

# **Cautionary Note**

This news release contains "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 applicable Canadian securities legislation. Such forward looking statements and information herein include but are not limited to statements regarding Endeavour's anticipated performance in 2020 and future years including statements regarding the economics analysis and production estimates in the 2020 PFS, changes in mining operations and production levels, the timing and results of various activities and the impact of the COVID 19 pandemic on operations. The Company does not intend to and does not assume any obligation to update such forward-looking statements or information, other than as required by applicable law.

Forward-looking statements or information involve known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, production levels, performance or achievements of Endeavour and its operations to be materially different from those expressed or implied by such statements. Such factors include, among others, the reliability of the Terronera economic analysis and production estimates for Terronera, the ultimate impact of the COVID 19 pandemic on operations and projects and results, changes in production timelines and costs guidance, national and local governments, legislation, taxation, controls, regulations and political or economic developments in Canada and Mexico; financial risks due to precious metals prices, operating or technical difficulties in mineral exploration, development and mining activities; risks and hazards of mineral exploration, development and mining; the speculative nature of mineral exploration and development, risks in obtaining necessary licenses and permits, and challenges to the Company's title to properties; as well as those factors described in the section "risk factors" contained in the Company's most recent form 40F/Annual Information Form filed with the S.E.C. and Canadian securities regulatory authorities.

Forward-looking statements are based on assumptions management believes to be reasonable, including but not limited to: the ability to achieve the revenue, costs and production estimates in the Terronera 2020 PFS, the continued operation of the Company's mining operations, no material adverse change in the market price of commodities, mining operations will operate and the mining products will be completed in accordance with management's expectations and achieve their stated production outcomes, no material impact of the COVID 19 pandemic on the Terronera development plans provided for in the 2020 PFS, and such other assumptions and factors as set out herein. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements or information, there may be other factors that cause results to be materially different from those anticipated, described, estimated, assessed or intended. There can be no assurance that any forward-looking statements or information will prove to be accurate as actual results and future events could differ materially from those anticipated in such statements or information. Accordingly, readers should not place undue reliance on forward-looking statements or information.

# Agenda



Bradford Cooke, M.Sc., P.Geo. CEO

Join the live Video Webcast here: https://www.edrsilver.com/terroneraPFS2020webinar

Participants can submit a question through the webcast webform via "Submit a Question" button

#### Topic

Overview

Location, Access, Physiography, Infrastructure

Property, History, Geology

**Project Milestones** 

Mineral Resources and Reserves

**Production and Grade Profile** 

**Base Case Economics** 

**Spot Case Economics** 

**Project Evolution** 

Value Adds

Capex, Sustaining Cap

Opex, Cash Cost and MAISC

**Operating Cost Comparables** 

Free Cash Flow & EBITDA

**Project Sensitivities** 

Mine Layout

**Plant Flow Sheet** 

Surface Infrastructure

**Sustainability Goals** 

**Government Permits** 

**Upside Opportunities** 

**Exploration Potential** 

**Next Steps** 

**Primary Silver Producers** 

**Primary Silver Deposits** 

Silver Leverage

**EDR Undervalued** 

### **Overview**

- ➤ Terronera has the potential to become Endeavour's **next core asset** and its largest and lowest cost mine
- The Final 2020 Pre-Feasibility Study highlights the robust economics of this high grade vein system
- ➤ After tax NPV 5% = \$137 million, IRR = 30%, Payback Period = 2.7 years at base case prices of \$1,419 gold and \$15.97 silver
- ▶ \$0.00 per oz Cash Cost, \$2.10 per oz MAISC, \$99 million initial capex
- ▶ **1,600 tpd capacity underground mine** and floatation plant producing high grade bulk sulfide concentrates
- 3.0 million oz per yr silver and 33,000 oz per yr gold for 10 year initial mine life



# Location, Access, Physiography, Infrastructure

**LOCATION** 

50 km northeast of Puerto Vallarta, Jalisco State, Mexico

**ACCESS** 

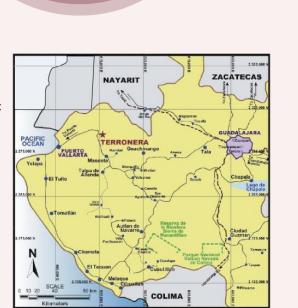
Excellent road access 1.5 hour drive from PV on Hwy #70

**PHYSIOGRAPHY** 

Mountainous, temperate, forested region at elevations of 1500 – 2200 meters ASL

**INFRASTRUCTURE** 

Supplies, water, power, labour readily available for exploration



**MEXICO** 

Town of San Sebastian del Oeste

# **Property, History, Geology, Mineralization**

#### **PROPERTY**

- ▶ 24 mineral concessions, totalling 173 km<sup>2</sup>
- applications for new concessions

### **HISTORY**

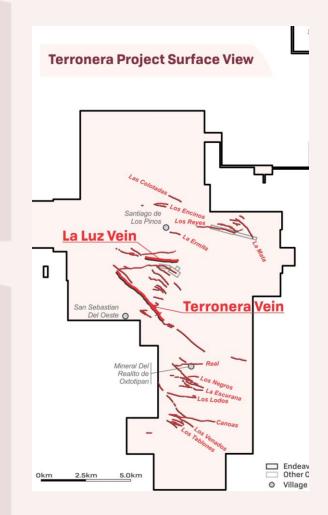
- Historic silver-gold mining district dating from 1500's to 1800's, mining halted in 1910-12 due to Mexican Revolution
- ► Endeavour optioned property in 2010, paid \$2.75 million acquisition cost and spent \$27.8 million on exploration and engineering

