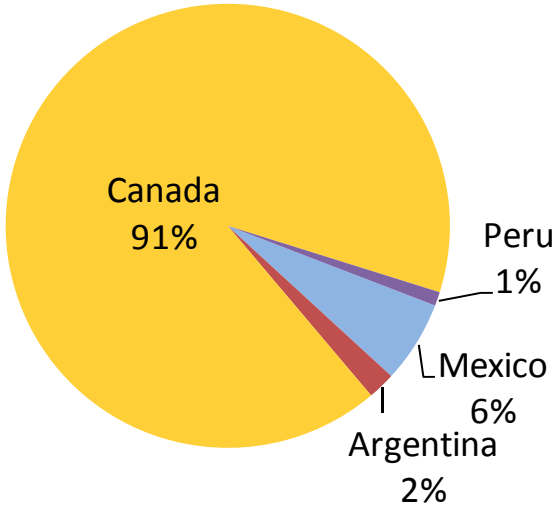


Large Silver and Gold Asset Base[9]

Total Silver Reserves & Resources (mil oz.)*	
Proven & Probable Reserves	291.9
Measured & Indicated Resources	1,120.4
Inferred Resources	516.7



Total Gold Reserves & Resources (mil oz.)*	
Proven & Probable Reserves	0.2
Measured & Indicated Resources	28.4
Inferred Resources	17.2

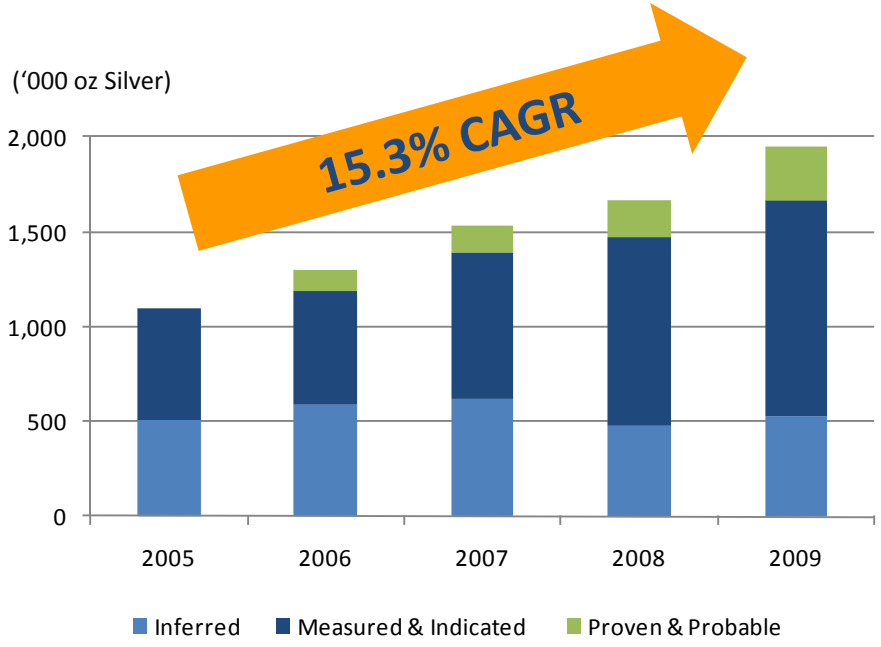


* As of September 10, 2010.

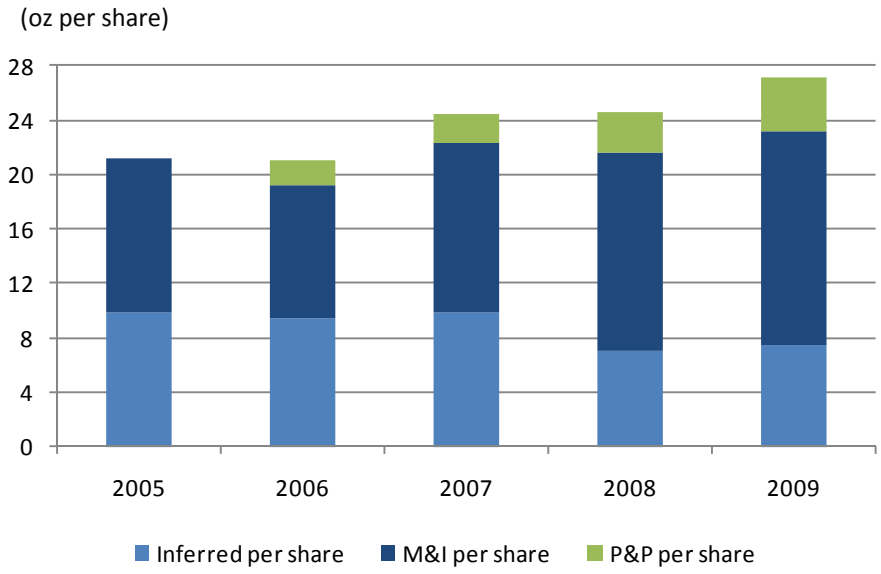
Accretive Growth in Silver[(1)]

(as at December 31, 2009)

