



ANTICIPATING SURPRISE – ASSESSING RISK

INVESTORS GUIDE TO THE ELDORADO GOLD CERTEJ MINE PROPOSAL IN ROMANIA (TSX:ELD)



Mining Watch Romania

April 2015

About Mining Watch Romania

Mining Watch Romania is a network of organizations joining local communities in their efforts to stop destructive industrial-scale mining projects. Mining Watch monitors the permits issued by authorities to the benefit of mining companies and signals irregularities to decision makers in Romania and when relevant, at the EU level. Among its activities count litigation and advocacy to ensure that authorities properly enforce relevant legal provisions.

Mining Watch Romania is also a founding member of the European *Bang! Ban Cyanide* Coalition. Modern industrial gold mining is a chemical process often done using massive open pits and large quantities of cyanide to separate the gold from the ores. This extraction method does not generate wealth but leads to pollution, poverty and dependency. It drains communities of resources and limits the development of alternatives. *Bang! Ban Cyanide* unites members from Belgium, Bulgaria, Finland, France, Greece, Germany, Romania, Slovakia, Spain, UK, the Czech Republic and Turkey calling for a ban of cyanide-based mining.

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The founding members of the Mining Watch Romania network are:

□ **The Independent Center for the Development of Environmental Resources**

The Independent Center for the Development of Environmental Resources is an NGO based in Cluj-Napoca. It was founded in 2007 by a network of communication, legal, design and biodiversity specialists with the aim of assisting grassroots campaigns from Romania to oppose large scale and destructive industrial projects. In its 9 years experience, the NGO was able to put a halt to many such projects by going to competent courts, putting out national and international petitions and organizing street actions.

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Alburnus Maior is an NGO based in Rosia Montana. It was founded in 2000 by local property owners from Rosia Montana and from Bucium, a neighboring commune. They oppose selling their properties – lands and houses – to make way for the mining project. The national and international campaign builds around the local opposition and opposes the mine proposal on environmental, social and economic grounds. It also opposes the destruction of a unique cultural heritage.

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□ **Save Bucharest Association**

This organization is active in the fields of urban planning, environmental protection and heritage preservation. Its main scope is to tackle unlawful decisions taken by state or local authorities in the fields mentioned above. Its main course of action involves legal proceedings against the authorities.

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CEE Bankwatch Network works across central and eastern European to monitor the activities of international financial institutions and propose constructive environmental and social alternatives to the policies and projects they support.

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□ **Prima Natura Association**

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Edited by the Mining Watch Romania network in association with:

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□ **Mining Watch Canada**

Mining Watch Canada is a pan-Canadian initiative supported by environmental, social justice, Aboriginal and labour organisations from across the country. It addresses the urgent need for a co-ordinated public interest response to the threats to public health, water and air quality, fish and wildlife habitat and community interests posed by irresponsible mineral policies and practices in Canada and around the world.

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Introduction

Eldorado Gold Corp. (TSX: ELD) is advancing a series of low cost operations throughout the world, the Romanian gold and silver Certej deposit being listed as one of the two *quality assets* (along with one in China)¹. The Certej commune consists of 9 villages and/or small towns and counts roughly 3000 inhabitants. It is located in the Apuseni Mountains of western Romania, the same region where Canada's Gabriel Resources has been attempting to develop the Rosia Montana deposit since 1997.²

ELD's Certej development has come under criticism from environmental groups due to a significant number of risks and the murky manner by which it obtained its permits. In autumn 2014 the project owner started construction works without a valid permit. After legal action and citizens' petitions, regional authorities ordered ELD to halt the works.

This report aims to present the most significant risks associated with the Certej gold project and highlights some of the less evident or known facts that in return are likely to impair ELD's ability to develop.

The proposal

The Certej deposit is owned by Deva Gold S.A., a joint venture between Eldorado Gold (80%) and Romanian state-owned Minvest Deva (~20%). Eldorado Gold is trying to develop several open pit developments (Certej, Băița-Crăciunești, Deva) that are facing local and national opposition. Romanian NGOs assessing the Certej mining project have already identified significant irregularities in the environmental permitting procedure. In summer 2014 they subsequently initiated a court case whose scope is to annul the permit.

In November 2011 Eldorado Gold Corp. ('Eldorado') bought European Goldfields for 2.5 billion dollars³. The acquisition was completed in February 2012 and Eldorado became the majority shareholder of the Certej mine.

Initially owned by Gabriel Resources (TSX: GBU), the Certej concession was transferred to European Goldfields Ltd. in 2000. The infamous Romanian businessman⁴ Frank Timiș⁵ who had access to resource estimates held by Romania's research institute for mineralogy

1 Eldorado Gold, *Building our Future - Growing through low cost operations*, February 2015, pg. 14
[http://www.eldoradogold.com/uploads/presentations-events-pdf/Eldorado_Gold_-_Investor_Presentation_\(BMO_2015\).pdf](http://www.eldoradogold.com/uploads/presentations-events-pdf/Eldorado_Gold_-_Investor_Presentation_(BMO_2015).pdf)

2 The Rosia Montana project was initially scheduled to commence ore commissioning in May 2004. Many lawsuits and other legal obstacles that accumulated over the years made it impossible for the mine to open. At this time, Gabriel Resources (TSX:GBU) – the investor – is undertaking last resort measures to 'amicably settle differences related to its mine proposal' with the Romanian state.

