

# Avala Announces Positive Preliminary Economic Assessment and Updated Mineral Resource for Timok Gold Project, Serbia

20.06.2014 | [Marketwired](#)

LONGUEUIL, Jun 20, 2014) - [Avala Resources Ltd.](#) (TSX VENTURE:AVZ) (the "Company" or "Avala") is pleased to announce the results of an independent preliminary economic assessment ("PEA") and an updated mineral resource estimate for its 100% owned Timok Gold Project located in Eastern Serbia.

## Highlights of the Timok Gold Project PEA

- Open pit gold mine with an initial life of mine ("LOM") of 8.4 years.
- Average annual gold production LOM of approximately 81,000 ounces at US\$788 cash cost per ounce.
- Average annual gold production of approximately 92,000 ounces for the first three years of production.
- LOM gold production of 680,000 ounces.
- Average LOM operating costs (including royalties, selling costs, closure/environmental costs and sustaining capital) of US\$843 per ounce of gold.
- Annual processing rate of 1.68 million tonnes per year.
- Average LOM gold recovery of 75% from milling and flotation to produce a gold-rich concentrate.
- Estimated pre-production capital cost of US\$177 million, including working capital.
- LOM net cash flow of US\$127.6 million at a gold price of US\$1300 per ounce.
- Net present value ("NPV") of US\$65 million at a 5% discount rate and a gold price of US\$1300 per ounce generating an internal rate of return ("IRR") of 14.3%.
- Project payback of 4.0 years.
- All economic outcomes presented in the PEA are the same on a pre- and after-tax basis as it is expected that the proposed level of investment and employment associated with the implementation of the proposed mine would qualify for a 10 year tax holiday under current Serbian tax legislation.
- Over 99.5% of the resources within the PEA pit designs are categorized as indicated resources.

## Purpose of the Study

The purpose of the PEA was to (a) provide a preliminary concept for the scale and type of mining project that the Timok Gold Project could support, (b) identify areas where additional work is required before a pre-feasibility study can be completed and (c) demonstrate potential for positive economic returns that would justify continued investment in the Timok Gold Project.

The PEA is preliminary in nature, based on mineral resources, and provides an indication of potential viability of the Timok Gold Project. Mineral resources that are not mineral reserves do not have demonstrated economic viability. Mineral resource estimates do not account for mineability, selectivity, mining loss and dilution. The PEA includes inferred mineral resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. There is also no certainty that these inferred mineral resources will be converted to the measured and indicated categories through further drilling, or into mineral reserves, once economic considerations are applied.

Additional details will be provided in a NI 43-101 technical report to be filed on SEDAR within 45 days.

## Project Throughput Trade-Off Study

Prior to initiating the PEA, Avala carried out an internal, preliminary trade-off study to determine the optimum throughput rate for the Timok Gold Project. Throughput rates of 5,000 tonnes per day (1.68 million tonnes per annum) to 10,000 tonnes per day (3.36 million tonnes per annum) were evaluated at gold prices from US\$1250 per ounce to US\$1500 per ounce. The results of the study indicated that 5,000 tonnes per day provides the best project economics relative to other operating and financial parameters.

## Summary of Base Case Results

The base case assumptions included revenues using a gold price of US\$1300 per ounce and current prices for fuel, reagents, labor, power and other consumables in Serbia. The key results are as follows:

Preliminary Economic Analysis Base Case Summary	
Item	Value
LOM average gold recovery (%)	75
Gold ounces produced (koz)	680
Average annual gold production (koz)	81
Ore mined (Mt)	14.1
LOM head grade (g/t Au)	2.0
Waste material mined (Mt) (including capitalized pre-strip)	63.6
Waste to ore strip ratio	4.5
Construction capital, including working capital (US\$M)	177.0
Sustaining capital (US\$M)	10.6
Gross gold revenue (US\$M)	839.5
Net income (US\$M) <sup>(1)</sup>	127.6
Net present value at 5% discount rate (US\$M) <sup>(1)</sup>	64.9
IRR (%) <sup>(1)</sup>	14.3
Mine life (years)	8.4
Payback (years) <sup>(1)</sup>	4.0
LOM direct cost (mining, processing and G&A) (US\$/oz)	567
LOM cash cost (direct cost + royalties and selling costs) (US\$/oz)	788
LOM operating cost (cash cost + closure/environmental costs & sustaining capital) (US\$/oz)	843
LOM total cost (operating cost + implementation capital) (US\$/oz)	1104
Average LOM mining cost (US\$/t mined)	14.92
Average LOM processing cost (US\$/t processed)	11.69
Average LOM cost of sales (US\$/t processed)	7.96
Annual G&A costs (US\$M)	1.24

(1) Same result on a pre- and after-tax basis due to the expected qualification to a 10-year tax holiday under current tax legislation in Serbia.