#### **GEOLOGY**

- Situated in the Sierra Madre
   Occidental Volcanic belt that hosts
   the majority of Mexico's Au & Ag
   deposits
- Low sulfidation epithermal vein system

#### **MINERALIZATION**

- ► 40 veins, many not drilled, typically 1-8 meters thick, up to 30 m in places, grades ranging 100 1000 pt Ag and 1-10 gpt Au
- Orebodies consist of silver-gold sulfides and sulfosalts with quartz and adulqria veins filling faults crosscutting the host volcanics



# **Project Milestones**

- Acquired option to purchase from **Grupo Mexico**
- Commenced exploration



- Completed initial PEA
- Discovered high grade La Luz vein



- Received final government permits
- Completed final PFS
- Successfully unlocked value to improve economics

2010-2011



2012-2014



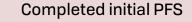




2017-2018

2019-2020

- Discovered main Terronera vein
- Consolidated land package
- Expanded resources



- Received initial mine and plant permits
- Incorporated La Luz vein into mineral reserves
- Infill drilled Terronera vein and updated PFS



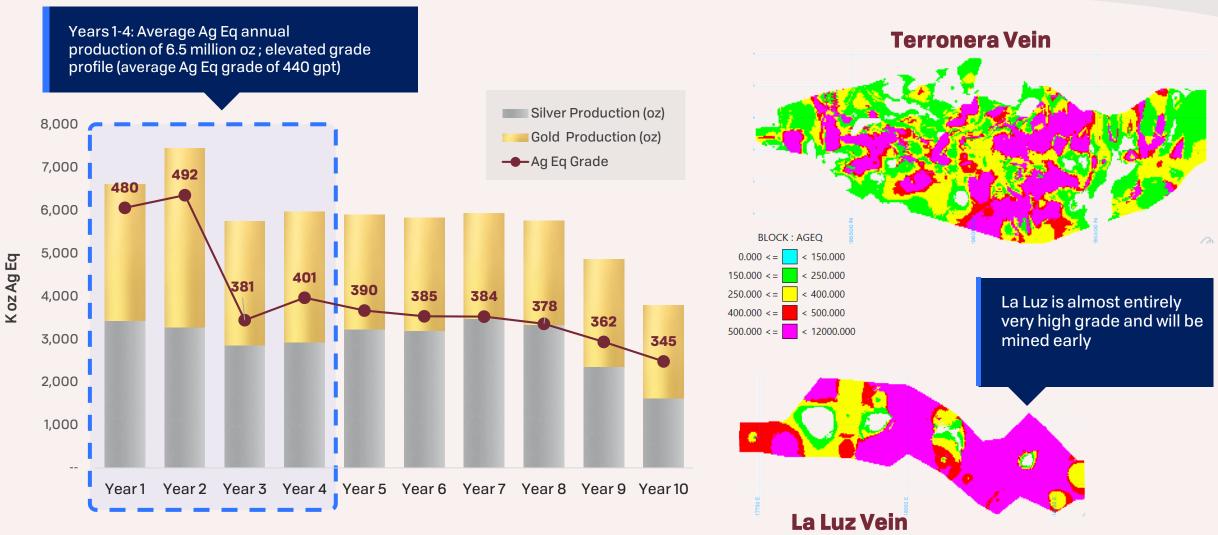
To date, we have invested +\$27.8 million on the project, including all exploration and engineering

### **Mineral Reserves and Resources**



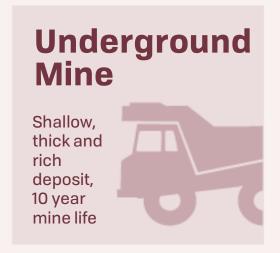
- All silver equivalents are converted using a 89:1 silver: gold ratio
- See full mineral reserve and resource estimates and associated footnotes in the appendix
- Change in cutoff grade in years 2013 and 2016 at 100 g/t, other years at 150 g/t
- Discovery cost is based on: (purchase price of \$2.75 million paid to Grupo Mexico, exploration to date, and engineering costs) / 2019 Ag Eg Probable Reserves

### **Production and Grade Profile**



Silver equivalents are calculated at a 89:1 ratio, using base case prices of \$15.97/oz Aq, \$1409/ oz Au

# **Base Case PFS Highlights**











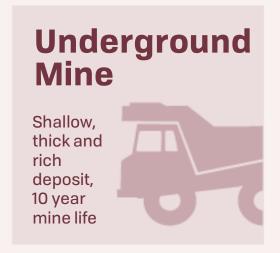


5.9
million oz
Ag Eq
per year

3.0 m oz Ag,
33,000 oz Au
(89:1)



