

## ENDEAVOUR TARGETS DISCOVERY OF 15-20 MILLION OUNCES OF INDICATED RESOURCES OVER NEXT 5 YEARS

## **HIGHLIGHTS:**

- Endeavour targeting discovery of 15-20Moz of Indicated resources over the next five years at an average cost of less than \$25/oz
- Near-mine exploration aims to continue to extend the mine lives of core assets to beyond the 10 year target
- Greenfield exploration targets the discovery of at least another new standalone project
- Group remains on track with its target to discover +2.5Moz of Indicated resources in 2021

**London, 30 September 2021** – Endeavour Mining plc (LSE:EDV, TSX:EDV, OTCQX:EDVMF) ("Endeavour" or the "Group" or the "Company") is pleased to unveil its exploration outlook for the next five years which targets the discovery of 15 to 20 million ounces of Indicated resources at a cost of less than \$25 per ounce across West Africa.

Please click the following link to view a video presentation from management, outlining the exploration outlook: <a href="https://youtu.be/QPBzWvrfJ34">https://youtu.be/QPBzWvrfJ34</a>

The discovery target was established using the same conservative ranking and screening methodology which has successfully yielded the discovery of 8.5Moz of Indicated resources over the past four years, as detailed in the Methodology Section below.

Sebastien de Montessus, President & CEO said: "Our exploration success has been a significant value creation driver over the past four years, following the tremendous work completed by our exploration team. Our track record gives us the confidence to set ambitious new targets and, given the strong expected returns, investment in exploration will continue to be an important component of our capital allocation framework.

Our exploration strategy is centered on continuing to extend the mine lives of our core assets to well beyond ten years and discovering new greenfield projects. While we see significant opportunities across our portfolio, we are particularly pleased with the potential defined at our flagship mines; Sabodala-Massawa, Hounde and Ity. We believe these mines have the potential to be Tier 1 assets with over 10 million ounces resource endowment, inclusive of historical production. We are also very pleased to demonstrate the opportunities identified at our recently acquired assets, which have the potential to grow their current resources by as much as 60%.

Setting these exploration targets demonstrates our commitment to both near-term and long-term growth and underpins our ability to be a resilient and reliable business. We believe that we offer a strong investment appeal due to the long-term visibility across our business, through our minimum progressive dividend outlook which is supported by a robust five-year production outlook, near-term growth prospects from existing projects, and our new five-year discovery horizon that provides the foundation for longer-term success."

Table 1 illustrates the areas of focus for the discovery targets, with the majority expected to occur at existing mines, supporting the Company's objective of continuing to extend mine lives to beyond ten years, in addition to discovering at least one new standalone greenfield project over the next five years. The potential quantity of ounces is conceptual in nature since there has been insufficient exploration to define a mineral resource and it is uncertain if exploration will result in the targets being delineated as a mineral resource.

#### Table 1: Resources and 5-year Discovery Target

|   | M&I RESOURCES<br>as at 31 Dec., 2020 <sup>1</sup> |                  |                            | 5-YEAR M&I RESOURCE<br>DISCOVERY TARGET (2021-2025) <sup>2</sup> |
|---|---|------------------|----------------------------|--|
| Resources shown inclusive of P&P<br>Reserves, on a 100% Basis | Tonnage,<br>MT                                    | Grade,<br>Au g/t | Content <i>,</i><br>Au Moz | Content, Au Moz  |
| Ity mine  | 77.1  | 1.52             | 3.8                        | 3.5 – 4.5  |
| Houndé mine   | 82.0  | 1.74             | 4.6                        | 3.0 - 4.0  |
| Sabodala-Massawa mine   | 102.1   | 2.02             | 6.6                        | 2.3 – 2.7  |
| Wahgnion mine   | 44.2  | 1.51             | 2.2                        | 1.5 - 2.0  |
| Fetekro project   | 32.0  | 2.40             | 2.5                        | 1.2 - 1.8  |
| Greenfield properties   | n.a   | n.a              | n.a                        | 1.5 - 2.0  |
| Boungou mine  | 14.4  | 3.32             | 1.5                        | 1.0 - 1.5  |
| Mana mine   | 45.2  | 2.07             | 3.0                        | 1.0 - 1.5  |