The PEA is subject to a number of assumptions, including amongst others, that an environmental impact assessment will be completed within the required timeline, that all required permits will be obtained in a timely manner, that the Timok Gold Project will have the support of the local government and community, that the regulatory environment will remain consistent and that estimated costs will not increase materially. The table below summarizes key assumptions in the PEA.

Preliminary Economic Analysis Key Assumptions			
Costs and Recoveries		Capital Estimate	
Fuel cost (US\$/liter)	1.22	Mining (US\$M)	27.24
Electricity cost (US\$/kWh)	0.07	Process plant (US\$M)	66.64
Mill power usage (kWh/t)	35	Plant infrastructure (US\$M)	16.72
Mining (US\$/t) - unit cost (ore)	2.36-2.55	Area infrastructure (US\$M)	7.29
Mining (US\$/t) - overall cost (waste+ore)	14.92	Regional infrastructure (US\$M)	1.86
Grade control (US\$/t)	0.45	Miscellaneous	7.62
Rehabilitation (US\$/t)	0.09	Sub-Total Direct Cost (US\$M)	127.37
Stockpile re-handling (US\$/t)	1.50	Indirect cost (US\$M)	19.14
Plant feed at ROM pad (US\$/t)	0.25	Accuracy provision (US\$M)	22.22
Ore haulage (US\$/t) (Kraku Pester)	3.50	Sub-Total Initial Capital (US\$M)	168.73
Processing (US\$/t) - full production year	11.55	Owner's costs (US\$M)	8.29
Concentrate costs (TC/RC, transport etc.) (US\$/dry t concentrate)	200.0-203.8	Total Initial Capital (US\$M) - including working capital	177.02
General services (US\$/t)	0.74		
CAT mining equipment financing cost (US\$/t)	1.15	State royalty	5 %
Total operating cost (US\$/t)	37.99		
Plant recoveries: Bigar Hill	80 %	Plant recoveries: Kraku Pester	56 %
Plant recoveries: Korkan	68 %	Overall plant recoveries: LOM	75 %

A full list of the assumptions will be set out in the NI 43-101 technical report for the PEA.

## Project Sensitivities

The Timok Gold Project PEA is based on producing a gold-rich sulphide concentrate for sale to smelters. A small positive increase in gold price and/or gold recovery has a marked effect on the project economics, as illustrated in the table below (with the pit designs and schedules unchanged). The optimum pit shells, which form the basis of the PEA pit designs, are most sensitive to plant recovery and the gold price. The Company believes that the metallurgical testwork recommended in the PEA may result in higher overall plant recoveries, which would result in a higher conversion ratio. Independently, an increase in the gold price will also increase the conversion ratio, as larger pits are developed. As noted below, Avala also intends to assess the potential for underground extraction of gold mineralisation beneath the open pit designs.

Preliminary Economic Analysis Sensitivity Summary <sup>(1)</sup>				
Sensitivity	Gold Price (US\$/oz)	NPV@0% (US\$M)	NPV@5% (US\$M)	IRR (%)
Gold Price Sensitivity				
Gold price +US\$150	1450	219.2	132.1	22.4
Gold price +US\$100	1400	188.7	109.7	19.8
Gold price +US\$50	1350	158.1	87.3	17.2
Base case gold price	1300	127.6	64.9	14.3
Gold price -US\$50	1250	97.0	42.6	11.4
Gold price -US\$100	1200	66.5	20.2	8.2
Recovery Sensitivity				
Recovery +6%	1300	191.0	111.0	19.9
Recovery +4%	1300	169.9	96.6	18.1
Recovery +2%	1300	148.7	80.3	16.3
Recovery -2%	1300	106.4	49.6	12.3
Recovery -4%	1300	85.2	34.3	10.2
Combined Sensitivities				
Recovery +4% & gold price +US\$50	1350	202.1	119.2	20.8
Recovery +6% & gold price +US\$100	1400	257.0	159.3	25.2

(1) Same result on a pre- and after-tax basis due to the expected qualification to a 10-year tax holiday under current tax legislation in Serbia.

