ASX Announcement

31 October 2017

Underground samples further confirm expansion potential at Colonna Zorzone

Sampling, mapping and geological interpretation confirm the potential of the northern extension of Colonna Zorzone as part of the regional exploration program for Gorno

HIGHLIGHTS

- **Underground sampling along the exposed walls of the 1070 RL drive at Piazzole (refer to Figure 2) has returned results including:**
  - **15.7% Zn, 4.3% Pb, and 47ppm Ag**
  - **18.6% Zn, 4.1% Pb, and 42ppm Ag**
  - **20.8% Zn, 5.7% Pb, and 83ppm Ag**
- **The mineralisation at Piazzole, about 300m to the north of the existing resource, appears to be wider and more continuous than first interpreted, and geological observations suggest the existence of a consistent, coherent mineralised layer.**
- **The observed trend of the mineralisation, if continuous down plunge, is likely to extend to link up with the existing Colonna Zorzone resource.**

Energia Minerals Ltd (ASX: EMX) ("Energia" or the Company) is pleased to advise the assay results from a recently completed underground grab sampling program at its 100%-owned **Gorno Zinc Project** in northern Italy.

This latest sampling program by the Company represents the final stage of the low-cost regional exploration work commenced in May 2017, utilising existing access to zones of mineralisation to investigate Gorno's regional exploration potential beyond the current Resource Estimate for Colonna Zorzone of 3.3Mt grading 4.8% Zn, 1.3% Pb and 27g/t Ag. Refer to Figures 1, and 2 for sample locations.

Previously three areas, Pian Bracca, Riso Parina, and Mt Arera, were mapped and sampled, with 58 samples taken. Results from these programs clearly show that the tested areas host significant mineralisation and furthermore confirm excellent exploration potential. Please refer to the ASX announcements released on 26 June 2017, 24 July 2017 and 12 September 2017 for more details.

In the current program a total of 32 samples were collected at Piazzole, an area located about 300m to the north of the current resource. The mineralised zone is interpreted to be at least 170m long and up to 110m wide, with thickness ranging from 1m to 3m with an average of 2m. The original interpretation by ENI (Gorno's previous owner) was of two discrete columns within this zone, however,

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examination of historical drilling and structural measurements show that the gently folded shallow dipping mineralised horizon, which undulates above and below the drive, is potentially continuously mineralised and wider than initially believed.

The chip-channel samples were taken in lines along the walls of the drives where mineralisation is exposed, with small rock chips taken every 20cm along these lines, forming a composite sample of the mineralisation visible in the drive. All samples were taken roughly horizontally along the drive.

While these sample results cannot be used in a resource estimate[1] at the current time, they provide support for Energia's geological interpretation and, furthermore, characterise the mineralisation types as oxide or sulphide (refer to Figure 1 and Figure 2 for details and Table 1 for assay and location data).

Significantly, the mineralisation appears open to the north, with the host Metallifero Formation continuing up plunge to outcrop 4km to the north of the current resource.

In light of these results, Energia's team is now focused on designing and optimising cost-effective drilling programs to be performed from existing accessible underground workings. The drilling programs will aim to validate the geological model and the mineralised zones identified by underground sampling.

Energia Executive Chairman and Chief Executive Officer, Mr Alexander Burns, said: "The Energia team have done an excellent job demonstrating the significant expansion potential for the Colonna Zorzone deposit up and down plunge and, at the same time, have identified three new nearby zones of significant mineralisation to the east in Pian Bracca, Colonna Fontanone and Mt Arera.

"Our objective is to demonstrate to potential financiers the viability of developing a mine based on Colonna Zorzone, and to establish a cost-effective means of incrementally building on the existing resource from the other nearby deposits. We expect to announce more news on this strategy in the coming months and remain confident in Gorno's unique commercial advantages."

For and on behalf of Energia Minerals Limited.