<sup>1</sup>For details reference press release date 18 March, 2021 available on the Company's website. Mineral Reserve Estimates follow the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definitions Standards for Mineral Resources and Reserves and have been completed in accordance with the Standards of Disclosure for Mineral Projects as defined by National Instrument 43-101. Reported tonnage and grade figures have been rounded from raw estimates to reflect the relative accuracy of the estimate. Minor variations may occur during the addition of rounded numbers. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

<sup>2</sup>For methodology details please refer to the Methodology section below. Targeted Indicated Resources are based on average tonnage and average gold grades of 24 – 48Mt at 1.5 – 3.5g/t for Sabodala-Massawa, 25 - 67Mt at 1.4 - 5.0g/t for Houndé, 47 - 54Mt at 2.0 - 3.0g/t for Greater Ity, 12 – 24Mt at 1.3 – 4.0 g/t for Mana, 18 – 49Mt at 0.95 – 3.5g/t for Greenfield, 21 – 28Mt at 1.8 – 2.0g/t for Fetekro, 21 – 39Mt at 1.2 – 3.0g/t for Wahgnion and 19 – 21Mt at 1.5 – 2.5g/t for Boungou. Note that Karma was not included in the outlook as it is a non-core mine and the Fetekro was prioritized over Kalana for the project related exploration.

## **DETAILS BY ASSET**

#### Ity mine

At Ity, between 3.5 and 4.5Moz of Indicated resources are targeted to be discovered over the next five years at an average discovery cost of \$17/oz.

Exploration efforts in the near term will be focused on the larger Le Plaque area, the Yopleu-Legaleu extension, the new discovery named West Flotouo, Daapleu Deep, and the area located at the junction between the Bakatouo and Walter deposits.

A full geological re-interpretation of the Ity area led to the discovery and prioritisation of the West Flotouo target, which is located immediately below an old Verse West waste dump. West Flotouo is a series of continuous high grade mineralised lenses, located in the immediate proximity of the Ity plant. Delineation is currently ongoing, and this new discovery, which remains open to the North, South and at depth, is expected to have a new maiden resource published prior to year-end.

The Le Plaque mineralisation is open both along strike and at depth in the Delta Extension area, while the Yopleu-Legaleu area has delivered promising drill results, both of which are expected to contribute to the larger Le Plaque area resource update later this year. Very positive drilling was also conducted at depth at Daapleu. The results confirmed that mineralisation extends at least 300 meters down-dip of the current pit design. At the junction between the Bakatouo and Walter deposits drilling has confirmed the continuity of mineralisation between both skarn type deposits, and illustrates the global continuity of mineralisation around the whole dioritic-granodioritic Ity intrusion.

### Houndé mine

At Houndé, between 3.0 and 4.0Moz of Indicated resources are targeted to be discovered over the next five years at an average discovery cost of \$19/oz.

Exploration efforts are currently focused on Vindaloo South, Mambo and the junction between Kari Gap and Kari Center, in addition to integrating Golden Hill within the Houndé mine complex. In the near-term, drilling will commence on higher grade targets such as Sia Sianikoui and Dohoum.

The Mambo target, located at the boundary between a volcanic and a granitoid intrusive, has the potential to be a significant discovery. Its mineralised trend now extends more than 800 meters, with the possibility of extending its strike length to between 1.0 and 1.2 kilometers. Mineralisation appears to remain open to the North East, South West and at depth. Step out drilling is underway, targeting the lateral extensions of Mambo. An initial maiden resource is expected to be published before year-end.