# **Spot Case PFS Highlights**









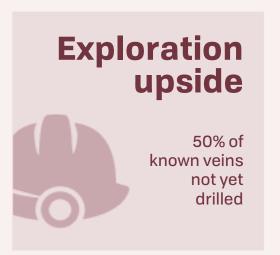


net of the gold credit

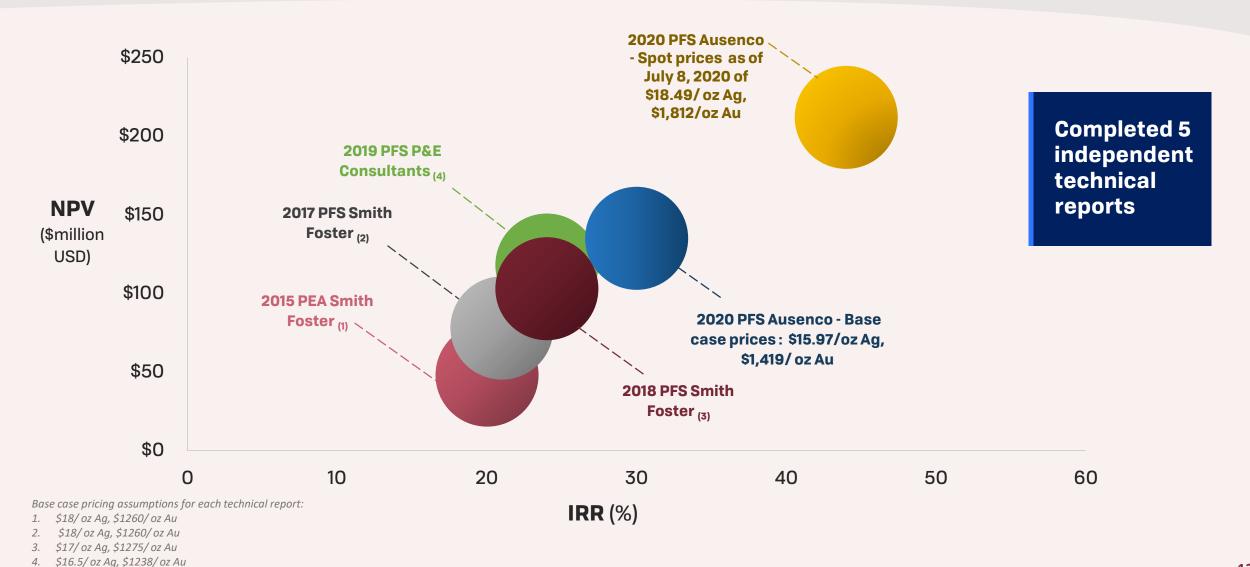


6.2
million oz
Ag Eq
per year

3.0 m oz Ag,
33,000 oz Au
(98:1)



# **Project Evolution**



### Value Adds in 2020 PFS



## Plant Throughput & Production Schedule

- Capacity increased to 1,600 tpd
- ▶ Production profile re-sequenced
- Elevated grade and production in yrs 1-4



# Mine Development & Mining Method

- Deferred development and raise meters
- Incorporated more longhole where possible



### **Plant Equipment**

 Incorporated idle equipment from El Cubo



### **Crushing Circuit**

 Simplified process flow sheet, smaller crushers and tailings thickeners, fewer pumps



#### **Power**

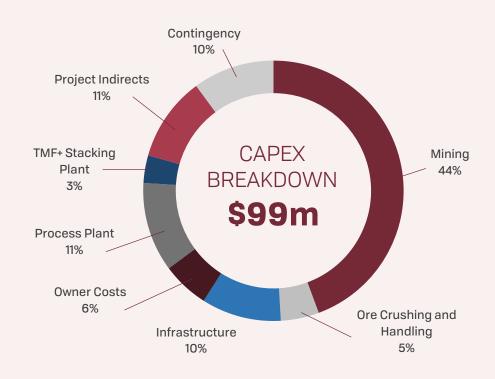
 Changed power source to LNG and solar



### **Construction Camp**

 Smaller facility in construction phase with plan to expand in operations

# **Initial and Sustaining Capital**



### \$16 million in CAPEX savings due to:

- Deferred mine development and reduced equipment plant footprint
- Utilizing El Cubo idle equipment
- Modifying tailings facility
- Lease financing

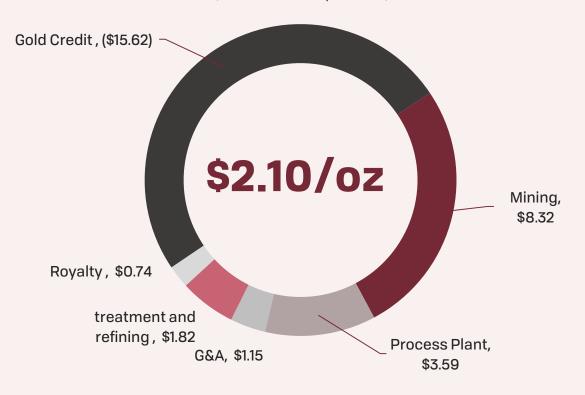
Decreased initial CAPEX by	14%
CAPEX	USD (million)
Mining	\$43.9
Ore Crushing and Handling	\$4.7
Infrastructure	\$9.8
Owner Costs	\$5.8
Process Plant	\$11.0
TMF+ Stacking Plant	\$3.4
Project Indirects	\$10.4
Contingency	\$10.0
Total Capital	\$99.1

80% spent in Years 1-4	
SUSTAINING CAPITAL	USD (million)
Mining	\$50.4
TSF Stacking Plant	\$4.3
Processing Plant	\$5.7
Net closure costs	\$2.0
Total Capital	\$62.4