## Mineral Resources

In conjunction with the preparation of the PEA, the mineral resource estimates for the Bigar Hill and Korkan deposits (Oct 2013) and Kraku Pester deposit (Jan 2013) have been updated to constrain the deposits within pit shells for the purposes of the PEA, based on the assumptions, parameters and methodology that are summarised below. At this stage the Korkan East deposit has not been subject to preliminary economic assessment. The Bigar Hill, Korkan and Kraku Pester estimates are supported by 271,420.2 metres of drilling. The average drill spacing is 40 meters by 40 meters for indicated resources and 80 meters by 80 meters for inferred resources. The mineral resources for Bigar Hill, Korkan and Kraku Pester, which were used in the PEA, are listed in the table below.

TIMOK GOLD PROJECT							
INDICATED AND INFERRED RESOURCES USED IN THE PEA							
Deposit	Cut Off Grade (Au g/t)	Indicated			Inferred		
		Million Tonnes	Au (g/t)	Million Ounces (Au)	Million Tonnes	Au (g/t)	Million Ounces (Au)
Bigar Hill	0.3	38.62	1.19	1.48	1.3	1.3	0.1
Korkan	0.3	22.35	1.07	0.77	2.7	0.9	0.1
Kraku Pester	0.3	6.45	1.05	0.22	0.3	0.8	0.0
Total		67.42	1.14	2.48	4.3	1.0	0.2

- Notes:
- (1) The effective date of the updated mineral resource estimate is May 1, 2014.
  - (2) The resource estimation was prepared by Chris Arnold MAusIMM CP(Geo) of AMC Consultants Limited 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.
  - (3) The resources are constrained within pit shells returning the maximum undiscounted values, based on the following assumptions: NSR gold price of \$1500/oz (\$1700/oz spot price less \$200/oz for off-site concentrate costs), 85% gold recovery for Bigar Hill and Korkan, 80% recovery for Kraku Pester, 55 degree pit slopes, US\$2.00/t ore and waste mining costs (including rehabilitation costs) and US\$12.70/t processing and other costs, resulting in cut off grades of 0.32g/t for Bigar Hill and Korkan and 0.34g/t for Kraku Pester. Both cut off grades have been rounded to 0.3g/t for the reporting of resources within the designated pit shells.

- (4) *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, sociopolitical, marketing, or other relevant issues.*
- (5) *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 indicated or measured mineral resources.*
- (6) *Totals and average grades are subject to rounding to the appropriate precision.*
- (7) *The key changes between the previous mineral resource estimate for the Bigar Hill, Korkan and Kraku Pester deposits (news release of October 16, 2013) and this updated mineral resource are that the updated resource estimate is constrained within a pit shell and has been reported at a lower cut-off, commensurate with the gold price and costs parameters used to defined the constrained pit.*

The NI 43-101 technical report to be filed for the PEA will include the technical and scientific data to support the updated mineral resource estimate.

## Next Steps

Subject to the availability of funds, Avala plans to do the following work to advance the Timok Gold Project.

Several metallurgical testwork programs have been undertaken since 2011 on samples selected from the Timok Gold Project deposits. Initial work investigated the potential for gold recovery from several processing options, including cyanidation techniques. During 2012 and 2013, the metallurgical testwork focus changed to the assessment of ultra-fine grinding and flotation to produce a gold-rich sulphide concentrate for treatment by others. In addition, the potential for upgrading via attritioning/scrubbing (pre-concentration) was evaluated, which showed promise but was not taken further in the PEA design. Testwork was successful in using primary grinding, ultra-fine grinding and flotation to produce a gold bearing pyritic concentrate. Metallurgical recoveries adopted for the design were 80%, 68% and 56% for Bigar Hill, Korkan and Kraku Pester deposits respectively; into a design concentrate mass pull of 4%. Testwork to support pre-feasibility study activities would include:

- Detailed mineralogical evaluation to improve understanding of gold associations with gangue and sulphide minerals;
- SAG milling characterization;
- Further evaluation of scrubbing/attritioning (pre-concentration) potential;
- Evaluation of finer grind sizes to improve flotation recovery;
- Larger scale ultra-fine grinding testwork to confirm specific energy requirements and to prepare flotation feed;
- Staged Flotation Reactor circuit testing;
- Production of concentrate for marketing purposes; and
- Liquid-solid separation testwork (concentrate and tailings).

Avala has developed an extensive geo-metallurgical database for the Timok Gold Project and plans to produce detailed three dimensional geometallurgical models of the deposits to assist with effective targeting of further metallurgical testwork.

Review of the Bigar Hill and Korkan resource models suggests there may be potential for underground extraction of gold mineralization beneath the current open pit designs. Avala plans to assess this potential, along with preliminary assessment of the recently announced Korkan East deposit.