Silver Reserves and Resources



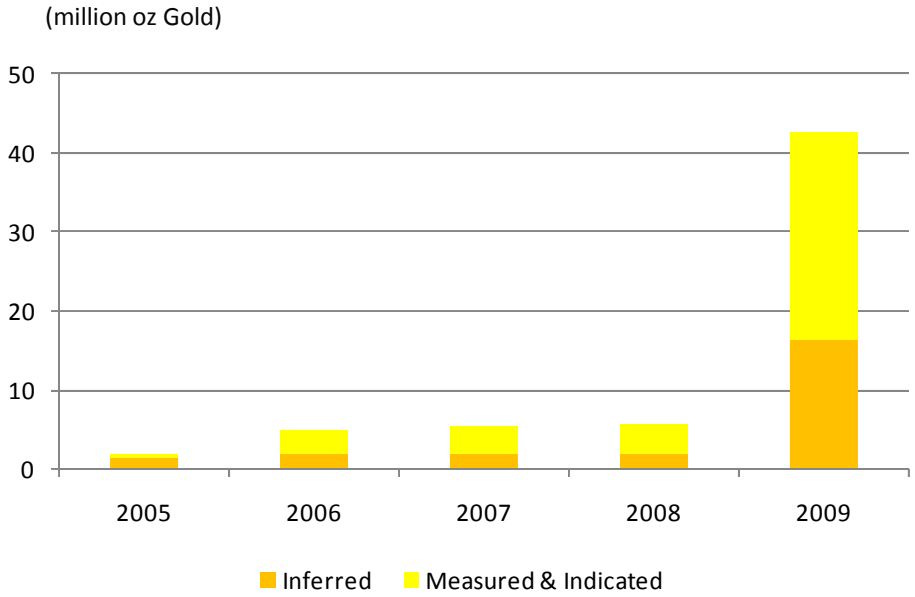
Per Share Silver Reserves and Resources



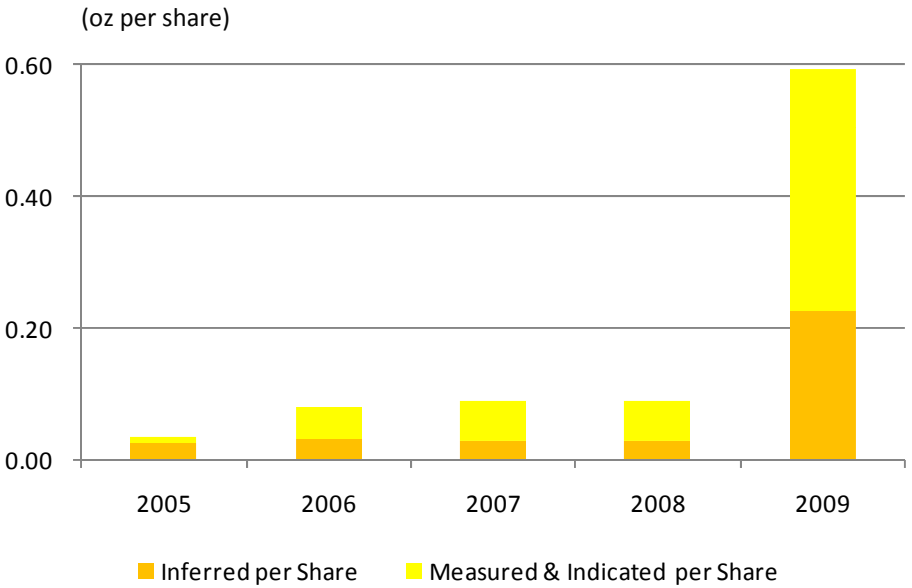
Accretive Growth in Gold[1]

(as at December 31, 2009)