3 Liezel Hill and Thomas Biesheuvel, *Eldorado Drops Amid \$2.4 Billion Bid for European Goldfields*, December 2011, <http://www.bloomberg.com/news/articles/2011-12-18/eldorado-to-buy-european-goldfields-for-2-41-billion-to-expand-in-europe>

4 Dan McCrum and Paul Radu, *Romania's Timis embroiled in another mining controversy*, December 2014, <http://www.riseproject.ro/investigation/romania-timis-embroiled-in-another-mining-controversy/>

5 Between 2000 and 2006, Frank Timiș was one of the most important shareholders of European Goldfields (ranging between 15% and 18.9%).

founded both companies. The resulting projects, Rosia Montana and Certej, have been a source of controversy ever since; not least for the destruction involved.

The mining project

'Eldorado' plans to extract gold and silver via open cast mining. The project footprint is 456.2 ha; currently covered by forests, meadows, arable fields and residential areas. The 3Mt per annum mine foresees the logging of 187 ha of forests to locate two open-pits and two tailings management facilities (TMFs) - one for the cyanide leach tailing and one for the CIL⁶ process. The facilities would neighbor the densely populated villages of Hondol, Bocșa Mică, Săcărâmb and Certej.

The tailing dams in the Bosca Mare valley would be located *a monte* and immediately north of the mine site and villages, thus putting the local community at risk in the event of an accident such as e.g. a TMF failure. Initial stages of rock-fill embankment construction will be for a starter dam. The embankments will be subsequently be raised to their final elevation (169 metres high) by extensions throughout the project life.

Eldorado intends to employ the cyanide leaching method, in conjunction with classic flotation. The mineral processing and the gold recovery entail the use of 26 500 tons of sodium cyanide during its 16 years of operation. The heavy metal sludge and the cyanide solution would be stored in the above-mentioned TMFs in open air.

The deposit

'Eldorado' estimates reserves of 46.984 Mt at a grade of 1.63 g/t Au and 11 g/t Ag⁷. Given the deposit's low grade, the mine will be sensitive to market fluctuations. Temporary or premature closure is possible in case of a fall in the price of gold. Since the summer of 2011, when it peaked at \$1,900, the price of gold has fallen almost 40 percent, to trade today at around \$1,193⁸ per ounce.

"It is a small deposit, I would say at the limit of profitability, particularly when all costs are rising," said Nicolae Stanca, director of Deva Gold⁹, for *România Liberă* in 2008. Stanca admitted the low efficiency of Certej project as compared to the optimum gold mining operations which yield between six and eight grams per tonne.

6 CIL is conventional cyanide-in-leach

7 Eldorado Gold, *Technical Report for the Certej Project, Romania*, February 2014, pg 15-6, [http://www.eldoradogold.com/uploads/operations-reports/Technical_Report_-_Certej_\(Feb_2014\).pdf](http://www.eldoradogold.com/uploads/operations-reports/Technical_Report_-_Certej_(Feb_2014).pdf)

8 Gold price, 14th April 2015, <http://goldprice.org/>

9 Lidia Moise, *Zacamant de aur de doua miliarde de dolari descoperit langa Deva*, July 2008, <http://stirile.rol.ro/print/zacamant-de-aur-de-doua-miliarde-de-dolari-descoperit-langa-deva-137214.html>

Financial risks

■ The project's initial capital costs are now estimated at \$539 million¹⁰ compared to \$133.4¹¹ million in 2008. The latest estimate is based on a study completed in 2014. The *Technical Report* shows an internal rate of return (IRR) at 7.6 percent paid back within 8 years, assuming a gold price at 1250 \$/oz. The IRR changed dramatically over the years. This was acknowledged in *European Goldfields 2008 Annual information form*. A previous 21.3 percent post tax IRR was being promoted to investors in 2008. With a corresponding net present value (NPV) at \$84 million in 2014, Eldorado could only obtain commercial financing at prevailing interest rates on the market for high-risk investments. Such a project is generally considered to be attractive to potential investors and financiers if it provides an IRR greater than 20%, preferably 30%, on an after-tax basis¹²; otherwise it cannot be regarded as attractive.

■ In calculating the project's NPV (2014), Eldorado presents a 5 percent discount rate¹³. A discount factor of 5 percent is inappropriate for assessing the NPV of a high-risk project. The discount rate for a mineral project should comprise three principal components: the real, risk-free, long-term interest rate (2.5%); the mining project risk (varies with level of knowledge) 3.0%-16%¹⁴; plus the country risk premiums for Europe¹⁵. Therefore the project specific discount rate fails to present an accurate value.

■ A more realistic 8-10 percent discount rate should be applied, which takes the NPV from \$84 million to -\$10 or -\$57¹⁶. The resulting negative NPV could mean that the investors would not receive the required return at the end of the project. Initial capital costs are likely to further increase for reasons that to date have been underestimated or not yet assessed (ex. *Various options for additional tailings facilities to the west of the mine site have been investigated, 2014*¹⁷).

■ Eldorado has not appraised costs generated by delays in starting the Certej mine. In July 2013, it announced that, *in light of the recent significant decline in gold price the Company has and continues to critically review and make modifications to its operating plan*¹⁸. As a consequence, the original production start for Certej - 2015 - was delayed to 2016/2017.

10 Eldorado Gold, *Technical Report for the Certej Project, Romania*, February 2014, pag 21-1, [http://www.eldoradogold.com/uploads/operations-reports/Technical_Report_-_Certej_\(Feb_2014\).pdf](http://www.eldoradogold.com/uploads/operations-reports/Technical_Report_-_Certej_(Feb_2014).pdf)

11 Lidia Moise, *Zacamant de aur de doua miliarde de dolari descoperit langa Deva*, iulie 2008, <http://www.romanalibera.ro/economie/finante-banci/zacamant-de-aur-de-doua-miliarde-de-dolari-descoperit-langa-deva-130330>

12 Andrey Dashkov, *The hidden costs of precious-metals miners' optimism*, 2013, <http://www.caseyresearch.com/articles/the-hidden-costs-of-precious-metals-miners-optimism>

13 A discount rate for a mining operation will vary depending upon variables such as metal prices, the mine product, the mine life, the milling process, production rates, permitting and regulatory constraints, and other factors.