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Competent Person Statement

Information in this release that relates to Exploration Results is based on information prepared by Mr David Andreazza, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Andreazza is a full-time employee of Energia Minerals Limited. Mr Andreazza has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Andreazza consents to the inclusion in this release of the matters based on their information in the form and context in which it appears.

The information in this release that relates to Mineral Resources is based on, and fairly represents, the Mineral Resources and information and supporting documentation extracted from the report, which was prepared by Mr James Ridley as Competent Person in compliance with the JORC Code (2012 edition) and released to

[1] They do not fully describe or encompass the true width of the mineralisation at the sample point, nor are they continuous samples.

ASX by the Company on 3 May 2017. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. All material assumptions and technical parameters underpinning the Mineral Resource estimates in that previous release continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

Sample ID	Easting (m) WGS84Z32N	Northing (m) WGSZ32N	RL (m ASL)	Sample Length (m)	Zn %	Pb %	Ag g/t
CS1	559884	5085481	1070	5	2.9	0.8	9
CS2	559888	5085477	1070	5	18.6	4.1	42
CS3	559894	5085474	1070	4	15.7	4.3	47
CS4	559898	5085471	1070	5	0.7	0.2	4
CS5	559897	5085478	1070	6	10.7	1.8	13
CS6	559919	5085495	1070	5	12.3	3.4	94
CS7	559924	5085497	1070	5	8.6	1.7	64
CS8	559940	5085441	1070	4	8.7	2.1	27
CS9	559962	5085429	1070	6	3.3	1.1	16
CS10	559972	5085426	1070	5	1.1	0.5	11
CS11	559972	5085420	1070	5	20.8	5.7	83
CS12	559972	5085415	1070	5	8.7	2.8	42
CS13	559971	5085410	1070	6	15.5	3.8	55
CS14	559971	5085404	1070	5	1.7	0.5	8
CS15	559971	5085399	1070	5	11.6	2.3	40
CS16	559972	5085396	1070	4	8.6	2.8	45
CS17	559974	5085393	1070	4	12.0	2.9	47
CS18	559970	5085392	1070	5	4.7	0.9	11
CS19	559977	5085429	1070	6	6.9	2.1	38
CS20	559973	5085446	1070	5	3.1	1.2	8
CS21	559975	5085451	1070	5	1.3	0.5	3
CS22	559974	5085455	1070	5	5.3	2.2	10
CS23	559970	5085457	1070	5	1.6	0.7	3
CS24	559965	5085457	1070	5	5.7	2.0	19
CS25	559960	5085457	1070	4	3.0	1.6	26
CS26	559974	5085463	1070	4	1.7	1.0	6
CS27	559974	5085467	1070	5	9.7	2.1	19
CS28	559975	5085459	1070	5	3.3	1.4	9
CS29	559980	5085459	1070	5	2.5	0.5	4
CS30	559985	5085459	1070	5	4.4	1.6	12
CS31	560041	5085535	1070	5	2.8	1.0	6
CS32	560041	5085528	1070	6	11.3	3.5	19