Gold Resources



Per Share Gold Resources

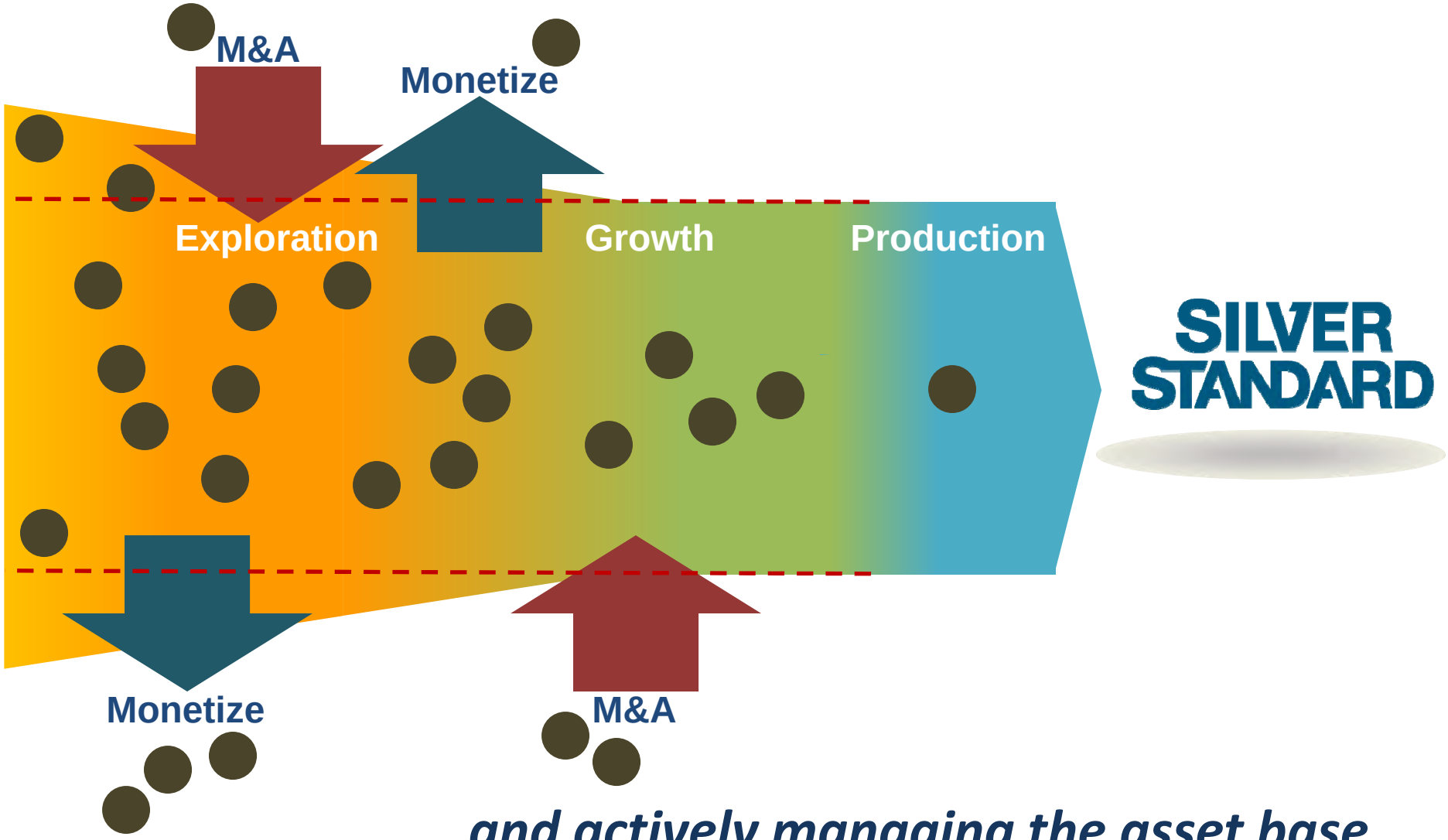


Our Corporate Strategy

- **Grow the business**
  - **Continue to increase ounces in the ground and production**
  - **Strengthen balance sheet and operating systems**
- **Develop quality assets**
  - **Focus on low cost, long-lived projects**
  - **Rationalize the project portfolio**
- **Grow our capability**
  - **Project management and operating expertise**
  - **Expand core capabilities**

Building our business …

Portfolio Management



… and actively managing the asset base

Growth Pipeline



Largest growth profile amongst silver producers

2010 Corporate Objectives

Production

- **Pirquitas** – Generating cash flow in 2010
- 2010 Production guidance of 7 million ounces silver, 600,000 pounds tin and 3 million pounds zinc

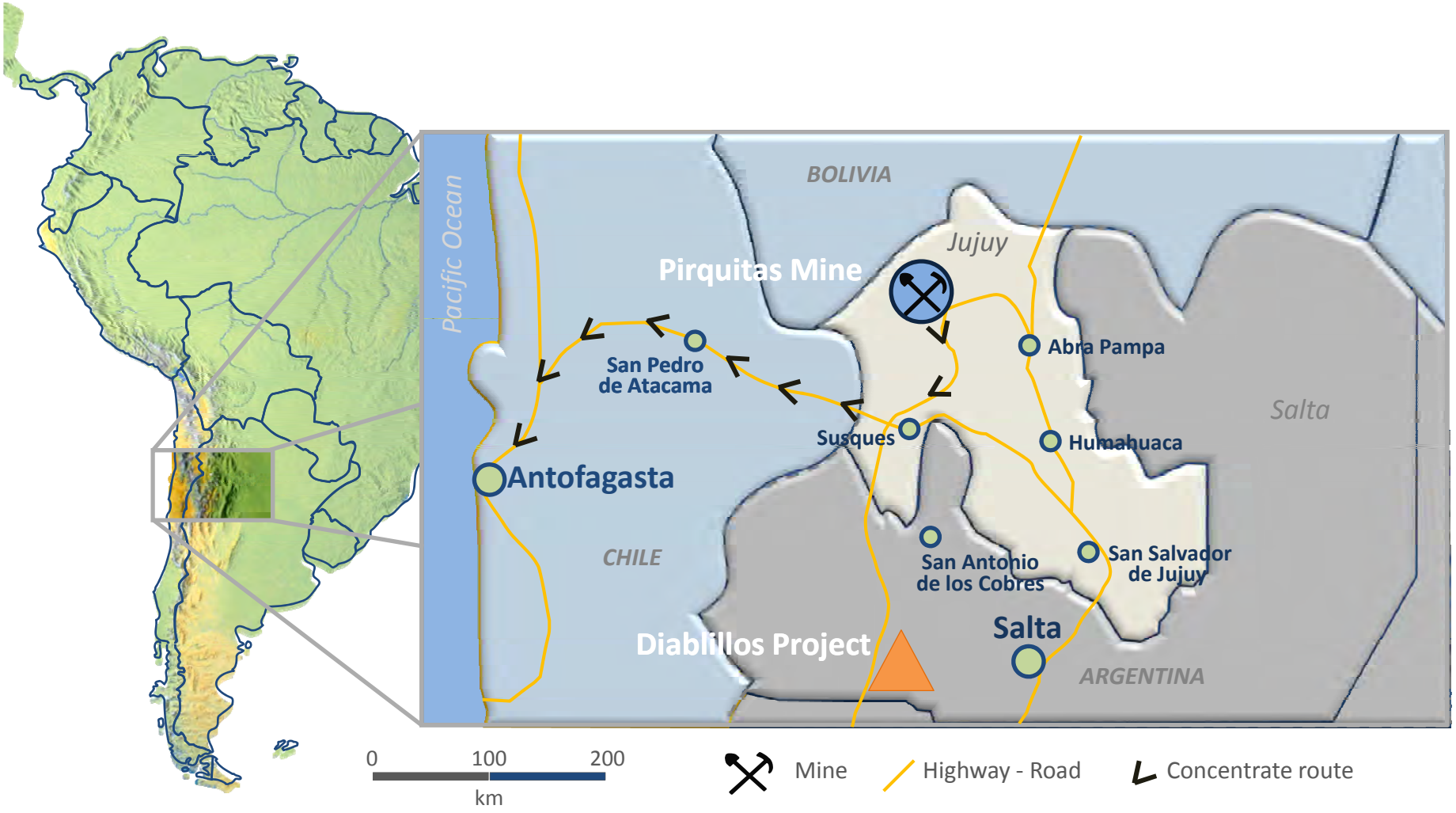
Growth

- **San Luis** feasibility study Q2 2010
- **Pitarrilla** underground feasibility study Q4 2010
- **Diablillos** preliminary economic assessment Q4 2010

Exploration

- **Snowfield/Brucejack** summer/fall 2010 drill programs
- Snowfield and Brucejack resource updates H1 2011
- **San Agustin**: test shallow low grade gold/silver and high grade silver/lead/zinc potential at depth
- **Berenguela/Challacollo**: test potential at depth

Production: The Pirquitas Mine



Pirquitas … *Up and running*

- Mine and processing plant operating at capacity
- Expected to process sulphide ore Q3
- Tin circuit commissioned
- Mine producing zinc concentrates available for sale Q3
- 2010 production guidance:
  - 7 million ounces silver
  - 600,000 pounds tin
  - 3,000,000 pounds zinc