14 Svetlana Baurens, *Valuation of Metals and Mining Companies*, November 2010, pg. 40, http://www.basinvest.ch/upload/pdf/Valuation_of_Metals_and_Mining_Companies.pdf

15 Idem, pg. 40, The Discount Rate Risk Premium for Europe is 2.5 percent.

16 Calculations done by Tatiana Tomescu, Financial Consultant, April 2015, <http://miningwatch.ro/wp-content/uploads/2015/04/NPV-Calculations-Eldorado-Gold.pdf>

17 Eldorado Gold, *Technical Report for the Certej Project, Romania*, February 2014, pg. 18-12, [http://www.eldoradogold.com/uploads/operations-reports/Technical_Report_-_Certej_\(Feb_2014\).pdf](http://www.eldoradogold.com/uploads/operations-reports/Technical_Report_-_Certej_(Feb_2014).pdf)

18 Eldorado Gold, *Update*, July 2013, <http://www.eldoradogold.com/news-media/news/eldorado-update>

Further delays can be expected as site works¹⁹ were stopped and declared illegal by the National Construction Authority²⁰. The Hunedoara County Prefect subsequently introduced a court action asking for the annulment of the illegal construction authorization²¹ granted to ELD. These delays are likely to take considerable time and generate significant costs.

■ The Romanian government refused²² equipment import tax exemptions requested by the Chinese Huadian Engineering Co. for the Rovinari coal mine, stating that it would breach European Union regulations and would attract competition related litigation. Thus, it is also unlikely that Eldorado's project will benefit from import tax exemptions.

■ Investors should re-assess the Sensitivity Analysis as detailed in the 2014 *Technical Report* available on Eldorado's website²³. The gold and silver prices assumed are based on the following values: 1350, 1450 and 1550 (US\$/oz); all of them being higher than the project-target 1250 US\$/oz. Although project economics are highly sensitive to gold price variations, the price assumptions used in this study are too optimistic. Unrealistic assumptions might result in net incomes far below investors' expectations.

■ There can be no assurance that the market price of gold will remain at current levels or that prices will improve. A decrease in the market price of gold and silver could adversely affect the profitability of the Certej project. Already, at the time of the report, the gold price is below the project target (\$1,193 vs. 1250 US\$/oz), which would have a financial adverse effect on the project's earnings and profitability, if the mine were in operation.

■ Analysts estimate that middle capitalization gold stock prices are headed lower²⁴. 'Eldorado' is currently testing the resistance of the 50-day moving average share price (US\$ 5,08) compared to its respective 200-day moving average (US\$ 6,55).

■ In order to develop the Certej project, Eldorado must complete land acquisition and acquire all necessary surface rights falling under the project footprint. Eldorado has been unable to purchase certain property titles due to owners' refusal to sell. Worse still, it faces additional land acquisition impediments. Approximately 48 ha of forests, located on the proposed site for the TMFs, have an undetermined property status. Previously owned by the Obște²⁵ Agricolă Măcrișul, the communal forest is undergoing a sinuous restitution process.

19 Eldorado Gold, *Third Quarter 2014 financial and operating results*, October 2014, <http://www.eldoradogold.com/news-media/news/correction-from-source-eldorado-gold-corporation-2014-third-quarter-financi>

20 Mining Watch Romania, *Certej: Official confirmations of illegal building permit. The National Construction Authority demands the permit's annulment*, January 2015 <http://miningwatch.ro/stiri/certej-official-confirmations-of-illegal-building-permit-the-national-construction-authority-demands-the-permits-annulment/?lang=en>

21 The court action is registered at the Hunedoara County Tribunal under file no. 895/97/2015. The court scheduled the first appearance on 26 May 2015.

22 TV Sud, *Chinezii vor sa demoleze jumatate din termocentrala Rovinari*, September 2013, <http://www.tvsud.ro/chinezii-vor-sa-demoleze-jumatate-din-termocentrala-rovinari.html#.VTdWKCHtnBE>

23 Eldorado Gold, *Technical Report for the Certej Project, Romania*, February 2014, pg. 22-3, [http://www.eldoradogold.com/uploads/operations-reports/Technical_Report_-_Certej_\(Feb_2014\).pdf](http://www.eldoradogold.com/uploads/operations-reports/Technical_Report_-_Certej_(Feb_2014).pdf)

24 Casey Murphy, *5 Charts That Suggest Gold Stocks Are Headed Lower*, April 2015, <http://www.investopedia.com/stock-analysis/cotd/040915/5-charts-suggest-gold-stocks-are-headed-lower-abx-agi-ego-mdw.aspx?partner=YahooSA>

25 *Obște* or *composesorat* is a historic community organisation typical in Romania that owns and administers pasture and forest land. It is similar to a cooperative although Romanians would disagree.

The former members are redeeming collective property titles from the Romanian state proceedings that revealed community conflicts. At present, the Prosecutor's Office in the town of Alba Iulia is carrying out several criminal investigations concerning the restitution of property titles in the Certej area.

■ Moreover, Eldorado never revealed information on its resettlement and relocation program or the percent of all necessary properties acquired in Certej, thus concealing significant information and costs from investors.

■ BMI Research's *View on Romania* report, released in 2014, states: '*There are numerous risks associated with investment in Romania. Endemic political corruption and poor contract enforceability hampers business operations and increases the costs and risks that investors will be exposed to illicit activity*'²⁶.