Table 1: Sample location details and assay results

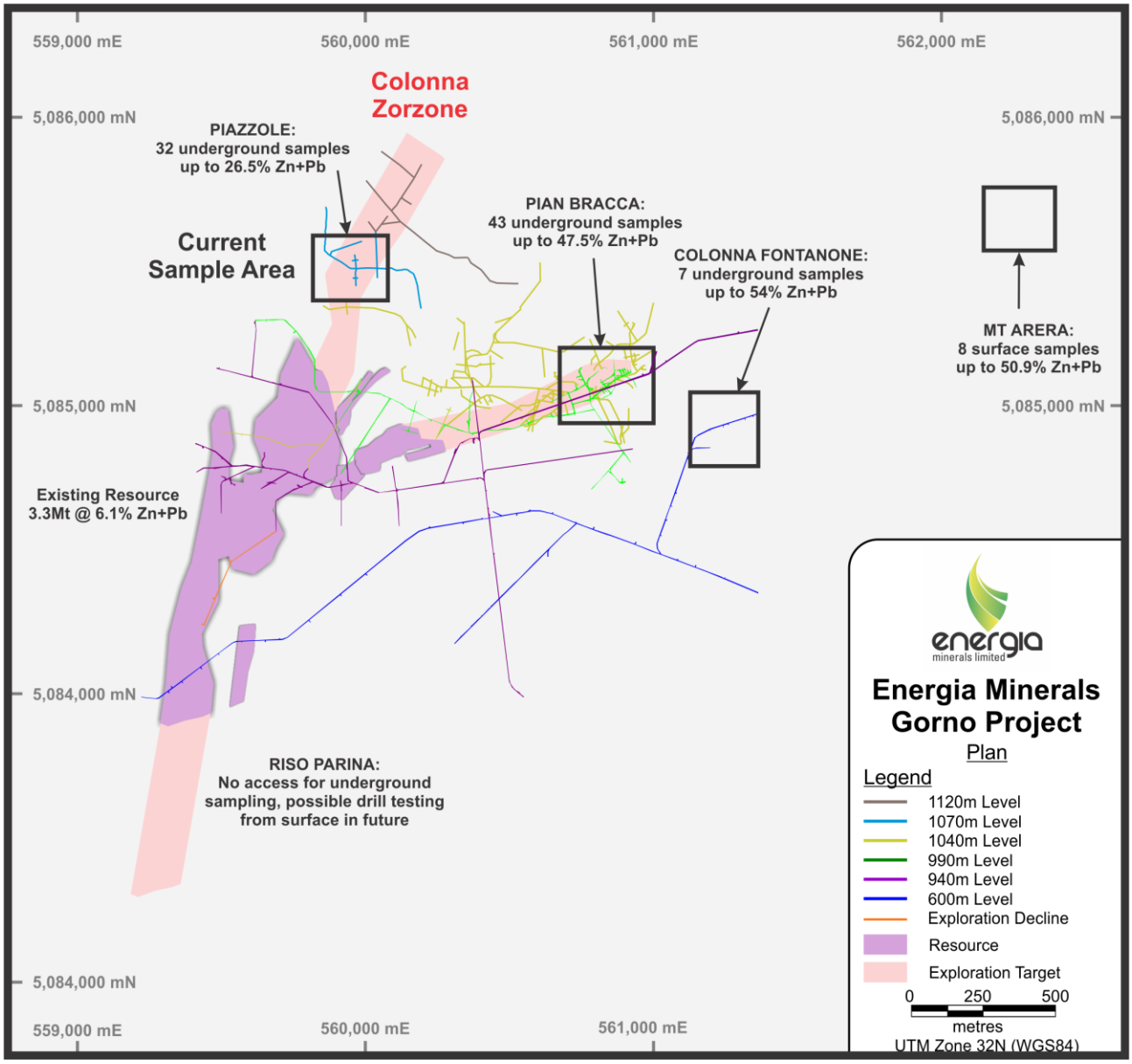

Figure 1: Location Plan showing existing resource and sample area location

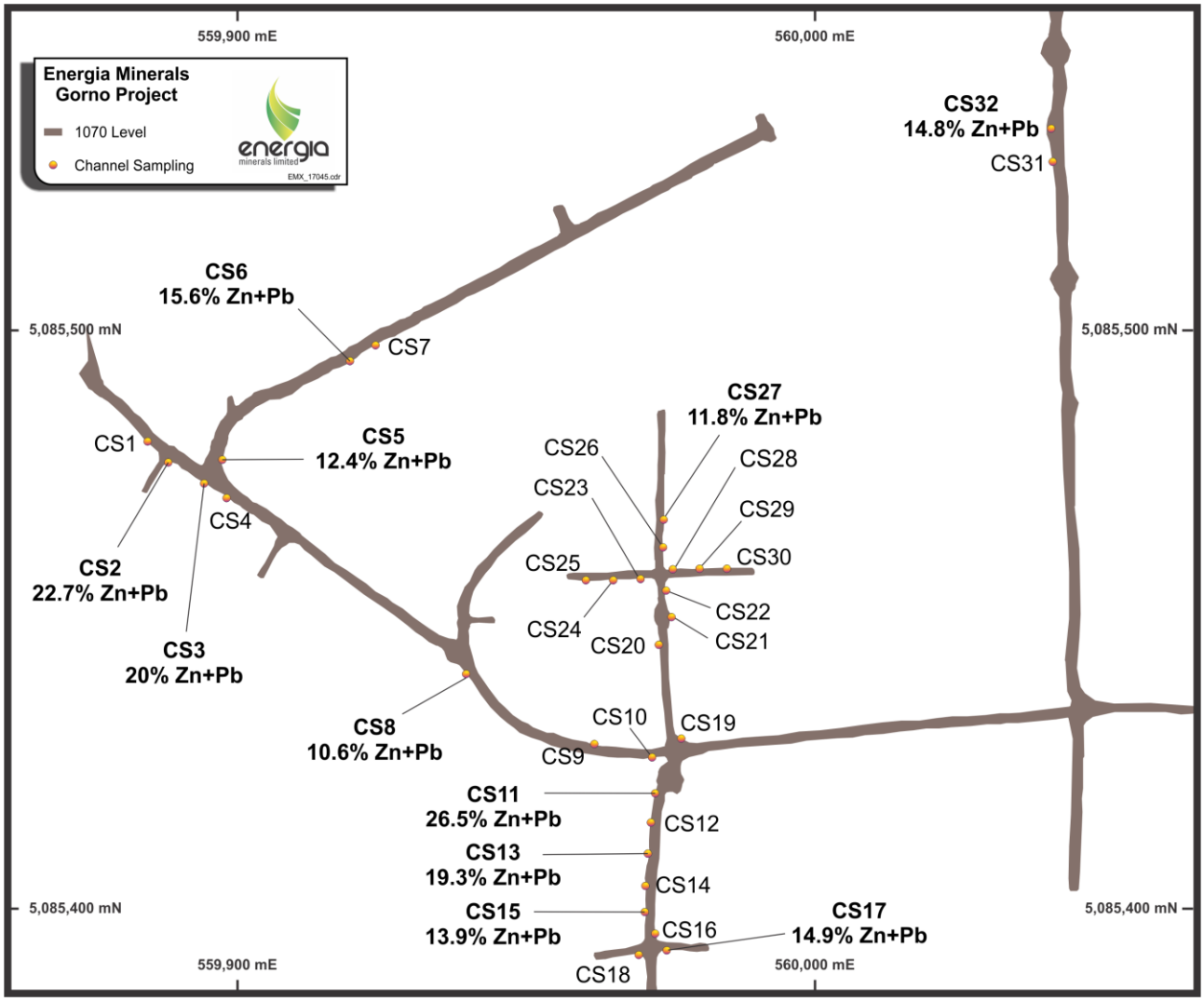

Figure 2: Current Sample Area Results

JORC Code, 2012 Edition – Table 3 Underground Face Sampling and Surface Sampling

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Samples were collected using face samples taken from underground drives using a geo pick to dislodge mineralisation from the adit wall, samples were collected at 20cm intervals along the mineralised face, and composited, the length of each composite sample is given in Table 1. Effort was made to ensure each individual sample was of similar size to others used in the composite. The samples were dispatched using a reputable contract courier from site to the laboratory where it was dried, then crushed and pulverised to allow 85% to pass -75µm. A 0.15g-0.25g aliquot subsample of the pulverised sample was then dissolved in a four acid digest, and then analysed using an ICP-AES or ICP-AAS technique to determine grades of the following elements Pb, Zn, As, Ag, Bi, Co, Cu, Fe, Mg, Mn, Ni. • No QAQC was completed by Energia, however laboratory QAQC was done and returned with no issues being noted. The nature of the samples is not representative of a grade thickness, it illustrates the localised grade the visible massive sulphide expressions can achieve. • Mineralisation can be both contained in oxide and sulphide material. Historical studies and recent observations show very low levels of deleterious elements in both material types, however further studies must be completed to quantify this. • Energia has exhaustive procedures and protocols in place to ensure that 'Industry Standard' is met as a minimum.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• No drilling completed

