

# ASX MARKET ANNOUNCEMENT

## Strike's Iron Ore Assets

In addition to its lithium and graphite projects, Strike Resources Limited (ASX:SRK) (**Strike**) holds three iron ore assets, being the Apurimac and Cusco Iron Ore Projects in Peru and the Paulsens East Iron Ore Project in Western Australia.

These assets have not been developed for a number of reasons, with the principal driver being the significant decline in the iron ore price<sup>1</sup> from over US\$180 per tonne (\$/T) during 2011 to lows of less than US\$50/T in 2015.

However, as a result of a range of market forces the iron price has steadily increased from 2015 lows to a current price of approximately US\$100/T, with a number of market commentators forecasting these prices to remain strong for the medium term.

As a result of the increase in the iron ore price, Strike believes it appropriate to now reexamine the market potential of its iron ore assets in Australia and Peru and in particular, to examine the potential for one or more of these assets to provide an early cashflow opportunity for the company.

### Summary of Proposed Actions

- Recommence previous work conducted between 2006 - 2008 on the **Paulsens East Iron Ore Project** which investigated the potential for up to a one million tonne per annum mining operation with direct shipping quality iron ore (**DSO**) being trucked to an existing port.
- Initial Paulsens East works will involve resource modelling to define a JORC (2012) Mineral Resource Statement for the iron ore mineralisation previously identified in surface sampling and two extensive drilling campaigns (66 holes, 3,537 metre RC drilling).
- Upon completion of the resource statement, examine the potential for undertaking a Direct Shipping Ore (DSO) small scale mining operation using contract mining, crushing and transportation by truck to port then ship to China.
- Based upon the **Apurimac Iron Ore Project** pilot mining operation previously conducted by Strike in Peru in December 2013, commence works into the potential creation of one or more small scale but high grade iron ore mining operations (up to approximately 125,000 tonnes per annum each) in a relatively short period for export of iron ore to China.
- The Peruvian operations to be under existing Peruvian legislation which allows for small scale mining by suitably registered local artisanal miners.

An outline of each of these projects and Strike's proposed methodology to advance the same is described below.

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<sup>1</sup> 62%Fe, CFR China

## Paulsens East Iron Ore Project (Western Australia)

(Strike 100%)

The Paulsens East Iron Ore Project (**Paulsens East**) is located approximately 140 kilometres west of Tom Price, 8 kilometres from the Paulsens Gold Mine and only 233 kilometres by road (of which 210 kilometres is good quality paved road) from the Port of Onslow. Paulsens East consists of hematite iron ore mineralisation occurring as a ridge rising to approximately 60 metres above the valley floor and extending for approximately 3,500 metres West to East.



*Figure 1: Paulsens East hematite ridge, facing North.*

Between 2006 and 2008, Strike conducted an extensive rock chip sampling programme across the ridge and two drilling campaigns comprising 66 holes for 3,537 metres of reverse circulation (RC) drilling, to determine the extent and quality of the Paulsens East mineralisation.

The mineralisation presents as a high-grade hematite conglomerate in hematite matrix, with multiple rock chip samples recording values higher than 62% Fe and up to 67.67% Fe.<sup>2</sup>

Whilst extensive analysis and interpretation of this work was undertaken at the time, Strike did not publish a JORC Mineral Resource or advance further with Paulsens East as its focus shifted to its more substantial iron ore assets in Peru.

In 2013, Strike converted the area containing Paulsens East mineralisation to a Retention License status (RL 47/7) to minimise ongoing holding costs.

With the recent increase in iron ore prices (and with a number of market commentators forecasting these prices to remain strong for the medium term), Strike has now determined to complete the work required to define a JORC Code (2012) compliant Mineral Resource for Paulsens East and to examine the potential for undertaking a Direct Shipping Ore (DSO) mining operation using contract mining, crushing and transportation by truck to port then ship to China.