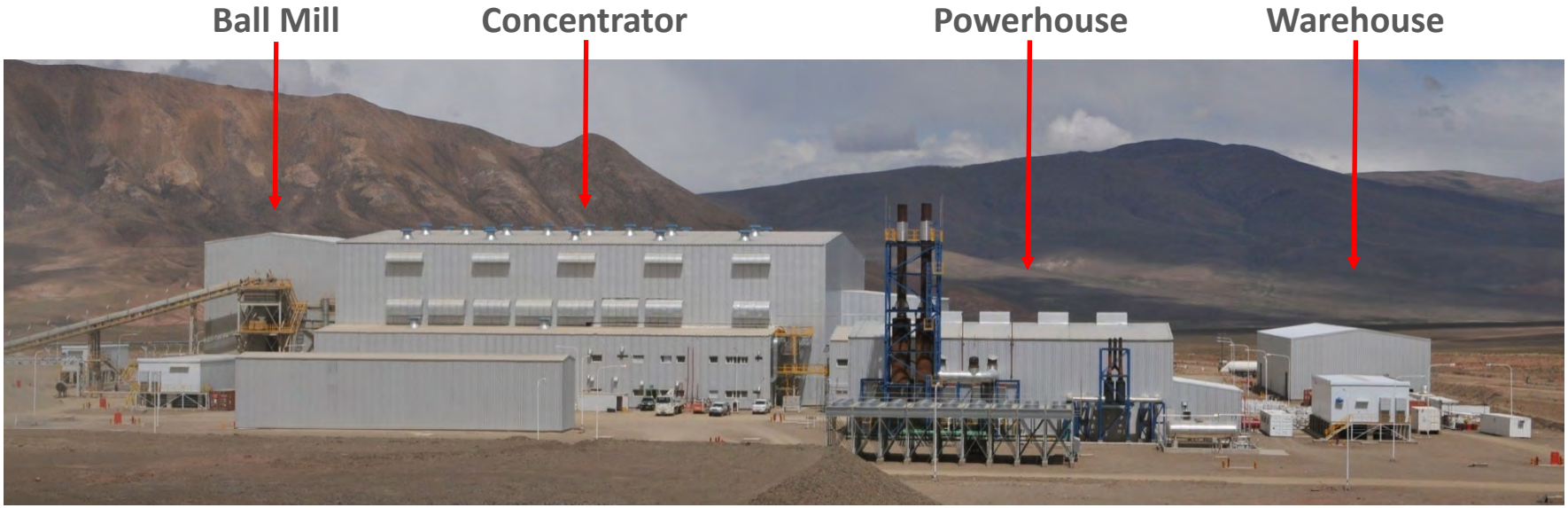
Mine Statistics[2]	
Proven and Probable Reserve	195.1 mm oz Ag
Mining rate	6,000 tpd
Processing rate	4,000 tpd
LOM average silver recovery	78%
LOM average operating cost	$26 per tonne
LOM average metal production	
Silver	8 to 10 million oz
Tin	4 million lbs
Zinc	11 million lbs
Mine Life	14.5 years