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximize sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Not Applicable.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Basic logging including recognition of stratigraphy, and type of mineralisation was carried out only. • Qualitative only. • All samples were logged.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No sub sampling was carried out. • Not applicable. • Not applicable. • Not applicable. • No duplicates were taken. • Sample weights were between 1.0, and 4.0 kg.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• The digest method and analysis techniques are deemed appropriate for the samples. Four acid digestions are able to dissolve most minerals; however, although the term "near-total" is used, depending on the sample matrix, all elements may not be quantitatively extracted. The intended analysis techniques are ICP-AES (Atomic Emission Spectroscopy) and ICP-AAS (Atomic Absorption Spectroscopy typically used to quantify higher grade base metal mineralisation. • No geophysical tools, spectrometers or XRF instruments have been used. • QA/QC samples were not used.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Samples were collected by 3 Energia Minerals personnel working in unison. • Not applicable. • Digital records and reports were generated. • No adjustment of assay data is required.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Locations using existing maps of underground infrastructure. • The grid system used at Gorno is WGS_1984_UTM_Zone_32N. Easting and Northing are stated in metres. • Topographic control is from a total station measurements tied into multiple Italian Survey Control Points.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Data spacing is random, and reflects the location of mineral occurrences only. • This data cannot be used to establish a Mineral Resource. • No sample compositing has been applied other than previously mentioned.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Not applicable. • Not applicable.
Sample security	• *The measures taken to ensure sample security.*	• Samples were dispatched from the Exploration Site using a single reputable contracted courier service to deliver samples directly to the assay laboratory where further sample preparation and assay occurs.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Not applicable.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Gorno Lead Zinc deposit is located in the north of Italy, in the Lombardia Province. The Gorno Project is made up of ten (10) granted tenements: Decrees 1571, 1629, 1630, 1632, 1633, 3276, 3277, 3278, 3279, 3280; and six applications. These leases are 100% owned and operated by Energia Italia, a 100% owned subsidiary of Energia Minerals. All permits are valid at the time of this report. • All tenements are in good standing and no impediments to operating are currently known to exist.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• A significant amount of work was undertaken by ENI subsidiaries in the region, notably SAMIM, an Italian state owned company and part of the ENI group. Drilling works completed in the period between 1964-1980 have been compiled and digitised by Energia. A significant amount of work has been completed on the Gorno deposit including the development of more than 230km of exploration drives, detailed mapping, and the mining and production of over 800,000 tonnes of high grade zinc concentrate. Large scale mining operations ceased at the Gorno deposit in 1978, and the project closed in 1980.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Gorno deposit is an Alpine Type Lead-Zinc deposit (similar to Mississippi Valley Type Lead Zinc deposits) it is broadly stratabound with some breccia bodies and veining also occurring. It displays generally simple mineralogy of low iron sphalerite, galena, pyrite, and minor silver. Gorno lies in a part of the Italian Southern Alps named "Lombard Basin", formed by a strong subsidence occurring in the Permian-Triassic which allowed the subsequent accumulation of a thick sedimentary pile. The sedimentary sequence is constrained laterally by the Luganese Platform to the west and by the Atesina Platform to the east. The lithotypes in the southern portion of the basin are predominantly Triassic in age. The geological sequences of importance in relation to mineralisation, from oldest to youngest are as follows: ○ **Breno Formation**: a back-reef limestone composed of light grey calcareous beds, 10 to 170 m thick. The facies indicate a palaeogeographical evolution from back reef to shelf environment, in low energy water to alternating peri-tidal cycles. ○ **Metalliferous Limestone:** composed of dark grey to black limestone deposited in stromatolitic tidal flats, with siliceous intercalations present in the upper part. The dark colour suggests a stagnant anaerobic depositional environment with bituminous beds generally present at the footwall of the Metallifero. This formation represents a transitional phase between the underlying shelf environment and the upper sequence typified by a peri-continental and detrital sedimentation. Three tuffaceous levels are present in the Metallifero stratigraphical column. The pyroclastic tuffs are submarine volcanic phases which intervened during the deposition of the limestones, and effectively represent a control for the mineralized horizons,