# Operating, Cash and MAISC Costs

### LOM MAISC, NET OF THE GOLD CREDIT

(Base case prices)



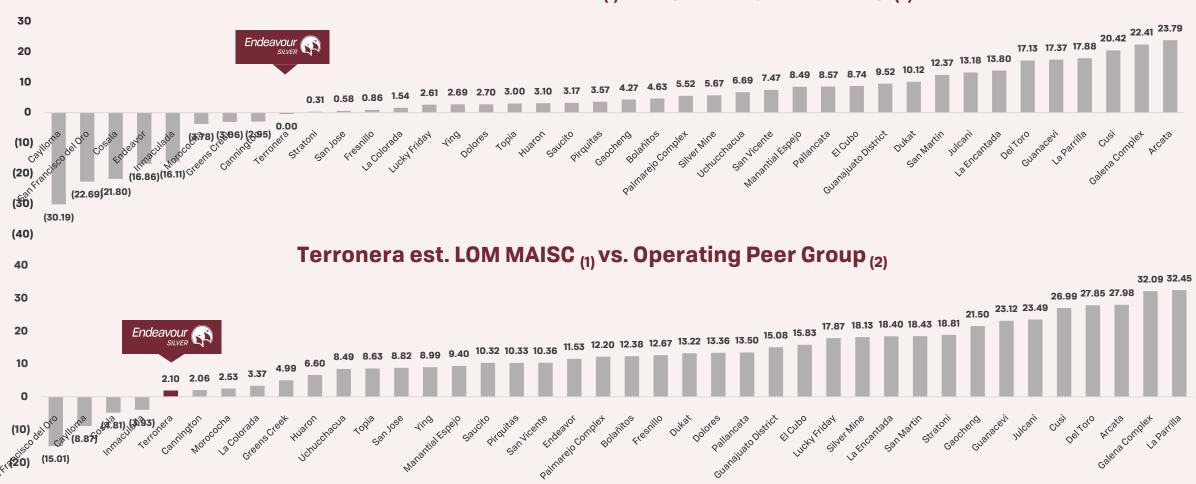
The projected LOM MAISC is estimated to be in the lowest decile of operating silver mines\*

	BASE	SP0T	
	US\$/T	US\$/Ag Oz	US\$/Ag Oz
Mining	\$44.64	\$8.32	\$8.32
Process	\$19.27	\$3.59	\$3.59
G&A	\$6.16	\$1.15	\$1.15
<b>Total Operating Costs</b>	\$70.06	\$13.06	\$13.06
Treatment and Refining	\$9.76	\$1.82	\$1.82
Royalties	\$3.99	\$0.74	\$0.92
Total Cost per Tonne	\$83.82	\$15.63	\$15.80
Gold Credit		(\$15.62)	(\$19.95)
Cash Cost, by-product		\$0.00	(\$4.15)
Sustaining CAPEX	\$ 11.22	\$ 2.10	\$2.09
MAISC by Product Basis		\$2.10	(\$2.06)

- Base case assumes silver price of \$15.97/oz and gold price of \$1,419/oz
- Spot case assumes silver price of \$18.49/oz and gold price of \$1,812/oz
- See slide titled "Operating Cost Comparison" for reference

# **Operating Cost Comparison**

### Terronera est. LOM Cash Costs (1) vs. Operating Peer Group (2)



Based on the Updated 2020 PFS for the Terronera Project, net of by product credits

### **After-Tax Free Cash Flow and EBITDA**



<sup>•</sup> Base case assumes silver price of \$15.97/oz and gold price of \$1,419/oz

Spot case assumes silver price of \$18.49/oz and gold price of \$1,812/oz

# **Sensitivity Analysis**

Project has equal leverage to rising silver and gold prices, as LOM revenue mix is 50/50% silver, gold

(Implies 100:1 Au:Ag ratio)					
Gold Price (\$/oz)	Silver Price (\$/oz)	\$NPV (after- tax 5%)	%IRR (after- tax)		
\$1,200	\$12	\$49.8	14.2%		
\$1,400	\$14	\$107.8	24.2%		
Base Case	Base Case	\$137.1	30.0%		
\$1,600	\$16	\$164.5	34.9%		
\$1,800	\$18	\$220.9	44.4%		
\$2,000	\$20	\$277.3	53.9%		

Movement	OPEX NPV	OPEX IRR	CAPEX NPV	CAPEX IRR
-20%	173.2	36.2%	150.4	38.1%
-10%	155.2	33.1%	143.8	33.6%
Base Case	137.1	30.0%	137.1	30.0%
10%	118.9	26.7%	130.4	26.9%
20%	100.7	23.4%	123.7	24.3%

# **Mine Layout**

# UNDERGROUND RAMP ACCESS MINES

**Terronera** – 4 ramps connect to main haulageway 2,000 m to the mill, average production of 1600 tpd

**La Luz** – one portal for two ramps

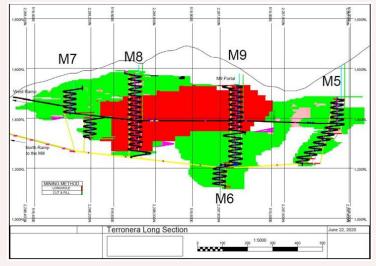
# MINING METHOD

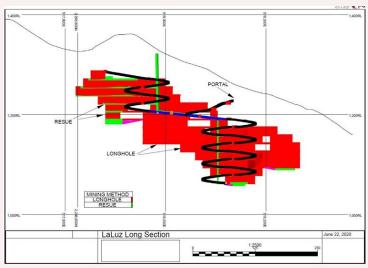
**Terronera** - 59% mechanized cut and fill, 41% long hole