Strike expects the JORC Mineral Resource Statement for Paulsens East to be published shortly, following which Strike plans to apply to convert the tenement to a Mining Lease.

<sup>2</sup> Refer Strike's ASX Announcements dated 26 May 2008: High Iron Grades Averaging 64.7% Fe Confirmed Potential of Paulsens East Project and 17 July 2006: Australian Iron-Ore Update – Paulsens East High Grade Mineralisation

With regard to transportation, Strike has already held discussions with operators of several port facilities in the area, with various options being considered from Onslow (233 kilometres from Paulsens East by road) to Port Hedland (600 kilometres).

Strike is of the view that with the current level of iron ore prices, a small-scale contract mining, crushing and transportation operation has the potential to deliver significant cashflow for the Company.

The Figures below illustrate the location, topography and nature of the mineralisation:

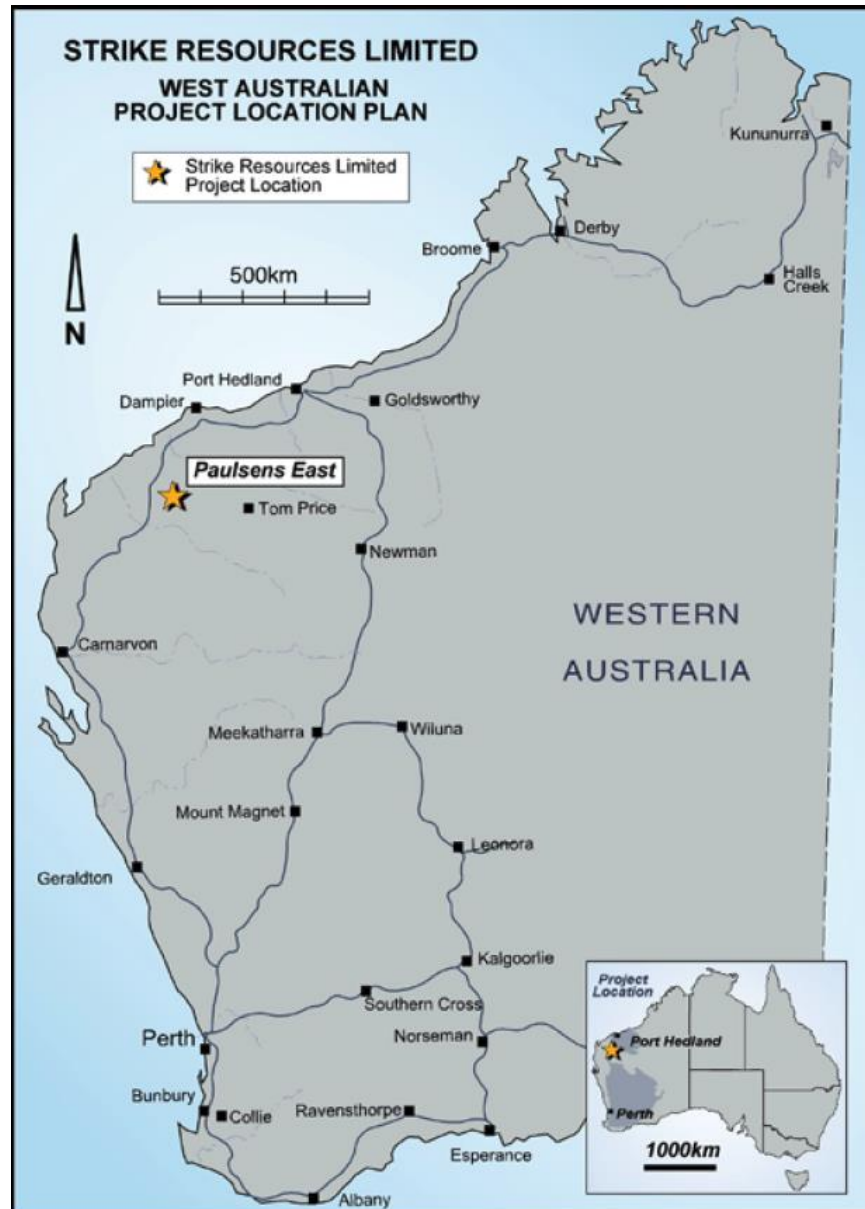
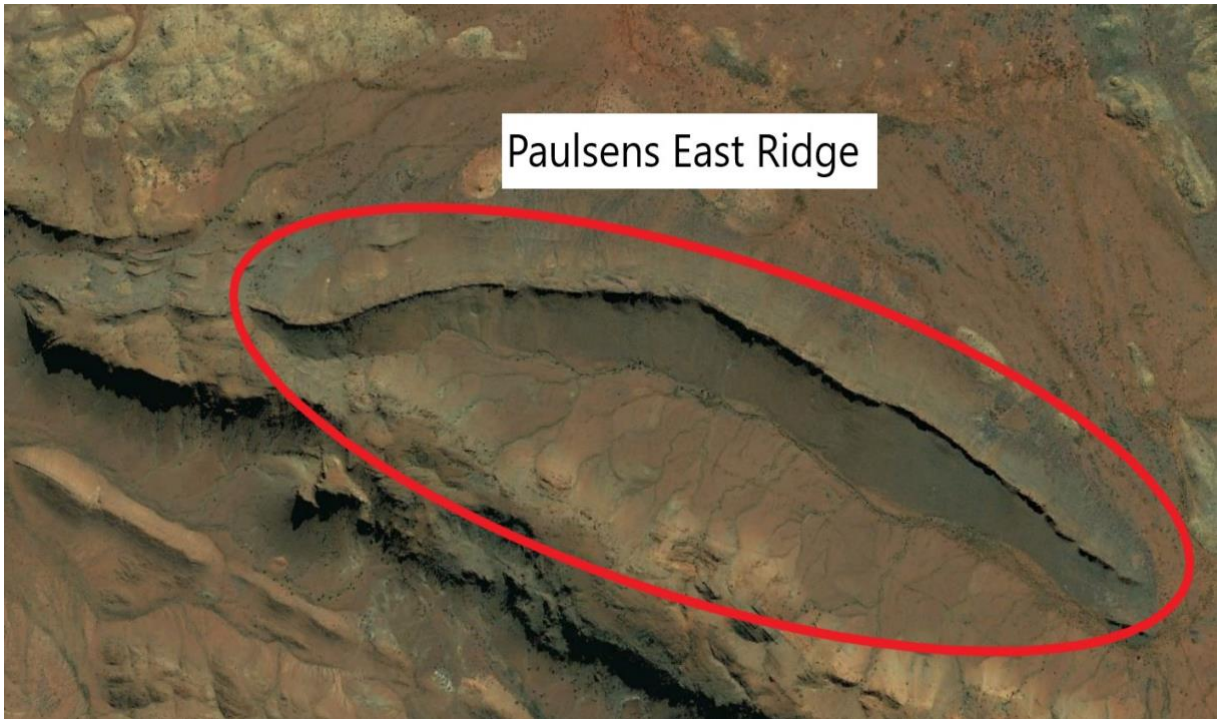