Political risks

■ Klaus Iohannis, Romania's President, has disapproved of the gold mining projects proposed in Romania (Certej, Roșia Montană) on several occasions. One of his first statements was: 'I will not accept projects like "Rosia Montana" and 'shale gas' being promoted overnight, under conditions that put people and the environment at risk'²⁷.

■ Immediately after he was elected president, in a statement dated November 2014, he said: 'During the election campaign, I committed to reject extraction projects that endanger people and the environment. Today, I reiterate the idea and I tell you that I will not accept projects to extract Romania's natural resources without debate, without guaranteeing total safety for human health and without protecting the environment and the interests of local communities.'²⁸

■ When petitioned²⁹ by 11 000+ citizens about the Certej mine, Klaus Iohannis reacted promptly: 'Thousands of Romanians wrote to me asking to help clarify the legal prerequisites for the mining project in Certeju de Sus (Hunedoara County). Today (November 27, 2014), my staff contacted the City Hall in order to verify the documents. We'll keep you informed about this case. Romania of things well done means respect between institutions and citizens!'³⁰.

26 Romania Operational Risk, <http://www.bmiresearch.com/romania##>

27 Loredana Voiculescu, *Reacția președintelui Klaus Iohannis față de proiectul de exploatare cu cianuri de la Certej. „Mii de români îmi cer sprijinul”*, November 2014 <http://www.gandul.info/financiar/reactia-presedintelui-klaus-iohannis-fata-de-proiectul-de-exploatare-cu-cianuri-de-la-certej-mii-de-romani-imi-cer-sprijinul-13659018>

28 *Klaus Iohannis: Nu voi accepta proiecte de exploatare a resurselor naturale fără dezbateri*, November 2014 <http://www.digi24.ro/Stiri/Digi24/Actualitate/Politica/Klaus+Iohannis+Nu+voi+accepta+proiecte+de+exploatare+a+resurselo>

29 <http://campaignion.bancyanide.eu/certej-ro%C5%9Fia-montan%C4%83-cere-i-lui-iohannis-respectarea-legii>

30 Mihai Gotiu, *Iohannis a răspuns solicitării publice legate de modul în care a început construirea minei de aur de la Certej*, November 2014, <http://www.romaniacurata.ro/iohannis-a-raspuns-solicitarii-publice-legate-de-modul-in-care-a-inceput-construirea-minei-de-aur-de-la-certej/>

Legal risks

■ From a legal perspective, the beginnings of the Certej project are very controversial. Romania's authorities did not organize a public auction to grant the concession contracts over the Certej deposit and there were no previous announcements regarding the state company's availability to associate with private companies³¹.

■ On October 2014, Eldorado made an announcement to investors about the steady progress of the Certej mining project³². However, it failed to mention that by the time of the report's release, the company was confronted with allegations of illegally obtaining the construction permits for the Certej site. This omission also remained in Eldorado's *Annual Report* released in March 2015.

■ Due to public pressure, by January 2015, the National Construction Authority (ISC) confirmed³³ that the construction works were based on illegal permits. The works were previously stopped in October/November 2014. The ISC made an official report and demanded that the Hunedoara County Prefect formulate a court action for the annulment of the illegal permits. Following this demand, the Prefect took the Certej City Hall to court³⁴ over the illegal building permits issued for Deva Gold's mine³⁵. In order to have Eldorado's permits investigated, a great number of citizens mobilised and notified the responsible authorities. In addition to this, more than 11 000 citizens petitioned³⁶ the Romanian President (Certej = Rosia Montana. Ask Iohannis to respect the law).

■ The Prosecutor's Office in Deva is currently investigating³⁷ those responsible for issuing the above-mentioned illegal building permits no. 05.21.2014 and no. 10 / 16.09.2014 for the benefit of Deva Gold.

■ In November 2013 Eldorado obtained a revised environmental permit for the Certej mine from the Hunedoara County Environmental Protection Agency. Several NGOs, members of the Mining Watch Romania network, with proven effectiveness in challenging permits for the Rosia Montana mine proposal, started a legal case to suspend and annul the revised

31 Rise Project, *The Rosia Montana Project's Confidential Documents Note: As Certej was initially owned by Gabriel Resources, the story*, August 2013 <http://www.evernote.com/shard/s339/sh/b9514892-b118-4a29-8a69-3f954303d3d9/4e1b76feb5bead396f26b13a57724cf6>

32 Eldorado Gold, *Third Quarter 2014 financial and operating results*, October 2014 <http://www.eldoradogold.com/news-media/news/correction-from-source-eldorado-gold-corporation-2014-third-quarter-financi>

33 Mining Watch Romania, *Certej: Official confirmations of illegal building permit. The National Construction Authority demands the permit's annulment*, January 2015 <http://miningwatch.ro/stiri/certej-official-confirmations-of-illegal-building-permit-the-national-construction-authority-demands-the-permits-annulment/?lang=en>

34 Hunedoara County Tribunal, File no. 895/97/2015

35 Mining Watch Romania, *The Hunedoara Prefecture takes the Certej City Hall in court over the illegal permitting of the Eldorado mine*, February 2015 <http://miningwatch.ro/stiri/romana-institutia-prefectului-hunedoara-ataca-in-instanta-autorizatia-de-construire-pentru-certej-emisa-de-primaria-certeju-de-sus/?lang=en>

36 Mining Watch Romania, *Petition to the President-elect Klaus Iohannis ref. Certej*, November 2014 <http://miningwatch.ro/stiri/romana-certej-rosia-montana-cere-i-lui-iohannis-respectarea-legii/?lang=en>

37 File no. 621/ P/ 2015

environmental permit. The case³⁸ recently started at the Cluj County Tribunal and the next hearing will take place on 29 April 2015.