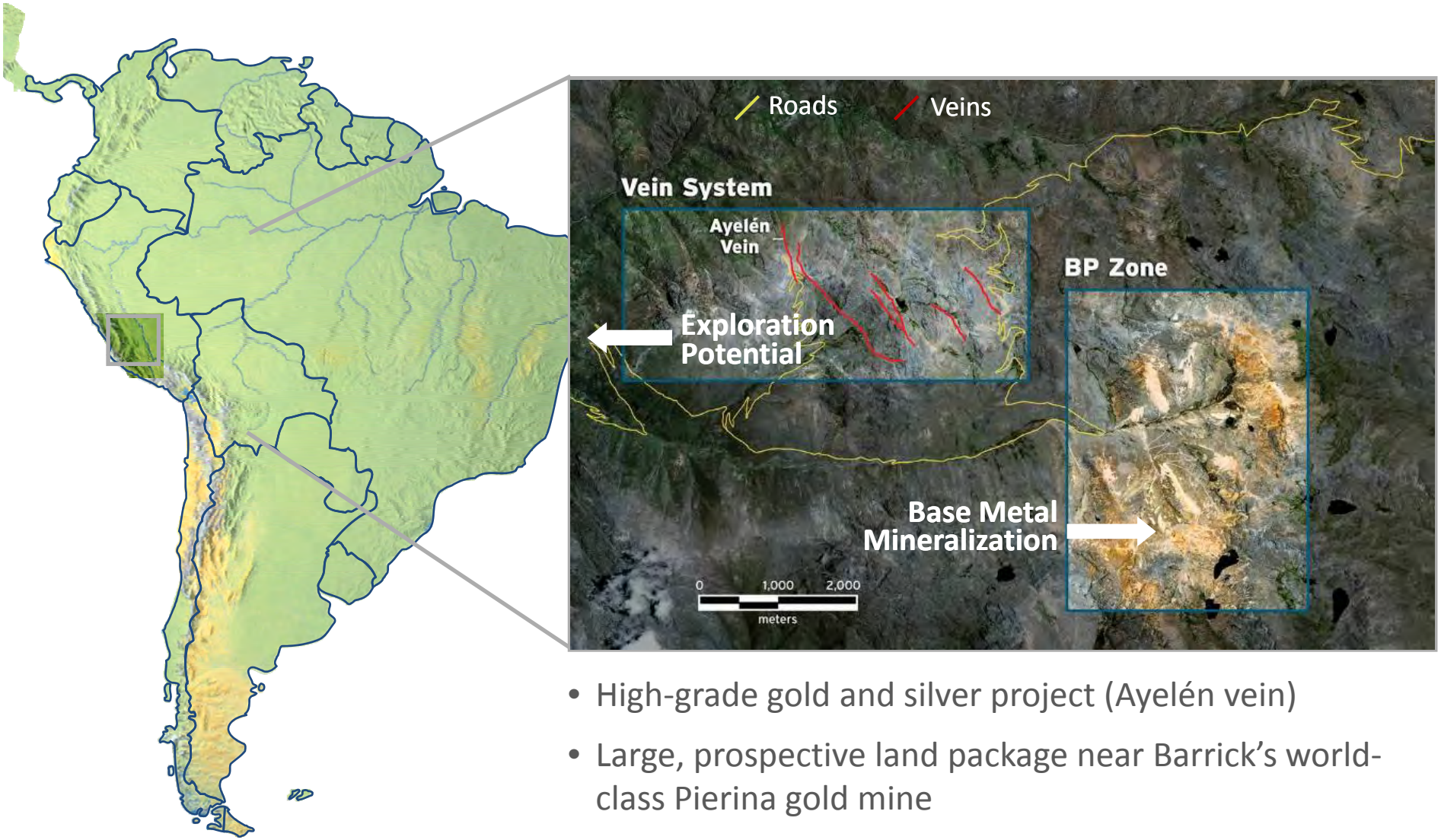
Pirquitas Open Pit and Process Facility







Growth: San Luis JV Project, Peru



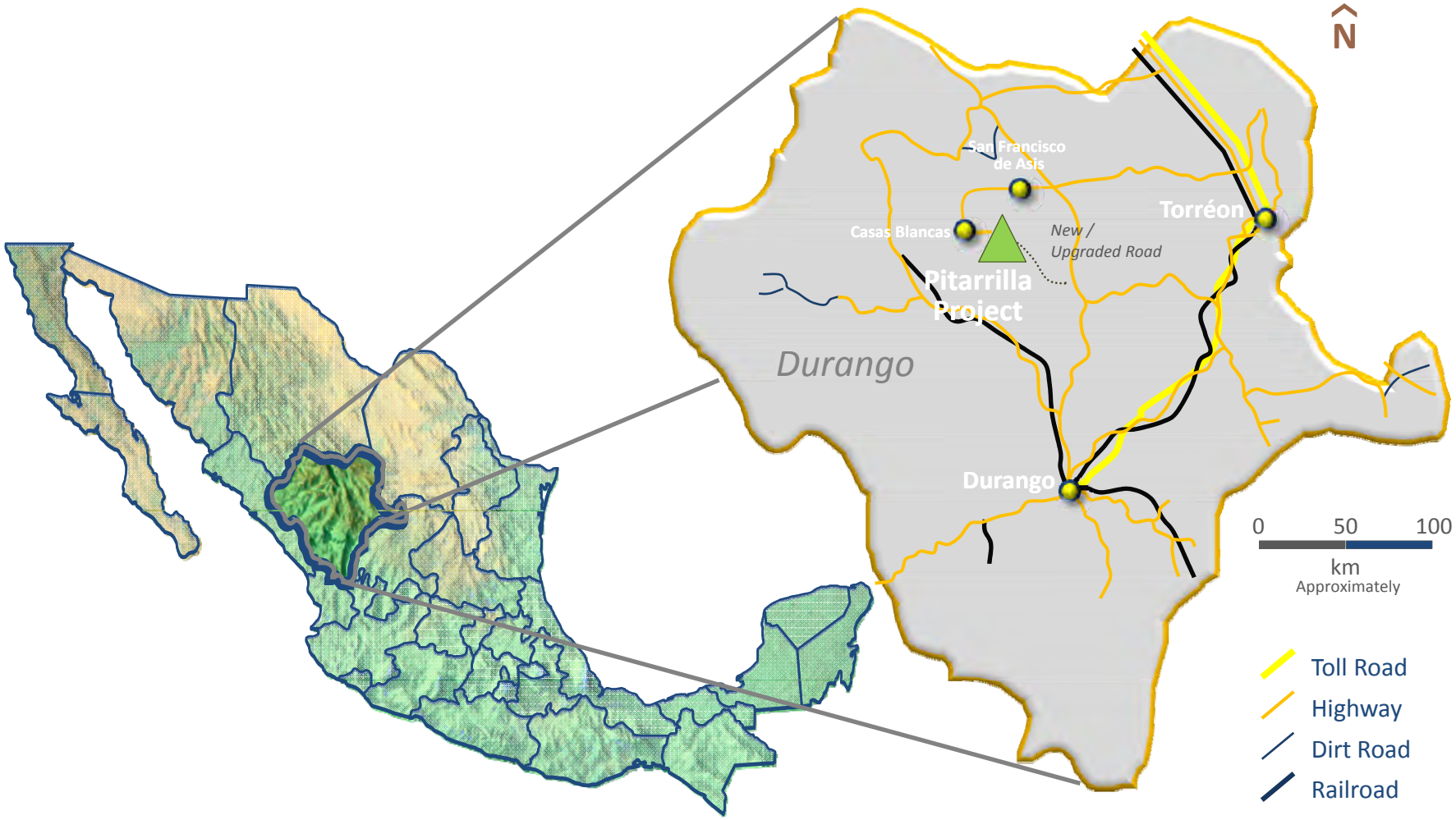
- High-grade gold and silver project (Ayelén vein)
- Large, prospective land package near Barrick's world-class Pierina gold mine
- Contained footprint

San Luis JV Project[3]



Last study completed	Feasibility, June 2010
Next steps	EIS, community agreements, production decision
Mine type	Underground, 400 tpd
Years to construct	Two years from production decision
Capex	US$90.4 million
Mine life	3.5 years based on current reserves
Annual Production	Gold: 78,000 oz, silver: 1.9 million oz
Ownership	70%, increasing to 80% by placing in production