Figure 2: Paulsens East location, West Pilbara





*Figure 3: Paulsens East satellite image*



*Figure 4: Paulsens East mineralised ridge, facing East*





Figure 5: Drilling at Paulsens East (North side), 2008



Figure 6: Paulsens East hematite conglomerate





*Figure 7: Paulsens East rock chip sample*

## **Next Steps**

Strike now plans to conduct the following activities to advance Paulsens East:

- Re-analyse historical work conducted, including drill samples still held in storage and an interpretation of surface sampling and drilling data from Strike's two previous campaigns.
- Undertake resource modelling to define a JORC Mineral Resource for the iron ore mineralisation.
- Upon completion of the JORC Resource, commission the development of a model for mine planning purposes.
- Undertake detailed metallurgical test work for the deposit including lump to fines ratio, crushing indexes etc.
- Undertake an economic viability study based upon a small scale contract mining, crushing and transportation operation.
- Restart and conclude Environmental Survey and Native Title Agreements (which were commenced but not completed) and other statutory permitting matters.
- Conversion of the current Retention Licence to a Mining Lease.

Subject to successful completion of the above and prevailing market conditions, Strike would then proceed to:

- Enter into a port access agreement.
- Finalise contract mining and trucking agreements.
- Enter into product offtake agreement(s).
- Initiate any required project financing.
- Commence production and first shipment.

For further background information about Paulsens East, please refer to Strike's previous ASX market announcements as follows:

- 4 April 2006: Grant of WA Iron Ore Tenement – Paulsens East
- 17 July 2006: Australian Iron-Ore Update – Paulsens East High Grade Mineralisation
- 15 February 2007: Iron Ore Projects Update
- 30 April 2007: 31 March 2007 Quarterly Report
- 26 May 2008: High Iron Grades Averaging 64.7% Fe Confirmed Potential of Paulsens East Project
- 11 August 2008: Acquisition of Outstanding Interests in Berau Coal and Paulsens East Iron Ore Projects
- 31 October 2008: 30 September 2008 Quarterly Report

### Apurimac Iron Ore Project (Peru)

(Strike 100%)

Strike's Apurimac Iron Ore Project in Peru is recognised as one of the highest grade, large scale magnetite projects in the world with the potential to support the establishment of a significant iron ore operation.



Figure 8: Strike Apurimac and Cuzco Iron Ore Projects, showing route of proposed Andahuaylas Railway

Over A\$50 Million has been expended by Strike since 2005 on acquisition, exploration, study and administration costs relating to its Peru assets.

The exceptionally high-grade +57% Fe magnetite iron at Apurimac is almost twice as high as the grades of magnetite deposits developed in Australia. The Apurimac ore bodies present as continuous broad zones of mineralisation with dominantly high grade, coarse grained magnetite providing comparatively high mass recoveries (>60%) at coarse grind size (>500 microns).

Favourable topography (see Figure 9) indicates the potential for a low mining strip ratio (between 1.2 – 1.8) and the coarse-grained nature of the ore provides significant processing energy savings as only coarse grinding is necessary to liberate the magnetite.





Figure 9: Outcropping Iron ore at the Opaban 1 ore body

A **JORC(2012) Indicated and Inferred Mineral Resource** has been defined at the main Opaban 1 and Opaban 3 concessions of **269Mt of iron ore at 57.3% Fe** (142 Mt Indicated Resource at 57.84% Fe and 127 Mt Inferred Resource at 56.7% Fe).<sup>3</sup>

Metallurgical testwork on reverse circulation chip samples from the Opaban 1 ore body has returned excellent product grades with low impurities, at coarse crushing with particle sizes of 80% passing 125 and 250 microns:

Table 1: Testwork results showing potential for high grade, low impurity product from Opaban 1 ore

	%
<b>Fe</b>	68.02 to 68.28
<b>P</b>	0.01 to 0.02
<b>SiO<sub>2</sub></b>	1.51 to 1.77
<b>Al<sub>2</sub>O<sub>3</sub></b>	0.30 to 0.35

Within this JORC Resource there has also been identified the potential for low impurity Direct Shipping Ore (DSO) material of approximately 67.9 Mt at 61.5% Fe with low impurities (refer Table 2) which could be mined from surface and shallow near surface mineralisation.

Table 2: Opaban 1 DSO characteristics

	%
<b>Fe</b>	61.5
<b>P</b>	0.03
<b>S</b>	0.1
<b>Al<sub>2</sub>O<sub>3</sub></b>	1.7
<b>LOI</b>	1.0

3 Refer Strike's ASX Announcement dated 19 January 2015: Apurimac Mineral Resources Updated to JORC 2012 Standard



In addition to the current JORC resource, there is significant exploration potential given the deposits are open at depth and along strike (with very promising drill results including 154m @ 62% Fe) with extensive undrilled gravity and magnetic anomalies.