■ In July 2012 Eldorado received an environmental permit by the Timisoara Regional Environmental Protection Agency.³⁹ The permit was challenged in court⁴⁰ by the Romanian National Environmental Protection Agency (NEPA) and by NGOs. A year later, the NEPA abandoned the court action and in November 2013 the local EPA in the Hunedoara county issued a revised environmental permit. Numerous corruption allegations arose around the issuing of the initial environmental permit due to the lack of transparency and mainly because Eldorado's attorney⁴¹ was Ana Diculescu Sova⁴², minister Dan Sova's stepmother. Dan Sova⁴³, as member of the government at the time, participated in the drafting of the 'National Plan for Strategic Investments and Creation of Employment', which also included the Certej mine proposal⁴⁴.

■ Well-known Romanian archaeologists have pointed out that the Certej area is acknowledged by the scientific community for its Roman vestiges and that its cultural potential has been deliberately underestimated by the mining company. While Eldorado states that the area lacks any archaeological relics (pointing it as a relevant positive aspect), researchers familiar with the area state differently citing an archeological report contracted by the company in 2007⁴⁵, never made public. A paper published in 2005 – *The archeological repertoire of the Hunedoara County*⁴⁶ – records several archeological vestiges located in Certej: from the Neolithic era in Măgura Toplița, Hondol and Certej; from the Bronze Age in Săcărâmb; from Hallstatt în Săcărâmb and Măgura Toplița; from the Dacian-Roman period in Săcărâmb, Măgura Toplița and Hondol and from the medieval period in Săcărâmb, Măgura Toplița and Hondol. The research (updated in 2008)⁴⁷ clearly points out that the area of the proposed Eldorado mining project has Roman and medieval mining remnants: 'the Coranda gallery presents traces of Roman gold mining works. The works continued during medieval times'.

■ A precedent ruling of the European Court of Justice clearly states that '*a proposal should not be considered in isolation if in reality it is properly to be regarded as an integral part of an inevitably more substantial development*'⁴⁸. The same way, the procedure for evaluating the

38 Court action registered under file no. 4024/117/2014

39 The Timisoara Regional EPA underwent reorganisation in 2012 and as a consequences the regional agencies disappeared and the territorial competence was transferred to the Hunedoara County EPA.

40 Bucharest Tribunal, court action registered under file no. 45346/3/2012

41 This information can be checked on the website of the Bucharest Tribunal, whereby at case 45346/3/2012 it is mentioned that Deva Gold is represented by Nestor Nestor Diculescu Kingston Petersen

42 Ana Diculescu Șova is a senior partner at Nestor Nestor Diculescu Kingston Petersen, http://www.nndkp.ro/the_firm/people/partners/ana-diculescu-sova

43 Victor Lupu, *DNA requires Dan Sova's arrest*, March 2015 <http://www.romaniajournal.ro/dna-requires-dan-sovas-arrest/>

44 Mining Watch Romania, *The environmental authorities disregard the Certej court cases*, October 2013 <http://miningwatch.ro/stiri/romana-autoritatile-de-mediu-trateaza-cu-delasare-cazul-certej/?lang=en>

45 Revista 22, S.O.S. *Rosia Montana*, February 2013, <http://www.revista22.ro/sos-rosia-montana-4146.html>

46 Sabin Adrian Luca, *Repertoriul Arheologic al judetului Hunedoara*, 2005, pg. 101, 155 <http://arheologie.ulbsibiu.ro/publicatii/bibliotheca/xvi/repertoriu%20arheologic%20hunedoara%20mic.pdf>

47 Sabin Adrian Luca, *Repertoriul Arheologic al judetului Hunedoara*, second edition, 2008, https://www.academia.edu/2573980/Sabin_Adrian_LUCA_Repertoriul_arheologic_al_jude%C8%9Bului_Hunedoara_The_Archaeological_Repertoire_of_Hunedoara_County

48 R on the application of Candish v Hastings Borough Council 2005 EWHC 1539

environmental impact (EIA) of the Certej mine should have integrated also phase two of the project, namely the Baita-Craciunesti open-pit. Proof that the Baita-Craciunesti and Certej are a single undivided project is the fact that they will use the same TMFs and processing unit. Instead, Eldorado submitted two separate requests for receiving the needed environmental permits⁴⁹.

■ The Certej gold mining proposal would seriously violate the European Water Framework Directive⁵⁰ as it implies the deviation of a the natural course of the Măcrişului River to allow the construction of the tailing dam facility. According to Article 5, point 7 of the Directive⁵¹, a member state is in breach of the directive when it fails to prevent deterioration in the status of a body of surface water or groundwater, unless the reasons for those modifications or alterations are of overriding public interest. The Certej gold mining proposal has never been declared of overriding public interest and this violation in itself may lead to the invalidation of the environmental permits obtained so far.

Management risks

■ According to Eldorado's VP Investor Relations, Krista Muhr, *'Eldorado would not engage in illegal activities of any sort, which would include commencing construction without permits'*⁵². Nevertheless, The National Construction Authority (ISC) found that the building permit for construction works at the Certej mining site was issued in violation of legal provisions⁵³. The entire affair is under criminal investigation at the moment.

■ *'We leave the day to-day business to our in-country teams, who understand the cultural, community and political nuances of doing business in their home countries'*, explained COO Paul Skayman in Eldorado's 2014 Annual Report. Thus, Nicolae Stanca, VP and General Manager in Romania is appointed to manage operations in Romania and to communicate information to the investors. Stanca is considered to be Frank Timiş's middle-man, the former public servant that put into practice the transfer of leases and exploitation licenses from the Romanian state-owned company to Deva Gold and, sequentially, to the companies that control the latter. A parliamentary committee called Stanca to a hearing on October 2013 to discuss the way the Romanian state's mining assets were transferred to private companies. The parliamentary committee notified the National Anticorruption Directorate (DNA) and the Public Prosecutor's Office.