La Luz - 6% Resue, 94% long hole

**BACKFILL** 

Blend of tailings, waste rock and cement





### **Process Flow Sheet**

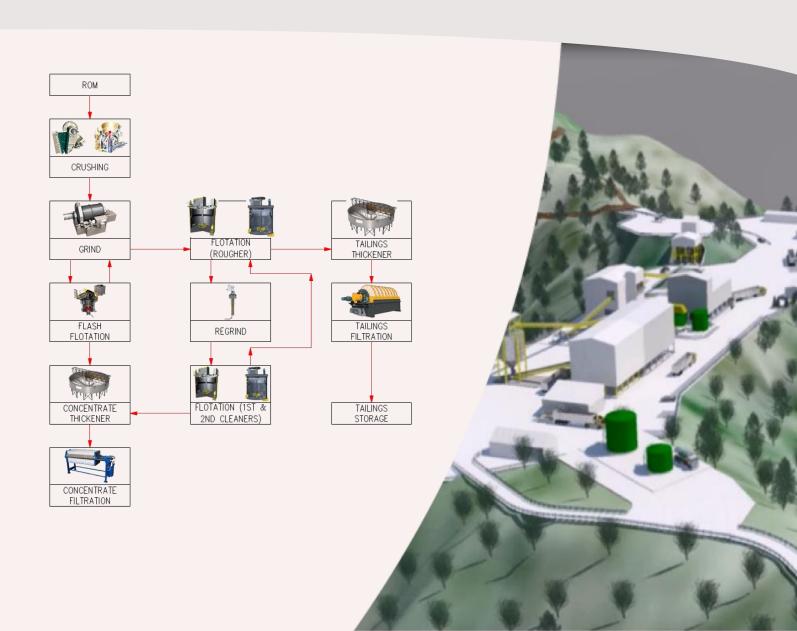
OVERALL PROCESS DESIGN

Three stage crushing, grinding, flotation, thickening, filtration

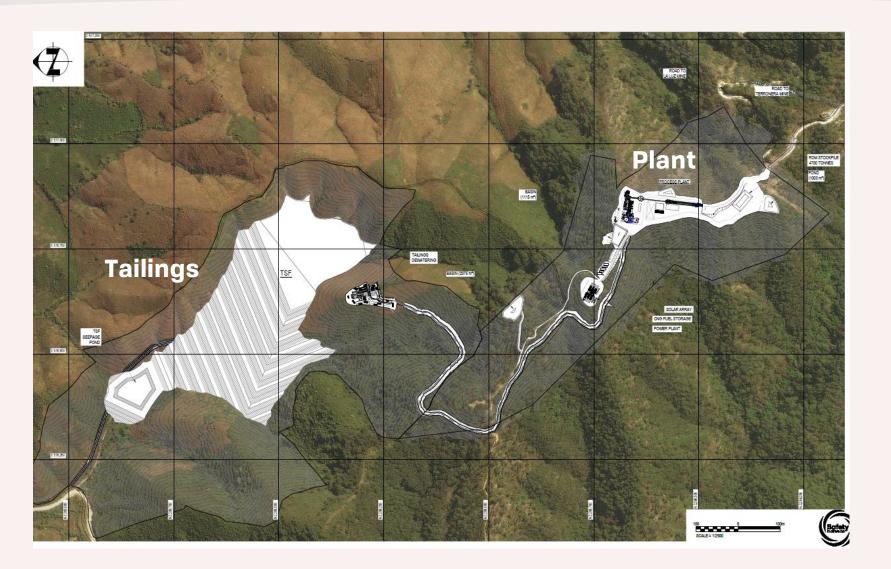
FLOTATION CONCENTRATES

Crush to 3/8 inches, grind size of 80 % - 70 microns

PLANT RECOVERIES Targets of 84.9% Ag/ 82.3% Au



### **Surface Infrastructure**



#### **Mining fleet:**

- Jumbo Drills
- Scooptrams
- Haulage trucks
- Bolting Jumbos
- Scissor Decks
- Loaders
- Longhole drills
- Explosive loaders and trucks
- Jackleg and Diamond drills
- Transmixers
- Shotcrete sprayers

# Power Plant to use liquified natural gas and solar panels

 Leased generators will be a turn key solution, installed on site to provide power during construction

### **Sustainability Goals - Shared Value for all Stakeholders**



The community relations team has been active and successful in mitigating risk and obtaining support from local communities.