A Pre-Feasibility Study completed in 2008<sup>4</sup> and updated in 2010<sup>5</sup> on the Apurimac Project indicated clear potential for development of a world class iron ore project, with competitive capital costs and very low operating costs:

- The 2008 Pre-Feasibility Study undertaken by Snowden Mining Industry Consultants and SKM utilised a proposed slurry pipeline configuration but considered a range of infrastructure options including a railway. The concentrate pipeline was the preferred transport solution (under the study) as the additional capital cost of building a railway compared to a slurry pipeline outweighed the operational and other benefits of a railway. For further details, refer to Strike's ASX Announcement dated 23 July 2008: Prefeasibility Results Confirm World Class Prospects in Peru.
- Further infrastructure studies were undertaken by Ausenco Sandwell and SRK Consulting in 2010, including a more detailed technical and costing study on building and operating a dedicated railway. The purpose of these studies was to further compare the economics of the slurry pipeline versus railway infrastructure solutions at various production levels. For further details, refer to Strike's ASX Announcement dated 23 November 2010: Apurimac Project Update and Strike's December 2010 Quarterly Report.

In early 2018, the Peru Government signaled its intention to undertake a study into building a 570 kilometre multi-railway, which would connect Strike's Apurimac Project to a multi-user port on the west coast of Peru.<sup>6</sup>

The development of this railway would provide significantly improved development options for the Apurimac Project, which would be one of the biggest users of the railway. A railway connecting Apurimac to a port would provide Strike the ability to attract premium pricing for high-grade lump and fines products, compared to a concentrate product delivered through an alternative slurry pipeline. In addition, a railway will allow for capital and processing costs at the mine to be substantially reduced, given the considerably simplified process to produce lump and fines products from Strike's high grade ore compared to producing a slurry concentrate.

### ***Short to Medium Term Production Potential from Apurimac***

Given the time framework for the construction of a potential railway from the Apurimac deposit to the coast is yet to be finalised, Strike believes it is appropriate to examine ways in which it can potentially bring a smaller scale mining and trucking operation into production utilising very high grade surface and near surface mineralisation that is present across the Opaban 1 and Opaban 3 deposits.

As referred to above, within the current JORC Mineral Resource of 269 Mt at 57.3% Fe there has been identified the potential for DSO material of approximately 67.9 Mt at 61.5% Fe (with low impurities) to be mined from surface and shallow near surface mineralisation.

In December 2013, Strike commenced a pilot operation, where approximately 8,000 tonnes of ore was mined from surface outcrops from its concessions by local artisanal miners, using an excavator.

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4 Refer Strike's ASX Announcement dated 23 July 2008: Prefeasibility Results Confirm World Class Prospects in Peru

5 Refer Strike's ASX Announcement dated 23 November 2010: Apurimac Project Update and Strike's December 2010 Quarterly Report

6 Refer Strike's ASX Announcement dated 23 October 2018: Peru Government Awards \$13 Million Tender for Andahuaylas Railway Study Linking Strike's Apurimac Iron Ore Project to Port and 8 February 2018: Peru Government Plans Railway Linking Strike's Apurimac Iron Ore Project to Port



Figure 10: Excavation of high grade iron ore from Opaban 3, 2013



Figure 11: Stockpile created from artisanal mining at Opaban 3 deposit, 2013

Once mined, the ore was transported to a third party crushing plant near the coastal town of Pisco in Southern Peru. Once crushed, the ore was sold to a local steel plant for use in their blast furnace to produce steel for the domestic market.

The quality of iron ore product delivered to the plant was consistently superior than the minimum characteristics specified by the plant (refer Table 3).