■ In an interview⁵⁴ from October 2014, Nicolae Stanca said that *'the only works that have been done are the construction of a hall to deposit mining materials, for which the company*

49 Intermediate assessment decision in the EIA procedure, <http://apmhd-old.anpm.ro/files/APM%20Hunedoara/TEASCUDecizieetapadeincadrasite.pdf>

50 Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy

51 The Directive was transposed into the Romanian legislation with Water Law no 107 of 25 September 1996, which in Article 2⁷ reproduces the provisions of Article 5, point 7 of the Directive.

52 Krista Muhr statement in a professional email correspondence about Certej with a concerned citizen.

53 Mining Watch Romania, *Certej: Official confirmations of illegal building permit. The National Construction Authority demands the permit's annulment*, January 2015 <http://miningwatch.ro/stiri/certej-official-confirmations-of-illegal-building-permit-the-national-construction-authority-demands-the-permits-annulment/?lang=en>

has a construction permit. Yet he denied that the company does any work on the mining perimeter (...). Stanca said that his company cannot and will not begin any work on the mining perimeter itself until they get a permit to clear the 187 hectares of forest". His responses were contradicted by pictures and videos⁵⁵ taken the previous days showing bulldozers and other large machines terracing land nearby the existing shallow open-pit.

■ Eldorado's Vice President, Nicolae Stanca, was investigated for private abuse of the public interest⁵⁶, a criminal offence under Romanian law, both in 2004 and 2006⁵⁷. In 1997 he was the representative of the state enterprise who transferred the mining title to the private company owned at present by Eldorado Gold. A couple of years later, he was employed by the same company who benefited from the transfer⁵⁸.

■ Eldorado is expected to lose the local authorities' support soon, mainly that of the Certeju de Sus mayor, Petru Cîmpian, who was summoned to hearings as a result of the Public Prosecutor's criminal investigation in relation to Deva Gold's illegal construction permits.

Social risks

■ Certeju de Sus commune, where the Certej mine is located, includes nine villages, totaling 3,126 inhabitants. The commune is one of the 13 communities which are members of the Tara Zarandului Local Action Group (GAL)⁵⁹, having access to EU rural development funding programmes. Certeju de Sus also benefits from financial support through the agri-environment schemes via the Agency for Payments and Interventions for Agriculture (APIA). As such, Eldorado's 221 job promises represent a weak argument for the project's development.

■ The Certej gold mine's dam failure led to the death of 89 people in 1971⁶⁰. The tragic moment is commemorated every year in Romania. The events from the night of the disaster are still among the most vivid of contemporary Romanian collective memories and have a strong impact on how people perceive future mining activities in the Apuseni Mountains.

■ Eldorado's Romanian subsidiary, Deva Gold, had to abandon its plans to locate the TMFs in the Voia village, following a heated public debate where it faced opposition from the local

54 Claudia Ciobanu, *Another Rosia Montana, despite public outrage*, October 2014

<https://www.opendemocracy.net/can-europe-make-it/claudia-ciobanu/another-rosia-montana-despite-public-outrage>

55 Mining Watch Romania, *The Certej mining project began illegally, without construction permits*, October 2014 <http://miningwatch.ro/stiri/romana-proiectul-minier-de-la-certej-a-inceput-ilegal-fara-autorizatii/?lang=en>

56 Open letter: *Urgent Action – Stop the Canadian Government from Supporting the Rosia Montana Gold Mine*, September 2005, <http://webcache.googleusercontent.com/search?q=cache:a6nKqqpA4JEJ:www.miningwatch.ca/es/urgent-action-stop-canadian-government-supporting-rosia-montana-gold-mine+&cd=1&hl=en&ct=clnk&gl=ro>

57 Files no. 896/P/2004 and 16/P/2006

58 Mining Watch Romania, *Certej - Authorities' incapacity to critically analyse new mining projects*, November 2013, pg. 9-11, <http://miningwatch.ro/wp-content/uploads/2014/01/Certej-MiningWatchRomania-EN.pdf>

59 Asociatia Intercomunitara Tara Zarandului, <http://tara-zarandului.ro/prezentare/teritoriu/>

60 Lor edana Voiculescu, *Acum 43 de ani, la ora 5 dimineata, acești români mureau în tăcere la Certej*, October 2014, <http://www.gandul.info/financiar/acum-43-de-ani-la-ora-5-dimineata-acesti-romani-mureau-in-tacere-la-certej-13456249>

community⁶¹. The mining company intended to build the two tailings dams, one of which for cyanide leaching residues, on Frumoasei Valley within the Balșa commune. Prior to the public debate held in June 2008, 102 persons, local people and landowners of Voia, signed a memorandum against cyanide-based mining. Needless to say, that at the time, the company in all its official information releases⁶² only referred to the support they had from the local community.