#### The 2020 objectives are:

#### **Education:**

- a) Scholarships
- b) School nurseries

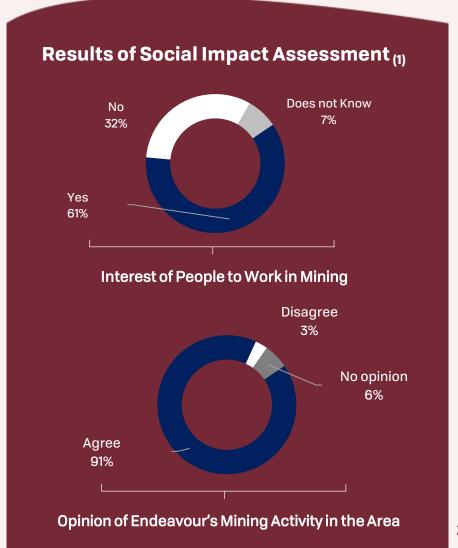
#### **Employability:**

- a) Training in trades (locals)
- b) Cross training (within the company)

# Public partnerships with government & other institutions:

- a) Improve local infrastructure
- b) Development of Municipal Urban Plan
- c) Social management system





### **Government Permits**

- ▶ Mine and plant permits (received Q3, 2017)
- ► Tailings and dumps permit (received Q2, 2019)
- MIA (EIS) from SEMARNAT
   (Mexican Environmental Authority) previously received in Q1, 2017, is now being extended for the new 1,600 plant capacity
- Additional minor permits will be filed as needed to support any changes that flow out of the feasibility study and future expansions



# **Upside Opportunities**

**Expand Property Size** - acquire new concessions covering mineralized areas in proximity

**Expand Resources & Reserves –** plan additional drilling to convert inferred to probable, test other veins

**Expand Mine & Plant –** evaluate potential to expand to 2,000 tpd subject to expanding reserves

**Optimize Mining Methods –** with more geotechnical drilling, additional longhole mining may be possible

**Optimize Ore Transport** – evaluate automated underground rail haulage system to benefit haulage costs and ventilation

**Optimize Mining Equipment –** evaluate electric equipment instead of diesel

**Optimize Recoveries –** evaluate grind size vs. floatation stages

Tailings Transport - evaluate conveyor or pipeline vs. trucks

**Power Capacity** – re-evaluate power needs and rates once alternatives are optimized



# **Exploration Potential**

Several areas of interest with discovery potential:

TERRONERA & LA LUZ VEINS

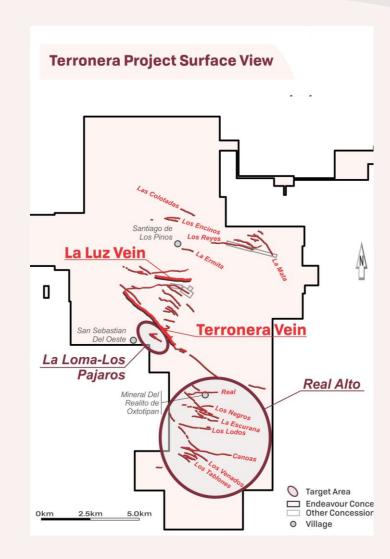
open at depth and to surface

2 other main areas with potential to increase resources

LA LOMA-LOS PAJAROS VEINS targets range up to 500 m long by up to 3 m thick in the footwall of the Terronera vein

REAL ALTO AREA

12 veins that have seen very little drilling with encouraging results - targets range from 500 to 1,000 m long by 1 to 2 m thick