Growth: Pitarrilla Project, Mexico

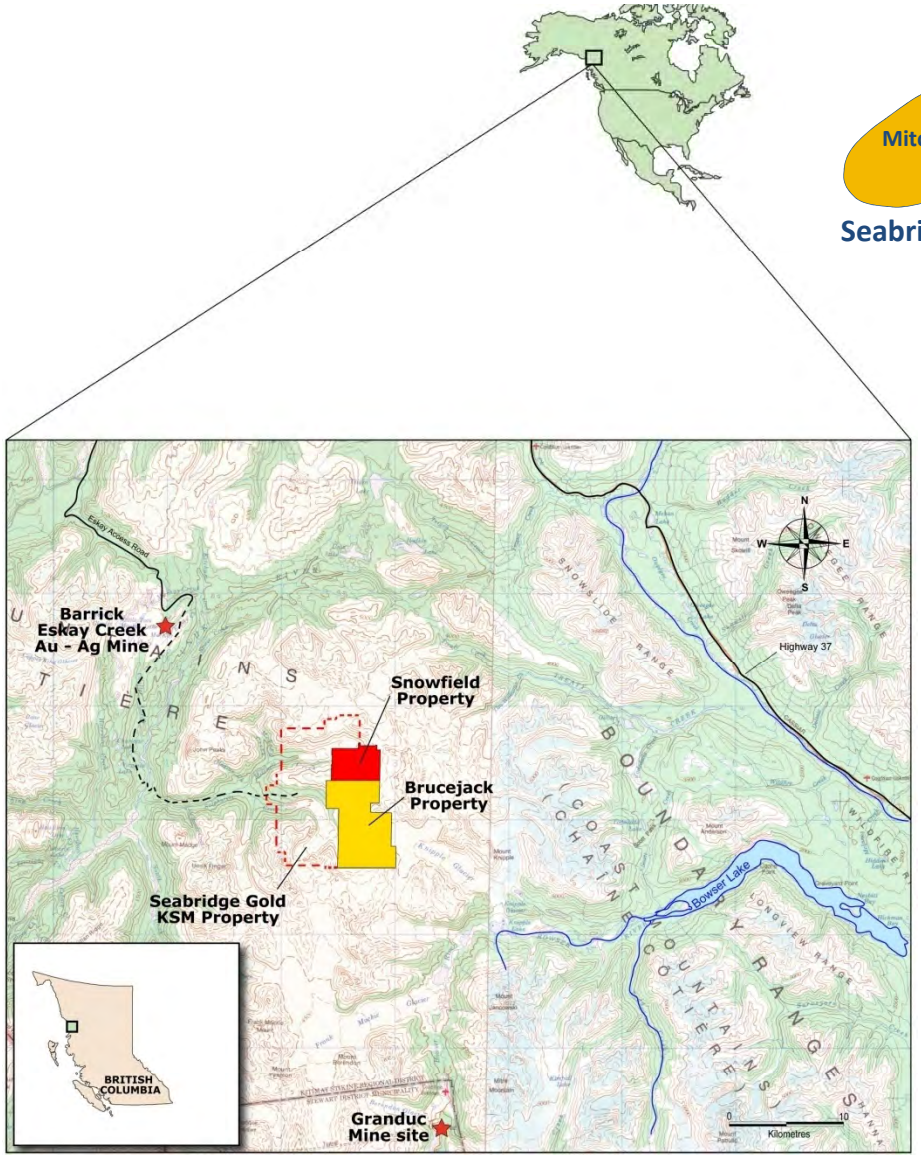


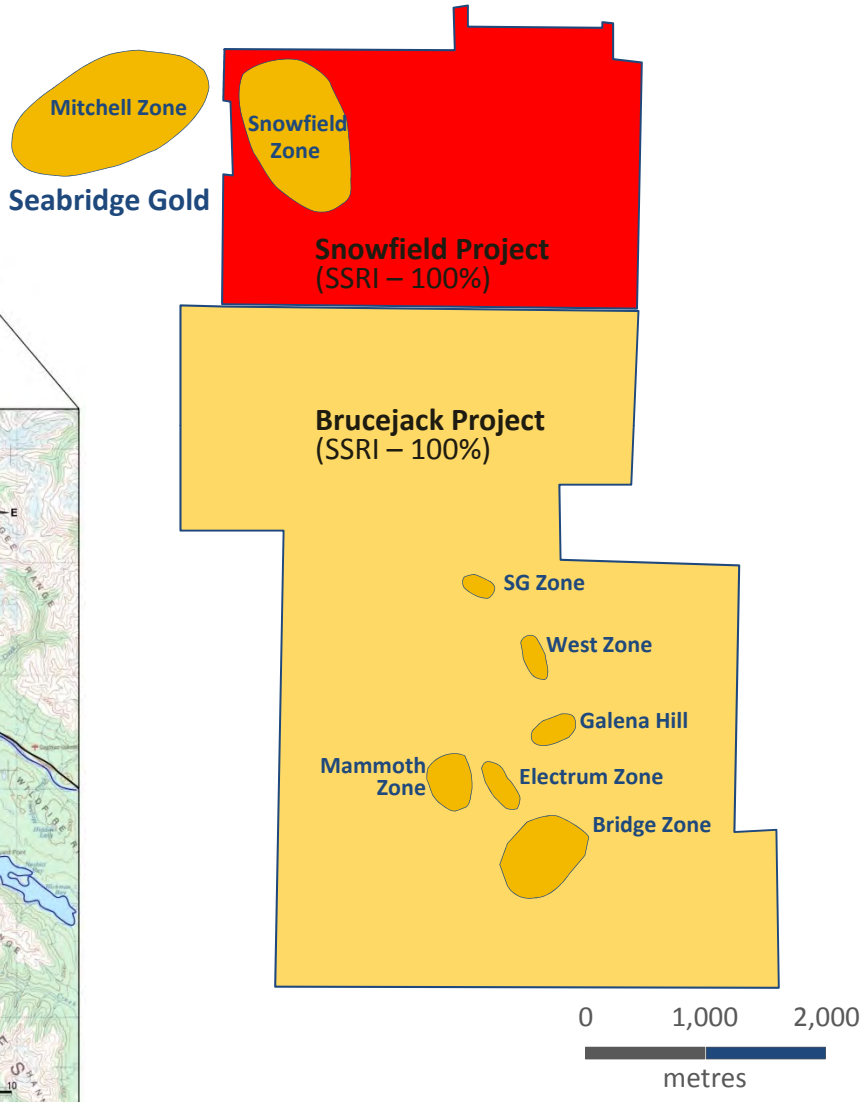
Pitarrilla Project, Mexico[4]