Significant potential has been identified at Golden Hill, which is an advanced-stage exploration property on the Houndé Belt within trucking distance of Houndé. New interpretations suggest that mineralisation is associated with

linking structures developed between the main Boni shear and a splay to the east and a successful drill validation of the concept will present an opportunity to extend that mineralisation. The Saleteon felsic intrusive appears to be a significant target measuring 4 kilometers by 3 kilometers in size. It already hosts three of the five existing deposits, has visible gold in drilling and strong geochemical anomalies over the central portion that remain untested by drilling.

### Sabodala-Massawa mine

At Sabodala-Massawa, between 2.3 and 2.7Moz of Indicated resources are targeted to be discovered over the next five years at an average discovery cost of \$26/oz.

Endeavour has successfully identified more than 15 potential targets within 30 kilometers of the Sabodala plant, while further significant potential exists with only half of Endeavour's 1,240 square kilometer land package currently assessed.

Near-term exploration focus will centre on the discovery of non-refractory resources on the Massawa permit, which would enable the optimisation of the mine sequencing and grade profile to maximise returns from the Phase 1 expansion, which is due to be completed later this year. Longer-term, significant additional upside exists within the combined Sabodala-Massawa area for both refractory and non-refractory resources, which may provide additional feed for the Phase 2 expansion.

Current exploration efforts are mainly focused on Samina, Tina, Sofia North Extension and Bambaraya targets.

At the Samina deposit, the Company has extended the 500 meters mineralised strike length to more than 900 meters, and mineralisation remains open to the north. As such, efforts will continue to be focused on testing this extension. Drilling conducted at the Tina deposit has focused on expanding the Inferred Resources defined in 2019 and converting them into Indicated resources. The mineralised strike length has been extended by more than 300 meters while the deposit remains open to the north and the southeast. The Sofia North deposit has been extended by more than 800 meters along strike with an average width of 150 meters, and it remains open to the north and at depth.

Beyond Massawa, the near-term focus will be at Bambaraya, Makana, Tiwana and Thianga. Bambaraya is a high priority target within the Massawa permit located 13 kilometers from the mill. It is a Loulo type mineralisation style, in a setting that is gently dipping with good grades. Mineralisation to the north has been extended by more than 800 meters.

While the Massawa permit will remain a priority, exploration will also be advanced in the relatively underexplored adjacent Kanoumba and Bransan permits, located 20 to 40 kilometers from the plant. Several highly prospective refractory and non-refractory targets have been identified on these permits, which are expected to feed the longer-term discovery pipeline.

## Wahgnion mine

At Wahgnion, between 1.5 to 2.0Moz of Indicated resources are targeted to be discovered over the next five years at an average discovery cost of \$25/oz.

The exploration program will focus on open pit targets located within 10 kilometers of the existing plant. The shortterm focus is on both the Nogbele North and Nogbele South deposits, targeting the continuation of mineralised structures beneath and between the Nogbele pits.

The Wahgnion mine was developed quickly under its previous ownership to feed the plant which was running at 30% above its nameplate capacity. As a result, some of the deposits have only been drilled down to relatively shallow depths or along a limited length as such, may contain significant resource upside. Several non-refractory ore targets are drill-ready and are expected to quickly be followed up on. Over the longer term, a number of the satellite deposits and targets will be subject to a multi-year effort given the significant exploration potential.

## Boungou mine

At Boungou, between 1.0 to 1.5Moz of Indicated resources are targeted to be discovered over the next five years at an average discovery cost of \$32/oz.

Geochemical sampling has been a successful exploration tool at Boungou, identifying 36 exploration targets to date. The near term focus is on extending the Natougou deposits, and advancing potentially higher grade targets identified within two key brownfield areas within 10 kilometers to the north of the mine. In addition, efforts will focus on Dangou Northeast, which is a potentially higher-grade greenfield target, located within 20 kilometers of the urban centre of Diapaga.