Table 3: Peru steel plant minimum specifications for delivered iron ore

	%
<b>Fe</b>	> 64
<b>P</b>	< 0.08
<b>S</b>	< 0.08
<b>SiO<sub>2</sub></b>	< 4.0

Strike has gained valuable experience in the mining and transport of iron ore from its concessions during this pilot programme and believes that, given the current and expected iron ore price in the medium term, the pilot programme can potentially be expanded to produce a small scale but high grade iron ore mining operation in a relatively short period, for export of iron ore to China.



Such an operation would be undertaken in compliance with Peruvian legislation permitting small groups of local 'artisanal miners' (that are in the process of being formalised under applicable regulations) to mine up to 350 tonnes per day (or ~125,000 tonnes per annum) from specific portions of a mining concession. This legislation allows for significantly reduced timetables and simplified processes for obtaining environmental and other permitting.

Based upon the pilot production previously undertaken and a review of the DSO material, Strike would target initial production of high grade DSO with low impurities as follows:

*Table 4: Target characteristics of DSO material from Opaban 3*

	%
<b>Fe</b>	64.35
<b>P</b>	0.07
<b>S</b>	0.07
<b>SiO<sub>2</sub></b>	2.85
<b>LOI</b>	0.56
<b>Al<sub>2</sub>O<sub>3</sub></b>	0.91

Given Strike's concessions contain multiple locations of outcropping ore, it is possible that multiple areas could be mined simultaneously by different groups of local artisanal miners under Strike's direction, thus giving Strike the potential to sell several hundred thousand tonnes of DSO per year to Chinese (and potentially other) buyers.

## JORC Mineral Resources – Peru Iron Ore Projects

### Apurimac Iron Ore Project (Peru)

(Strike – 100%)

The Apurimac Project has a JORC Code (2012 Edition) compliant Mineral Resource of 269.4 Mt, consisting of:

- a 142.2 Mt Indicated Mineral Resource at 57.8% Fe; and
- a 127.2 Mt Inferred Mineral Resource at 56.7% Fe.

Category	Concession	Density t/m <sup>3</sup>	Mt	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P%	S%
Indicated	Opaban 1	4	133.71	57.57	9.46	2.54	0.04	0.12
Indicated	Opaban 3	4	8.53	62.08	4.58	1.37	0.07	0.25
Inferred	Opaban 1	4	127.19	56.7	9.66	2.7	0.04	0.2
<b>Total Indicated and Inferred</b>			<b>269.4</b>	<b>57.3</b>	<b>9.4</b>	<b>2.56</b>	<b>0.04</b>	<b>0.16</b>

*The information in this JORC Resource table was prepared and first disclosed under the 2004 JORC Code (in Strike's ASX announcement dated 11 February 2010: Peruvian Apurimac Iron Ore Project Resource Increased to 269 Million Tonnes) and was upgraded to comply with the 2012 JORC Code and disclosed in Strike's ASX Announcement dated 19 January 2015: Apurimac Mineral Resources Updated to JORC 2012 Standard.*

### Cusco Iron Ore Project (Peru)

(Strike – 100%)

The Cusco Project has a JORC Code (2004 Edition) compliant Mineral Resource of 104.4 Mt Inferred Mineral Resource at 32.62% Fe.

Category	Concession	Density t/m <sup>3</sup>	Mt	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P%	S%
Inferred	Santo Tomas	4	104.4	32.62	0.53	3.19	0.035	0.53

*The information in this JORC Resource table was prepared and first disclosed under the 2004 JORC Code (in Strike's ASX announcement dated 17 June 2011: Cusco Project – Resource Estimate). It has not been updated since to comply with the 2012 JORC Code on the basis that the information has not materially changed since it was last reported.*

The Strike ASX market announcements referred to above may be viewed and downloaded from the Company's website: [www.strikeresources.com.au](http://www.strikeresources.com.au) or the ASX website: [www.asx.com.au](http://www.asx.com.au) under ASX code "SRK".