Last study completed	Pre-feasibility, September 2009
Next step	Feasibility, Q4 2010
Mine type	Underground, 4,000 tpd Open pit potential
Capex	US$278 million
Mine life	12 years
Annual Production	Silver: 7 million oz
Ownership	100%

Growth: Snowfield-Brucejack Projects, BC





Snowfield/Brucejack Projects



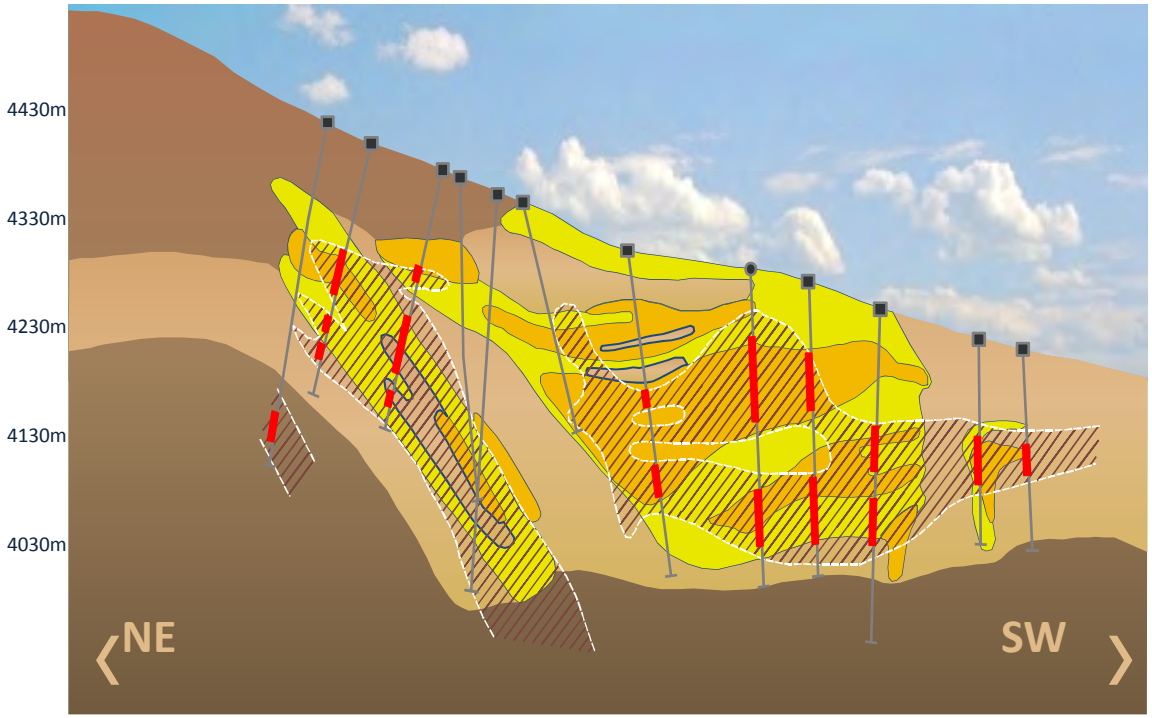
One of North America's largest gold resources is wholly-owned by Silver Standard

Snowfield-Brucejack Projects[6][7]



Last study completed	Preliminary assessment, September 2010
Next steps	Resource updates, H1 2011
Mine type	Open pit, 120,000 tpd
Capex	US$3.5 billion
Mine life	27 years
Annual production	Gold: 700,000 oz Silver: 4,160,000 oz Copper: 44,580,000 lb Molybdenum: 3,670,000 lb Rhenium: 9,011 kg
Ownership	100%

Growth: Diablillos Project, Argentina[5]



Drill Hole
Mineralized Intersection
Mineralized Zone

0 100 200
metres

Diablillos Resource Estimate – July 2009

Category	Tonnes (mil)	Silver (g/t)	Gold (g/t)	Contained Silver (mil oz.)	Contained Gold (mil oz.)
Indicated	21.6	111.0	0.9	77.1	.64
Inferred	7.2	27.0	0.8	6.3	.19

Diablillos Project

- **High sulphidation epithermal silver-gold project located in Salta, 171 miles south of Pirquitas**
- **Silver in the main area of mineralization is both oxide and sulphide in nature**
- **Preliminary Assessment commenced**



Exploration Expertise Delivers Value

- **Diverse exploration portfolio**
  - **Projects are silver dominant, but include gold, copper, zinc, molybdenum and lead**
  - **Projects are Americas-focused**
- **Accomplished technical team**
- **Consistent low silver and gold finding costs**
- **Objective: amass large land packages in prospective regions or existing mineral belts to test for world-class deposits**

Management has a long-term track record of discovery

Portfolio Projects[8][9]

(Amounts in millions of ounces of silver attributed to Silver Standard)