Drilling at Natougou Northwest identified a zone of mineralisation in the hanging wall of the Boungou shear that trends north-northwest and extends for more than 700 meters and remains open to the north. Drilling is underway to focus on delineating this trend.

At Boungou Northwest, drilling evaluated the continuation of the Boungou Shear mineralisation down plunge to the northwest of the mine. Initial results are promising, and a complete review of all drill results, expected later this year, will guide follow-up drilling in 2022.

Mineralization at Boungou is hosted by the shallow dipping Boungou Shear and the larger more steeply dipping TN45 structure. Re-interpretation of the geophysical and geologic datasets will help delineate structural and lithologic controls to the mineralisation and help in defining new targets.

### Mana mine

At Mana, between 1.0 to 1.5Moz of Indicated resources are targeted to be discovered over the next five years at an average discovery cost of \$30/oz.

Although Mana has been in production for over a decade, significant exploration potential still remains. Following the integration of Mana within Endeavour's business plan, the team has been restructured to provide fresh perspectives. Given that it is a mature exploration area, there was a strong need to re-interpret existing datasets and incorporate more structure and geology into the targeting strategy. In addition, given that most of the historical successful exploration was based on geochemical analysis, Endeavour will also be using geochemical sampling to refine targets in support of the revised strategy

Endeavour's near-term focus will be on evaluating oxide open pit targets within 20 kilometers of the plant, such as Maoula, and on evaluating underground targets at Siou and Nyafe. Good potential has been identified in our efforts to increase the Wona and Siou underground resources which would offer potential to extract high-grade material.

### Fetekro project

At Fetekro, between 1.2 and 1.8Moz of Indicated resources are targeted to be discovered over the next five years at an average discovery cost of \$14/oz.

In the near-term, the Lafigué deposit remains the priority, while the longer-term focus is on delineating several identified targets on the Fetekro property.

The Lafigué deposit is currently the main discovery made at Fetekro and has now been traced over two kilometers in the east-northeast direction and over one kilometer down-dip. The mineralization occurs as free gold in quartz vein stockworks and zones of silicification associated with a tourmaline-carbonate-chlorite-sulphide alteration. Mineralisation is controlled by a thrust gently dipping to the south-southeast. Significant potential remains at Lafigué as some mineralised extensions have been delineated where pinching and swelling had earlier been misdiagnosed and where mineralisation appears to remain open.

At Lafigué North, the 2021 exploration program has focused on converting some of the remaining Inferred Resources into Indicated resources, but most of the activity has been in the area located in between the Lafigué Center and Lafigué North areas. The results of this drilling activity were successful and demonstrated the continuity of the mineralised system with the occurrence of shallow, subparallel, and stacked mineralised lenses that were previously located outside of the 2020 resources pit. Newly discovered mineralisation will be included in the new resource estimate which is expected later this year and will support the ongoing definitive feasibility study.

### **Greenfield properties**

While Endeavour has identified several greenfield targets which have the potential to yield a new project, it has taken a conservative approach whereby it has only factored for one potential success within its 5-year discovery target, amounting between 1.5 and 2.0Moz of Indicated resources to be discovered at an average cost of \$45/oz.

Given the higher uncertainty related to greenfield exploration, compared to near-mine exploration, a low Probability of Occurrence multiplier was applied to greenfield targets (see Methodology section below for further details).

Advanced exploration properties include Tanda-Iguela and Afema in Cote d'Ivoire, Bantou and Liguidi in Burkina Faso, and Siguiri in Guinea. In addition, Endeavour holds significant exploration tenements along both the Houndé Belt and Ity Belt, which are expected to generate further greenfield targets.