■ According to BMI Research released in 2014, it is expected that Romania's mining sector will see only modest growth over the coming years. Gold production growth will only be marginally inspiring as weak prices and intense public opposition weigh on the gold industry's growth prospects: *'The outlook for Romania's gold mining sector is less positive than formerly anticipated as the Rosia Montana gold mine, which promised to be the largest of its kind in Europe, will now be shelved indefinitely due to the success of environmental lobbies in blocking the project. In November 2013, a special parliamentary commission rejected a draft bill that would have allowed Canadian firm, Gabriel Resources, to proceed with plans to bring the Rosia Montana gold mine to production.'*⁶³

■ Six months of persistent street protests⁶⁴ against the Rosia Montana gold mine proved the existence of a powerful, creative and intelligent civil society that is immovable in its decision to oppose a political class liable to corruption acts and completely detached from the citizens' real concerns and interests. The mass mobilisation against the Government's proposed bill that would have given a kick-start to the Rosia Montana mine, inspired Romania's most significant protests since the fall of communism⁶⁵. Romanian civil society's awareness on mining issues remains at very high levels as the Rosia Montana project proved to be the binder of socially aware young Romanians. Protests against open pit, cyanide-based gold mines continued in February 2014. Environmental activists occupied the headquarters of the state-owned mining company, Minvest, that owns 19% of the Certej project.⁶⁶

■ A noteworthy risk highlighted in an Ernst & Young report⁶⁷ includes companies' difficulty to secure a social license to operate. To quote the report, *'Community conflicts over environmental and social concerns can cause large mines to lose some \$20 million every week'*. Eldorado suffered significant reputational damage caused by the 2014 illegal works in the proximity of the existing shallow open-pit. As a direct consequence, the discontent among Romanians towards Canadian mining companies and their mine proposals further increased.

61 Gandul, *Deva Gold își mută cianurile la Certeju de Sus*, July 2008,

<http://hunedoreanul.gandul.info/comunitate/deva-gold-isi-muta-cianurile-la-certeju-de-sus-2749803>

62 Stock market quotes for European Goldfields Limited, http://web.tmxmoney.com/news.php?qm_symbol=EGU

63 Romania Mining Report, 2014,

64 Raluca Besliu, *Global Romanian Protest against Cyanide-based Open-Pit Gold Mining Project*, September 2013, <http://ireport.cnn.com/docs/DOC-1030279>

65 Claudia Ciobanu, *"The Revolution begins with Rosia Montana"*, September 2013,

<https://www.opendemocracy.net/can-europe-make-it/claudia-ciobanu/revolution-begins-with-rosia-montana>

66 TruthOut, *The Romanian Mining State Company, Minvest Deva, Occupied by Anti-Cyanide Goldmining Activists*, February 2014, <http://www.truth-out.org/speakout/item/21658-the-romanian-mining-state-company-minvest-deva-occupied-by-anti-cyanide-goldmining-activists>

67 Investopedia, *How does the risk of investing in the metals and mining sector compare to the broader market?* <http://www.investopedia.com/ask/answers/032415/how-does-risk-investing-metals-and-mining-sector-compare-broader-market.asp>

■ The endemic corruption within government authorities in Romania is considered⁶⁸ to ‘pose some of the severest risks to incoming businesses and potential investors. Further risks include the extensive bureaucracy surrounding the setting up of businesses and construction of properties. These can also prove extremely costly and time consuming’. Resource extraction in countries where law enforcement is weak have typically been accompanied by corruption and conflict, which in return leads to social, political and economic instability. In the region the permitting of current mining developments is already associated with corruption, scandals and violent conflicts, while it is almost impossible for gold mining as a mono-industrial activity⁶⁹ to co-exist with other types of economic development.

Environmental risks

■ The regional environmental authorities issued the environmental agreement for the Certej project in July 2012, in a non-transparent manner. The publication of this permit on the institution's website was done with a two months delay⁷⁰. In November 2013, the local Environmental Protection Agency published a decision to revise the existing environmental agreement, despite the fact that there was a pending court action submitted by the National Environmental Protection Agency (EPA) for the annulment of the 2012 permit. Since July 2014, the revised permit is being contested in court by Mining Watch Romania member organisations.

■ The mining project footprint would be overlapping the Natura 2000 site⁷¹ – 0132 ROSPA Metaliferi Mountains, over an area of 108 hectares. The Romanian Coalition of the Natura 2000 sites argues that the Certej mine proposal would put at risk daily both the population and the protected fauna and flora of the region⁷².

■ 1.9 million people depend on the water resources of the Mures River. The impressive quantity of water needed for the ore processing (29 mil. m³) is planned to come from the Mures. This is expected to produce severe consequences upon the discharges downstream.

■ The project site would be situated within 10 km from the Mures River that eventually flows into the Danube River. Countries such as Hungary, Bulgaria, Serbia and Ukraine would be at risk in case of accidental spills or dam failure.

■ The project, which covers an area of 456 hectares, involves processing 45 million tons of ore - with a concentration of 1.6 grams of gold per tons of ore – and the use of a sodium cyanide quantity of 1653 tons per year for a period of 16 years. As with the Rosia Montana

68 Romania Country Risk, <http://www.bmiresearch.com/romania>

69 17th Council Meeting, European Green Party, Greece, *The Balkan Gold Rush in the year 2012: A tragedy in the making*, November 2012, pg. 1 [http://europeangreens.eu/sites/europeangreens.eu/files/news/files/Adopted%20Balkan%20Gold%20mining,%20Balkan%20Network,%20Athens%20\(as%20adopted\).pdf](http://europeangreens.eu/sites/europeangreens.eu/files/news/files/Adopted%20Balkan%20Gold%20mining,%20Balkan%20Network,%20Athens%20(as%20adopted).pdf)

70 Mining Watch Romania, *Certej - Authorities' incapacity to critically analyse new mining projects*, 2013, p. 20, <http://miningwatch.ro/wp-content/uploads/2014/01/Certej-MiningWatchRomania-EN.pdf>

71 Natura 2000 is an EU wide network of nature protection areas established under the 1992 Habitats Directive. The aim of the network is to assure the long-term survival of Europe's most valuable and threatened species and habitats, http://ec.europa.eu/environment/nature/natura2000/index_en.htm

72 Romanian Federation of the Natura 2000 sites, *Open letter to the Ministry of Environment and Climate Change*, December 2014, <http://natura2000.ro/scrisoare-deschisa-catre-mmsc-exploatarea-minereurilor-auro-argintifere-de-la-certej/>

project, the post-processing residues, including the cyanide and heavy metals, will be stored in an outdoor, unlined, tailing pond with a total area of 63 hectares.