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## **FOR FURTHER INFORMATION**

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## **ABOUT STRIKE RESOURCES LIMITED (ASX:SRK)**

Strike Resources is an ASX listed resource company which owns the high grade Apurimac Magnetite Iron Ore Project and Cusco Magnetite Iron Ore Project in Peru and the Paulsens East Iron Ore Project in Western Australia. Strike is also developing a number of battery minerals related projects around the world, including the highly prospective Solaroz Lithium Brine Project in Argentina, the Burke Graphite Project in Queensland and a lithium exploration tenement in Western Australia.



## JORC CODE COMPETENT PERSON'S STATEMENTS

### JORC Code (2012) Competent Person Statement - Apurimac Project Mineral Resources

The information in this document that relates to Mineral Resources in relation to the Apurimac Iron Ore Project (Peru) is extracted from the following ASX market announcement made by the Strike Resources Limited on:

- 19 January 2015: Apurimac Mineral Resources Updated to JORC 2012 Standard

The information in the original announcement that relates to Mineral Resources and other Exploration Results (as applicable) in relation to the Apurimac Iron Ore Project (Peru) is based on, and fairly represents, information and supporting documentation prepared by Mr Ken Hellsten, B.Sc. (Geology), who is a Fellow of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Hellsten was a principal consultant to Strike Resources Limited and was also formerly the Managing Director of Strike Resources Limited (between 24 March 2010 and 19 January 2013). Mr Hellsten has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves" (JORC Code). 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. 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.

The Strike ASX market announcement referred to above may be viewed and downloaded from the Company's website: [www.strikeresources.com.au](http://www.strikeresources.com.au) or the ASX website: [www.asx.com.au](http://www.asx.com.au) under ASX code "SRK".

### JORC Code (2004) Competent Person Statement – Cusco Project Mineral Resources

The information in this document that relates to Mineral Resources and other Exploration Results (as applicable) in relation to the Cusco Iron Ore Project (Peru) is based on, and fairly represents, information and supporting documentation prepared by Mr Ken Hellsten, B.Sc. (Geology), who is a Fellow of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Hellsten was a principal consultant to Strike Resources Limited and was also formerly the Managing Director of Strike Resources Limited (between 24 March 2010 and 19 January 2013). Mr Hellsten has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the JORC Code. Mr Hellsten approves and consents to the inclusion in this document of the matters based on this information in the form and context in which it appears.

### JORC Code (2004) Competent Person Statement – Other Exploration Results

The information in this document that relates to other Exploration Results in relation to the Paulsens East Iron Ore Project (Western Australia), Apurimac Iron Ore Project (Peru) and Cusco Iron Ore Project (Peru) is based on, and fairly represents, information and supporting documentation prepared by Mr Ken Hellsten, B.Sc. (Geology), who is a Fellow of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Hellsten was a principal consultant to Strike Resources Limited and was also formerly the Managing Director of Strike Resources Limited (between 24 March 2010 and 19 January 2013). Mr Hellsten has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the JORC Code. Mr Hellsten approves and consents to the inclusion in this document of the matters based on this information in the form and context in which it appears.

## FORWARD LOOKING STATEMENTS

This announcement contains "forward-looking statements" and "forward-looking information", including statements and forecasts which include without limitation, expectations regarding future performance, costs, production levels or rates, mineral reserves and resources, the financial position of Strike, industry growth and other trend projections. Often, but not always, forward-looking information can be identified by the use of words such as "plans", "expects", "is expected", "is expecting", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes", or variations (including negative variations) of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might", or "will" be taken, occur or be achieved. Such information is based on assumptions and judgements of management regarding future events and results. The purpose of forward-looking information is to provide the audience with information about management's expectations and plans. Readers are cautioned that forward-looking information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Strike and/or its subsidiaries to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such factors include, among others, changes in market conditions, future prices of minerals/commodities, the actual results of current production, development and/or exploration activities, changes in project parameters as plans continue to be refined, variations in grade or recovery rates, plant and/or equipment failure and the possibility of cost overruns.