## **EXPLORATION RANKING AND SCREENING METHODOLOGY**

Endeavour's large land position (more than 17,000 sq Km) and comprehensive database over a very large number of exploration targets promotes the application of a general portfolio management theory where all numerous and independent exploration targets are statistically analysed and risked, according to their probability of success or occurrence. As applied to the Group's previous five-year exploration programme, Endeavour's exploration success has been based on the implementation of a systematic, statistically driven approach to selecting and optimising exploration targets. This approach was derived from a similar process used in the oil and gas industry to predict, analyse, rank and then prioritise a large number of exploration targets, as summarised below. It is important to note that this approach can only be performed with a significant number of independent exploration targets, where the larger the number, the better the global portfolio value estimate.

## Step 1: Exhaustive technical screening of the exploration portfolio based on geological data

The initial screening incorporated the exhaustive identification, selection, and ranking of all possible exploration targets occurring within Endeavour's exploration portfolio. The technical analysis cross-referenced all available geological data, including geological maps, cross sections, structural data, surface geology, geochemistry, geophysics, regolith mapping, alteration profiles, drilling data, cores, analysis of artisanal mining activity, outcrops, and other survey data.

Following this first screening, a total of 150 targets were identified and described.

## Step 2: 150 targets were further screened based on mining characteristics and the potential to have low production costs

The 150 targets were further screened by incorporating some tentative mining and processing costs parameters, to establish a selection of top targets which were appraised to have the potential to be produced at a low All-in Sustaining Cost ("AISC"). The criteria used in this second screening phase included factors such as potential grade, metallurgy, strip ratio, production costs, mineralisation type, and distance to a mill. After this second screening phase, the selection was narrowed to 110 high priority targets.

### Step 3: Probabilistic ounce and average grade distribution of selected 110 targets

This applied approach is similar to that used in the analysis of natural phenomenon and other industries where large volumes of calibration data are used to predict individual and then global outcomes. It can also be applied to an exploration portfolio containing a high number of identified targets where a significant amount of calibration data may allow an accurate prediction of the total ounces to be discovered over the full portfolio despite individual outcomes potentially varying widely.

Based on available information, Endeavour characterized all the physical parameters such as length, width, thickness, density, grade characterizing each of the 110 selected targets to establish a prediction of the minimum, maximum and mean values distribution for each parameter related to each individual target. Since each of the selected targets cannot possibly be all positive, a probabilistic weighting, defined as a Probability of Occurrence ("PoO") factor, was then applied to the mean values of each target. Since all 110 selected targets were defined as independent, the total value (total ounces predicted) of the portfolio could be approached by adding all the risked mean Indicated resources expected from each of the 110 targets.

PoOs represent the confidence or supporting control Endeavour has in describing, precisely the deposit it is trying to discover. The PoO values were set for each of the selected targets on a scale ranging from 0.2 to 0.8, with the very few, very low probability targets generally being eliminated due to a "killing" factor, such as possible refractory characteristics, lower expected average grade or continuity, or other highly unfavorable parameters.

The full analysis of the selected 110 targets resulted in the conclusion that up to 25Moz could ultimately be discovered over the full exploration portfolio, irrespective of the timeframe selected.

# Step 4: Final selection of targets, with higher PoO and priority, which can be physically be included in the 5 year exploration plan

Since Endeavour cannot feasibly explore the 110 targets, defined in Step 3, during the next 5-year period, the 110 targets were further assessed, classified and ranked against near-term mine priorities. This resulted in the final selection of the top 70 targets deemed to better fit the overall strategy.

The final output of the strategic exploration analysis is a quantitative, multi-screened and filtered estimate of the total potential ounces hosted in the Group's portfolio, where 15 to 20Moz of Indicated resources are targeted to be discovered within the next five years.

The applied approach does not mean that all selected and explored targets will be successful when taken individually, as some are likely to fail to deliver a deposit while others will outperform individual expectations. However, there can be reasonable confidence in achieving the total global estimated Indicated resources within the 5-year exploration programme. As such, it's reasonable to expect the achievement of the global target, but the individual successes that drive the global achievement may differ, sometimes significantly from the original estimate.