■ The ore grade at Certej is extremely low; Eldorado estimates it at 1.63 grams per ton for gold. The ore would be processed using the cyanide-leaching method (flotation would be used in conjunction), which is controversial, because it has led to serious cyanide spills in Romania, one in Certej (1971) and in Baia Mare (2000)⁷³. If Eldorado were to mine such low-grade ore using the cyanide process, the environmental consequences would likely be severe.

■ The project requires clear-cutting of 187 ha of local forests to access the mine and TMFs site, compounding the pollution threats with dangers of mudslides, flash floods, siltation of streams, and increased runoff.

■ Acid Mine Drainage (AMD) is the greatest potential environmental problem associated with mining⁷⁴. Acid mine drainage can be released anywhere on the mine where sulfides are exposed to air and water -- including waste rock piles, tailings, open pits, underground tunnels, and leach pads. The Au-Ag mineralization of Certej is associated with arsenic. Exposure to arsenic through contaminated drinking water has been linked to various cancers including bladder, colon, kidney, lung and skin cancers in high-exposure areas⁷⁵.

■ Studies revealed critical soil cadmium contamination in Certej. The mining activities developed in the area for hundreds of years resulted in '*acid wastewaters with high concentrations of heavy metals. Total and mobile cadmium values are situated in the range 1 to 7.3 mg/kg dry matter, exceeding the maximum admissible value, which is 0.8 mg/kg according to Romanian regulations*'. Research results showed '*a major toxicity on all tested organisms, with L(E)C50 < 1 mg/l which indicated an adverse impact on aquatic biota*'⁷⁶. If the Certej mine would start, cadmium would be mined and then released into the environment mainly through the air during smelting. Once in the environment, cadmium moves easily through the soil and is taken up into the food chain, posing additional health threats to the local community. Current contamination must be remediated to the maximum possible extent before considering any new activities in the area.

73 Baia Mare Task Force, *United Nations Environment Programme, The Cyanide Spill at Baia Mare*, June 2000, <http://archive.rec.org/REC/Publications/CyanideSpill/ENG/Cyanide.pdf>

74 AMD occurs when sulfide minerals are exposed to air and water. This causes the sulfide minerals, which are unstable in a surface environment, to break down into a weak hydrosulfuric acid, while simultaneously making the metals in the sulfides available for mobilization in the water.

75 Sabah Ahmed Abdul-Wahab, Fouzul Ameer Marikar, *The environmental impact of gold mines: pollution by heavy metals*, *Central European Journal of Engineering*, 2011, <http://link.springer.com/article/10.2478%2Fs13531-011-0052-3>

76 Vasile, Gabriela Geanina; Kim, Lidia; Gheorghe, Stefania; Stanescu, Bogdan, *Ecological assessment of mobile cadmium in sediments from Certej mining site, Hunedoara county*, June 2013 <http://connection.ebscohost.com/c/articles/91896593/ecological-assessment-mobile-cadmium-sediments-from-certej-mining-site-hunedoara-county-romania>

Conclusion

Eldorado Gold is not adequately informing its investors about the true risks of the Certej mine. This means that it is exposing them to uncertainty and hazard. Just as is the case with Rosia Montana, Certej is not a "quality" asset. Low gold prices make the profit margin very precarious. Management has not acknowledged that without the "social licence" there is a high social risk and very high political risk. Shareholders should be skeptical of a company that is willing to expose them to such risks without full disclosure and discussion.

It is important to realise the close connection between Certej and Rosia Montana. Both deposits once covered one concession granted to Frank Vasile Timis, the controversial entrepreneur known for misleading investors and their money. The concession was granted at a time when the Romanian government did almost everything to attract business meaning that important legal norms were not respected. The concession was granted without a prerequisite auction. It would be wrong to assume that time will erase these illegalities. The contrary is the case and worse still, corruption will only give rise to more corruption.

Due to opposition Eldorado's Certej project has already undergone multiple changes; reflected in the significant increase of initial capital costs. Forecasted capital and production costs and projected revenues as published by ELD are based on over-optimistic and unverified projections in terms of costs and prices.

Investors should also not underestimate the impact of the TMF failure at Certej in 1971 and the importance it still holds in Romania's collective memory. The tragedy is still commemorated with local and decentralised events.

Eldorado's Certej project caught the full attention of environmental NGOs in the region, especially since July 2012. An increasing number of Romanian citizens demand transparency in the permitting process as opposed to the murky previous procedures. ELD's environmental certificate is currently subject to litigation brought forward by civil society organisations active at Rosia Montana (TSX:GBU).

Attempts from the part of management to circumvent Romanian legal procedures was spotted by watchful citizens who alarmed the public and national supervisory authorities. Any further attempts to take advantage of servile, unscrupulous local officials is likely to induce additional reputational damage for Eldorado and will give rise to litigation.

The most relevant social movement in the last 25 years in Romania was triggered by corrupted authorities' intent to make a murky gold mining project happen for their client. It is thus safe to assume that no political force aware of this reality would be willing to risk accession or maintenance of power for whatever benefits the opening of the mine might grant them. Through making information available on the Certej project to as many people as possible, a high level of awareness is maintained within an expanding public in Romania.