During Q1 2014 Avala was granted the right to explore on the Bigar Istok license (15 square kilometers) which is located immediately due east of the Potoj Cuka Tisnica exploration license, which hosts the currently defined deposits. Previous exploration in this area has highlighted various gold-in-soil anomalies together with evidence of historic gold and base metal mineralization as defined by previous Serbian State exploration drilling. Avala believes that the exploration potential of the Bigar Istok license area, together with the various prospects located proximal to the currently defined deposits, remains high.

## Qualified Persons

The PEA was completed by AMEC Australia Pty Ltd. under the supervision of Peter Nofal, FAusIMM, with participation of AMEC Growth Regions Mining Services Group UK and Gary Jobson, MAusIMM, of Macromet Pty Ltd. (metallurgy), Nick Journet, ARSM, FAusIMM, of Dumpsolver Pty Ltd. (mining), Chris Arnold MAusIMM CP(Geo), AMC UK, (geology and resource modeling), Fergus Anckorn, FAusIMM CP(Environmental), of AMEC Earth and Environmental (UK) Ltd (Environmental, Social and Permitting), Ciaran Molloy, MIMMM ICE QP of AMEC Growth Regions Specialty Mining Services Group (Geotechnical & Civil Engineering), and Rod Cameron, F.Geol.Soc.London Chartered Geologist, of AMEC Growth Regions

Speciality Mining Services Group (Tailings and Water Management). The Bigar Hill, Korkan and Kraku Pester updated mineral resource estimate was undertaken by independent qualified person Chris Arnold MAusIMM CP(Geo) of AMC. Mr. Arnold has reviewed and approved the contents of this press release insofar as mineral resource estimates are concerned. Dr. Julian F. H. Barnes, FAusIMM, MAIG, a director of the Company and special consultant, is the Company's designated qualified person for purposes of the PEA. All qualified persons have reviewed and approved the disclosure in this press release related to their respective areas of expertise.

#### **About Avala Resources Ltd.:**

Avala Resources is a mineral exploration company focused on the exploration and development of the Timok Gold Project in Eastern Serbia. The Timok Gold Project comprises several targets, including the Korkan, Bigar Hill, Kraku Pester, and Korkan East deposits. Avala controls 100% of this recently identified sediment-hosted gold belt which totals approximately 250 square kilometers. The common shares of Avala trade on the TSX Venture Exchange under the symbol AVZ.

Avala had approximately \$1.1 million in its treasury at March 31, 2014. Avala's issued and outstanding share capital totals 254,492,223 common shares, of which approximately 53.1% is held by [Dundee Precious Metals Inc.](#) (TSX:DPM).

Additional information about the Company is available on Avala's website ([www.avalaresources.com](http://www.avalaresources.com)) and on SEDAR ([www.sedar.com](http://www.sedar.com)).

#### **Cautionary Statement Regarding Forward-Looking Information**

*This press release contains 'forward-looking information' within the meaning of Canadian securities legislation. Forward looking information in this press release includes information about the results of a Preliminary Economic Assessment (PEA). This PEA is the first in a series of development studies for the project assessing the potential viability of a potential mining operation on the Timok Gold Project. The operating and capital costs estimated in the PEA were developed to be reasonable estimates within industry benchmarks. The PEA is intended to quantify the project's cost parameters which will, in turn, be used to guide ongoing exploration and engineering work and to define the optimal scale of the operation for a feasibility study. Forward looking information in this press release also includes information about planned metallurgical testwork and the ability to increase metal recoveries through additional work, completion of a pre-feasibility study, the potential to incorporate an underground operation into the open pit plans for the Timok Gold Project, and the exploration potential of the Bigar Istok license and the target areas nearby Bigar Hill, Korkan, Kraku Pester, and Korkan East. This press release also includes an updated mineral resource estimate. Mineral resources are not mineral reserves and do not have demonstrated economic viability. Inferred resources have a great amount of uncertainty as to their existence, and economic and legal feasibility. Since forward-looking information is based on assumptions and addresses future events and conditions, by its very nature it involves risks and uncertainties. Certain assumptions used in the PEA and the resource estimate are summarized in this press release. Actual results could differ materially from those anticipated in the forward looking information for many reasons including, but not limited to: changes in general economic conditions and conditions in the financial markets; changes in demand and prices for gold; changes in prices of inputs and other assumptions in the PEA and the resource estimate; unavailability of the 10-year tax holiday; legislative, environmental and other regulatory, political and competitive developments; operational difficulties encountered in connection with the activities of the Company; and the Company's financial condition and financial resources to execute its business plans. These and other factors referred to in public disclosures and filings by the Company should be considered carefully, and readers should not place undue reliance on the Company's forward-looking information. The Company does not undertake to update any forward-looking information, except as required by applicable securities laws.*

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