### Step 5: Strategic prioritisation to establish 5-year programme

Finally, an individual risked budget was established for each target in order to reach an Indicated resource status level. To develop the execution plan, most selected exploration targets were then set within the 5-year exploration programme, according to corporate and mine priorities, license duration, sequencing of required activities and available exploration budget.

## **QUALIFIED PERSONS**

Jonathan Lawrence (FAIG, MAusIMM), VP Exploration - Burkina Faso for Endeavour Mining, has reviewed and approved the technical information in this news release. Jonathan has more than 20 years of mineral exploration and mining experience and is a "Qualified Person" as defined by National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101").

## **CONTACT INFORMATION**

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## **ABOUT ENDEAVOUR MINING CORPORATION**

Endeavour Mining is one of the world's top ten senior gold producers and the largest in West Africa, with operating assets across Senegal, Cote d'Ivoire and Burkina Faso and a strong portfolio of advanced development projects and exploration assets in the highly prospective Birimian Greenstone Belt across West Africa.

A member of the World Gold Council, Endeavour is committed to the principles of responsible mining and delivering sustainable value to its employees, stakeholders and the communities where it operates. Endeavour is listed on the London and Toronto Stock Exchanges under the symbol EDV.

For more information, please visit <u>www.endeavourmining.com</u>.

## **CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION**

This press release contains statements which constitute "forward-looking information" within the meaning of applicable securities laws, including statements regarding the plans, intentions, beliefs and current expectations of Endeavour with respect to future business activities and operating performance. Forward-looking information is often identified by the words "may", "would", "could", "should", "will", "intend", "plan", "anticipate", "believe", "estimate", "expect" or similar expressions and includes information regarding Endeavour's exploration potential, targeted exploration estimates, contained ounces, grades

and estimated discovery costs, , the estimation of mineral resources, the realization of mineral resource estimates, and the timing and amount of estimated future mineral resources.

Investors are cautioned that forward-looking information is not based on historical facts but instead reflect Endeavour management's expectations, estimates or projections concerning future results or events based on the opinions, assumptions and estimates of management considered reasonable at the date the statements are made. Although Endeavour believes that the expectations reflected in such forward-looking information are reasonable, such information involves risks and uncertainties, and undue reliance should not be placed on such information, as unknown or unpredictable factors could have material adverse effects on future results, performance or achievements of the combined company. This forward-looking information may be affected by risks and uncertainties in the combined business of Endeavour and market conditions, including (1) there being no significant disruptions affecting Endeavour's operations whether due to extreme weather events and other or related natural disasters, labor disruptions, supply disruptions, power disruptions, damage to equipment or otherwise, or as a result of the Covid 19 pandemic; (2) permitting, development, operations and production for the Company's mines and exploration projects, respectively, being consistent with Endeavour's expectations; (3) political and legal developments in the juridictions where the Company operates being consistent with current expectations; (4) certain price assumptions for gold; (5) the accuracy of Endeavour's mineral resource estimates; and (6) labor and materials costs increasing on a basis consistent with Endeavour's current expectations. This information is qualified in its entirety by cautionary statements and risk factor disclosure contained in filings made by Endeavour with the Canadian securities regulators, including Endeavour's annual information form, financial statements and related MD&A for the financial year ended December 31, 2020 filed with the securities regulatory authorities in certain provinces of Canada and available at www.sedar.com.

Should one or more of these risks or uncertainties materialize, or should assumptions underlying the forward-looking information prove incorrect, actual results may vary materially from those described herein as intended, planned, anticipated, believed, estimated or expected. Although Endeavour has attempted to identify important risks, uncertainties and factors which could cause actual results to differ materially, there may be others that cause results not to be as anticipated, estimated or intended. Endeavour does not intend, and do not assume any obligation, to update this forward-looking information except as otherwise required by applicable law.

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