# **Next Steps**

Complete feasibility study – approximately 9-12 months

Build project team

Complete EPC process -contractor bidding and selection

Extend Government permits - amend mine access ramp, construction camp

Order long lead items - mine and plant procurement

Evaluate upside opportunities – recommence exploration drilling

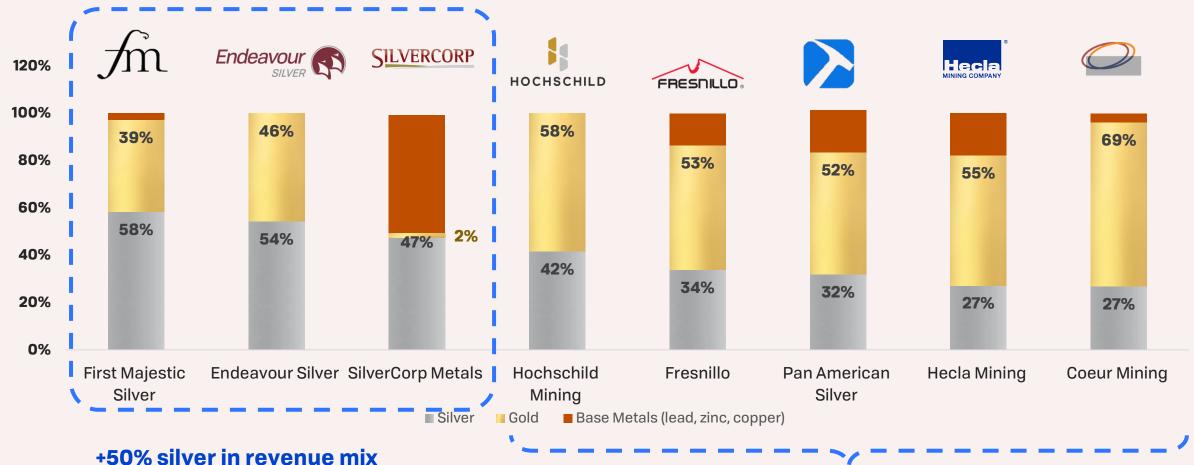
Obtain board approval for development

Secure project financing



### **Few Pure Silver Producers**

#### **2019 METALS MIX IN REVENUE**



Large "silver" producers are + 50% gold in revenue mix

# Scarcity of Silver Projects, Compared to Gold



### **GOLD PROJECTS**

Technical reports filed in last 3 years, since 2017



### **SILVERS**

+50% production silver in revenue

### **Approximately 100 gold projects globally (PFS & FS)**

HOMASE

**KILGORE AKASABA ESKAY CREEK** 

BOUMADINE ALTANNAR BOWDENS BOORARA

**CAMYURT** 

CARIBOO GOLD ROCK **DELAMAR GOLDSTRIKE** 

COPPERSTONE **CAPE RAY** 

**FENELON** 

WINDFALL LAKE

**DAWSON NORTH BULLFROG** 

MEXICAN HAT HOG RANCH **GANAJUR** 

GARDEN GULLY FGP

**MARA ROSA** 

GOLDRUSH

**CLEARWATER** 

TETLIN **TOROPARU** 

**JEANETTE SPRINGPOLE** 

**JONNAGIRI** 

**CANGREJOIS MACLELLAN** 

> **KALGOORLIE** NORTH

**MCPHILLAMYS** GRAMALOTE

**MT MACKENZIE** 

SIEMBRA CARRINGTON MINERA

> **SALARES NORTES**

**PREMIER RAVENSTHORPE** 

**RIVER VALLEY** RODEO

**ROVINA VALLEY** 

**ROZINO SANANKORO SEGUELA** 

**SOTO NORTE** 

COOLGARDIE

**CASTELO DE SONHOS** 

VALENTINE

HARVEST **HOD MADEN** 

**HOMESTAKE** 

RIDGE

**LOMA LARGA** WILCHERRY HILL

**KATANNING** 

**KOBADA** 

**KRASNY** 

LA COIPA **MANSOURAH** 

**LAKE CAREY** LONGSTREET

> **MARATHON** WATERBERG

**MTIDA** 

MT TODD MT COOLON

NAMDINI NABANGA PEDRA BRANCA NASEDKINO

> **PHOENIX PHOENIX** WARRAWOONA

> > **PINOS**

**WA-LAWRA** TIMOK **SUKHOILOG** 

**TAGUAS TAMPIA** 

**TURNER RIVER BOLD** 

TICK HILL TIJIRIT

VARGBACKEN

UNKURTASH

**JUANICIPIO** 

LAS CHISPAS

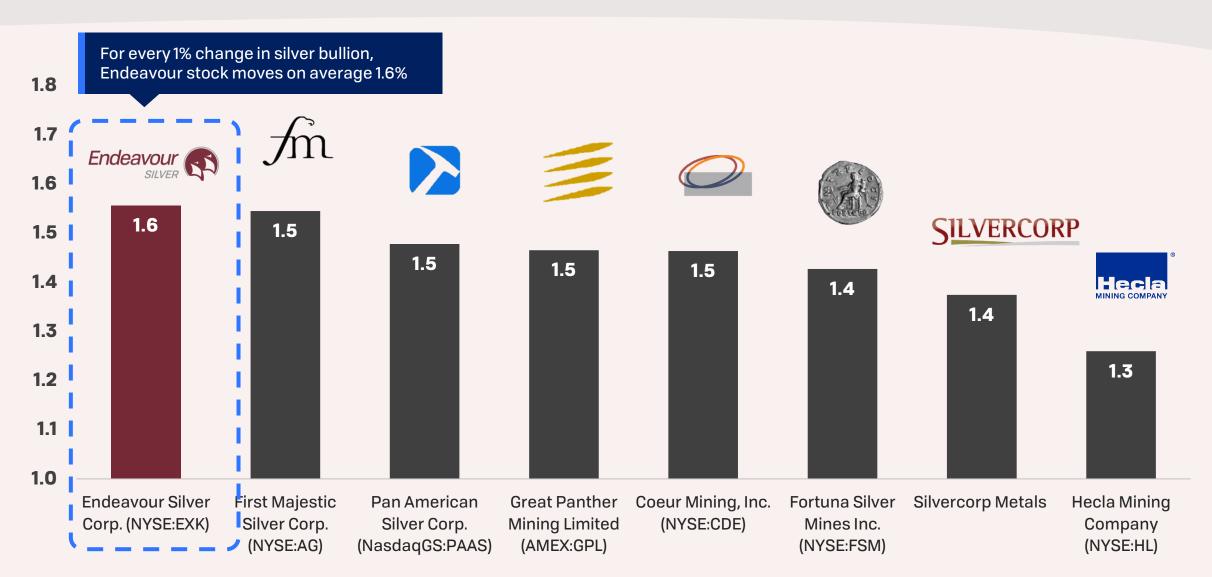
**KENO HILL** 

SILVER STRIKE

**TERRONERA** 

Only a handful of wellknown silver projects

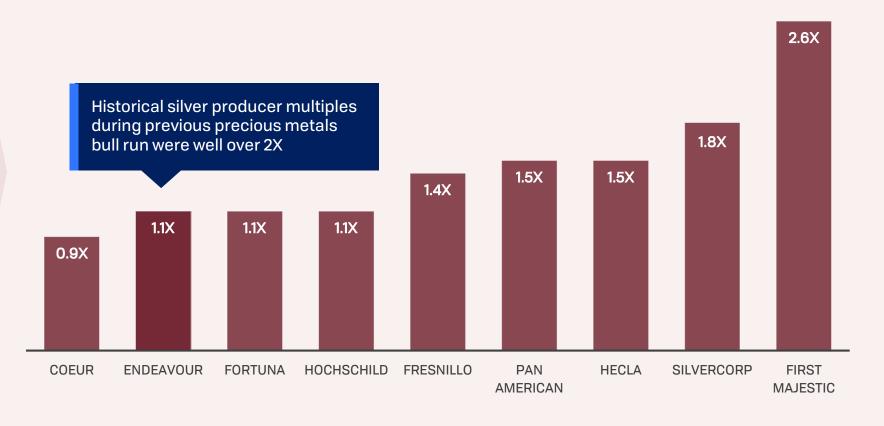
# **Sector Leading Beta to Silver Price**