Criteria	JORC Code explanation	Commentary
Geology (Continued)		in that they are always found at the foot wall (Tuff 1) and at the hanging wall (Tuff 2) of the productive mineralised horizons. ○ **Val Sabbia Sandstone:** present along the southern Lombard Basin border and is composed of alternating tuffaceous sandstone and green and\or red silt-mudstone. These were possibly derived from the erosion of continental sediments present to the south. The thickness varies between 0 and 400 metres. ○ **Gorno Formation**: alternating thinly bedded, black limestone and laminated marl deposited in protected lagoon environment with a thickness of 0-350 metres. A thin tongue, intercalated between the Metalliferous Limestone and the Val Sabbia Sandstone, is often mineralised and is referred to as the mineralised "black shales" of the Gorno deposits. ○ **San Giovanni Bianco Formation**: is composed of a thick alternation of marl, sandstone, siltstone and mudstone which transitions at the top of the unit to cellular limestone and evaporitic vuggy dolomite, estimated thickness of 150 metres. • Structure in the basin is typified by E-W trending belts which can be subdivided in five sectors: ○ **Orobic Anticline,** in the northern part, which includes Palaeozoic successions; ○ **Valtorta-Valcanale Line,** oriented E-W and separating the Orobic Anticline to the north from the Pb-Zn mineralised belt in the south. The line is responsible for many of the allochthonous units; ○ **Camuno Autochthonous,** including the sedimentary cover, which is covered in the central-western part by various overthrusts and outcrops only in the east; ○ **Para-autochthonous and allochthonous units,** present over a large area to the south of the Valtorta-Valcanale Line and formed by the double or triple superimposition of the Triassic carbonate formations; ○ **Fold and fold-fault zone,** which constitutes the southern sector near the Po plains and includes Jurassic-Cretaceous formations. • Mineralisation in the Gorno district occurs within the Camuno Autochthonous Zone, and the para-autochthonous, and allocthounous units. The geometry of the mineralised bodies is mainly stratabound with common characteristics in the

Criteria	JORC Code explanation	Commentary
Geology (Continued)		majority of the Gorno deposits. The prevailing distribution trend is N-S and the shape, represented by tabular "columns", which can be longitudinally developed for more than 2000 metres, with widths from 50 to 100 metres and thickness between 3 and 20 metres.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Information material to the understanding of the exploration results is provided in the text of the release. • No information has been excluded.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Not applicable. • Not applicable. • No metal equivalents are used.
Relationship between mineralisation	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the*	• Not applicable. • Not applicable.

Criteria	JORC Code explanation	Commentary
widths and intercept lengths	*drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Not applicable.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.* •	• Please refer to Figures 1 & 2 for this data.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• The results reported in the above text are comprehensively reported in a balanced manner.
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• Not Applicable
Further work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Future works at Gorno would include works to test for continuity of mineralisation up and down plunge on Colonna Fortuna, and regional exploration works. • Please refer to Figure 1 for areas that are open to extensions. The release of future detailed drilling plan data is commercially sensitive, subject to change on review; and will not be detailed here.