San Agustín, Mexico



Indicated: 48
Inferred: 37

Berenguela, Peru



Indicated: 66
Inferred: 22

Challacollo, Chile



Indicated: 19
Inferred: 24

Veta Colorada, Mexico



Resource estimate underway

Candelaria, US



M&I: 44
Inferred: 83

Bowdens, Australia



M&I: 79
Inferred: 18

Maverick Springs, US



Indicated: 70
Inferred: 86

Sunrise Lake, Canada

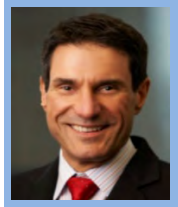


Indicated: 13
Inferred: 14

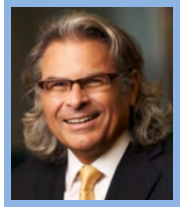
Executive Management and Board



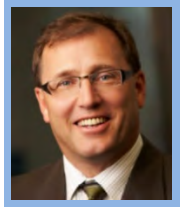
John Smith
President, CEO and Director



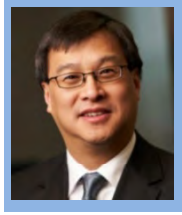
George Paspalas
Chief Operating Officer



Joe Ovsenek
SVP, Corporate Development



Ken McNaughton
SVP, Exploration



Tom Yip
VP, Chief Financial Officer



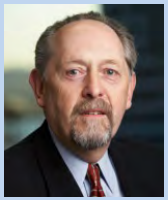
Peter Tomsett
Ex Placer Dome



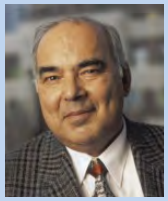
Mike Anglin
Ex BHP Billiton



John Brodie, FCA
Ex KPMG



Richard C. Campbell, MBE
Ex British Petroleum



David Johnston
Ex Highland Valley Copper



Richard D. Paterson
Genstar Capital

Experience to get to the right decision …

The Silver Standard Team

- Building on our exploration success
- Focusing on growth through project delivery
- Building quality teams for all aspects of our business
- Working with our communities
- Operating safely and sustainably
- Delivering value for our shareholders



2010 Corporate Objectives

- ☐ Produce 7 million ounces of silver at Pirquitas
- ☑ Complete San Luis feasibility Q2
- ☑ Complete Snowfield PEA H2
- ☑ Snowfield / Brucejack exploration programs Q3
- ☐ Complete Pitarrilla underground feasibility Q4
- ☐ Diablillos PA study Q4
- ☐ San Agustin exploration program H2
- ☑ Berenguela exploration program H2
- ☐ Challacollo exploration program H2

Silver Standard Resources Inc.[9][10]

(at September 14, 2010)

- Market cap: **US$1.6 billion**
- Shares outstanding: **78.8 million** issued, **84.4 million** fully diluted
- 2010 share liquidity: **~1 million/day**
- **Largest in-ground silver resource** of any silver company
- **Extensive portfolio of silver projects** throughout the Americas
- **Accretive silver and gold resource growth** (per ounce basis)
- **One of the largest North American-based gold resources**
  - 28 million ounces of gold (measured and indicated resource)
  - 17 million ounces of gold (inferred resource)



Footnotes

1. Based on company shares outstanding as at December 31, 2009. Please also refer to footnotes 9 and 10.
2. See Technical Report on Mina Pirquitas, Silver, Tin and Zinc Project, Jujuy Province, Argentina dated September 29, 2008, filed on SEDAR and available on the company's web site.
3. See the Updated Mineral Resource Estimate San Luis Project, Ancash Department, Perú, dated January 9, 2009, and the Technical Report for the San Luis Project Feasibility Study dated effective June 4, 2010 filed on SEDAR and available on the company's web site. Silver Standard has now vested a 70% interest in the San Luis Joint Venture.
4. See the NI 43-101 Technical Report - Pitarrilla Property Pre-feasibility Study dated September 21, 2009 (This report should be read in its entirety for additional information regarding the assumptions and key parameters included in the annual silver production, capital cost and financial analysis estimates), as well the Technical Report and Resource Estimate on the La Pitarrilla Project, Breccia Ridge Deposit, Durango, Mexico, dated August 26, 2008, and the Technical Report on the Pitarrilla Property, Durango, Mexico, dated September 28, 2006, filed on SEDAR and available on the company's web site.
5. See the Technical Report on the Diablillos Property, Salta and Catamarca Provinces, Argentina, dated July 27, 2009.
6. See the NI 43-101 Technical Report "Technical Report and Preliminary Assessment of the Snowfield-Brucejack Project dated September 10, 2010 and "Technical Report and Resource Estimates on the West, Bridge, Galena Hill, Shore, SG & Gossan Hill Gold & Silver Zones of the Brucejack Property" effective December 1, 2009 and filed on SEDAR January 14, 2010. The Snowfield resource estimate uses a cut-off of 0.30 g/t gold-equivalent with metals prices of gold-equivalent = US$878/oz gold (66.8%), US$14.50/oz silver (65.3%), US$2.95/lb copper (56.3%), US$17/lb molybdenum (50%) and US$7,811 /kg rhenium (50%). Mineral resources for the Brucejack December 2009 estimate are defined within an optimized pit that incorporates project metal recoveries, estimated operating costs and metals price assumptions. Parameters used in the estimate include metals prices (and respective recoveries) of US$800/oz gold (75%), US$12.00/oz silver (73%), US$2.50/lb copper (85%) and US$10/lb molybdenum (60%), as applicable. The pit optimization utilized the following cost parameters: Mining US$1.75/tonne, Processing US$5.00/tonne and G&A US$1.00/tonne along with pit slopes of 50 degrees. Contained metal may differ due to rounding.

   The quantity and grade of reported inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these inferred resources as an indicated or measured mineral resource and it is uncertain if further exploration will result in upgrading them to an indicated or measured mineral resource category.
7. See the NI 43-101 Technical Report "Technical Report and Preliminary Assessment on the Snowfield-Brucejack Project" dated September10, 2010 and filed on SEDAR.
8. See the NI 43-101 Technical Report "San Agustin Resource Estimate" effective March 30, 2009 and filed on SEDAR April 16, 2009.
9. For a breakdown of Reserves and Resources by project and category and for a more detailed description of the key assumptions, parameters and methods used in calculating Silver Standard's Reserves and Resources, see Silver Standard's Annual information Form/ Form 20-F (Amended) on file with Canadian provincial securities regulatory authorities and the U.S. Securities and Exchange Commission and the Mineral Reserves and Resources Summary dated September 10, 2010, available on the company's web site.
10. Total ounces per share represent the sum of proven and probable reserves, and the sum of measured and indicated mineral resources divided by the number of shares outstanding. Proven and probable mineral reserves, measured and indicated mineral resources and inferred mineral resources are separate categories under NI 43-101. Please refer to the Cautionary Note to US Investors at the beginning of this presentation.

Silver Standard's exploration programs are designed and conducted under the supervision of Kenneth C. McNaughton, M.A.Sc., P.Eng., Vice President, Exploration, Silver Standard Resources Inc.

Notes

SILVER STANDARD

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