### **Undervalued Relative to Peers**

- Stock underperformed in 2019 due to operational challenges at 2 mines
- Endeavour has the strongest organic growth profile in the sector that is not implicit in valuations
- Historically, Endeavour has delivered industry leading multiples and consistent returns and offers an industry leading beta to silver

### **Current P/NPV (ratio)**





# Terronera Assumptions for 2020 PFS

Base Case	2020
Silver Price	15.97
Gold Price	1,419
Silver:Gold Ratio	89
Operating Statistics	
LOM Tonnes Processed LOM (thousands)	5,563
Life of Mine (Years)	10.0
Average silver grade (g/t)	201
Average gold grade (g/t)	2.29
Silver equivalent grade (g/t)	405
Average silver recovery	84.9%
Average gold recovery	82.3%
LOM payable Ag ounces produced (millions)	29.8
LOM payable Au ounces produced (thousands)	328
LOM payable Ag Eq ounces produced (millions)	59.0
Avg annual payable Ag ounces produced (millions)	3.0
Avg annual payable Au ounces produced (thousands)	33
Avg annual payable Ag Eq ounces produced (millions)	5.9
Capital Expenditure Statistics	
Initial Capital Expenditure (millions)	99.1
Process Capacity (tonnes per day)	1,600
LOM Sustaining Capital	62.4
Total LOM Project Capital	161.5

Financial Cost Metrics	
LOM Revenue (millions)	942.7
LOM EBITDA (millions)	476.4
After Tax LOM Free Cash Flow (millions)	217.4
After Tax Project Net Present Value (millions)	137.1
After Tax Internal Rate of Return	30.0%
Pay Back Period (years)	2.7
Cash costs by Product (per silver ounce)	0.00
Mine site all in sustaining (per silver ounce)	2.10
Cash costs by Silver Equivalent (per silver ounce)	7.90
All in sustaining Silver equivalents (per silver ounce)	8.96
LOM Cost of Sales (millions)	466.3
Total Direct Production Costs (per Tonne)	83.80

# 2020 PFS Base & Spot Case Highlights

3 million oz silver and 33,000 oz gold

**LOM Annual Production** 

10 year mine life with 5.9 million oz of Ag Eq at 405 g/pt (89:1 ratio)

\$99 million initial capital expenditure

And \$62.4 million LOM sustaining capital

\$83.82 total

Direct production cost per tonne

	BASE CASE	SPOT CASE
Silver price	\$15.97/oz	\$18.49
Gold price	\$1,419/oz	\$1,812
Gold: silver ratio	89:1	98:1
NPV <sub>(5% after-tax)</sub>	\$137 million	\$229 million
IRR (after-tax)	30%	45.7%
Payback Period	2.7	1.7
LOM cash cost, net of gold by-product credit	\$0.00/ oz	(\$4.15)/oz
LOM MAISC, net of gold by-product credit	\$2.10/ oz	(\$2.06)/oz
Average annual after tax free cash flow once in production	\$31 million	\$43 million
After tax cumulative undiscounted free cash flow	\$217 million	\$342 million

<sup>•</sup> Base case prices for the PFS are calculated on a 2 year trailing average

<sup>•</sup> Spot case scenario for the PFS is closing metal prices as of July 8, 2020

### **Terronera 2019 Updated Reserves & Resources**

#### **Mineral Resource**

Classification	Tonnes (kt)	Ag (g/t)	Au (g/t)	Ag Eq (g/t)	Contained Ag (koz)	Contained Au (koz)
2019 Indicated Estimates						
Terronera	5,275	227.2	2.35	403.4	38,537	398
La Luz	126	192	13.60	1,212	779	55
2019 Inferred Estimates						
Terronera	1,022	212.2	1.70	339.8	6,970	56
La Luz	58	145	12.15	1,060	269	23

#### **Mineral Reserve**

Deposit	Tonnes (kt)	Ag (g/t)	Au (g/t)	Ag Eq (g/t)	Ag (koz)	Au (koz)
2019 Probable Estimates						
Terronera	5,356	205	2.08	367	35,268	358
La Luz	207	112	7.87	725	745	52
Combined	5,563	201	2,29	380	36,013	410

#### Notes:

- 1. Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
- 2. The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.
- 3. The Mineral Resources in this Updated Technical Report were estimated using the CIM Definition Standards for Mineral Resources and Mineral Reserves.
- 5. Historical mined areas were depleted from the Terronera Vein wireframe and Mineral Resource model.
- 6. Mineral Resources are inclusive of Mineral Reserves.
- 7. The Mineral Reserve in this Updated Technical Report was estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.
- 8. Grades vary from the January 19th, 2019 Mineral Reserve disclosure news release due to the elimination of longhole mining from previous studies.