

ASX: NCZ

### **ASX / MEDIA ANNOUNCEMENT**

# **Quarterly Activities Report December 2017**

# **Operations Highlights**

- Outstanding feasibility results for the Century Mine restart
  - Century to become one of the world's largest and lowest cost zinc operations
  - A\$1.76 billion in post-tax cash flow at a long term zinc US\$1.25/lb (US\$2,755/t) vs current zinc price of US\$1.60/lb (US\$3,525/t)
  - Post-tax NPV<sub>8</sub> of A\$1.3 billion and IRR of 270%
  - Low start-up capital of A\$50M & working capital of A\$13M
  - Life of mine C1 Cash Costs: US\$0.38/lb, C3 Cash Costs: US\$0.50/lb
  - Initial 6.3 year mine life (Century Tailings Deposit only)
  - Proven Ore Reserve declared of 77.3Mt at 3.1% ZnEq at Century Tailings Deposit
  - Domain composite testwork further demonstrates zinc recoveries of 61-64% into a premium 50-53% Zn concentrate from Century Tailings Deposit
  - Increased mine life & metal production opportunity identified via insitu Resources
  - Refurbishment & commissioning works underway, operations scheduled for Q3 2018
- Environmental Authority issued, all permits in place for Century operational restart
- Upgrade of insitu Mineral Resource base for the Century Mine:
  - South Block Indicated Mineral Resource 6.1Mt at 6.8% Zn+Pb (5.3% Zn, 1.5% Pb, 43g/t Ag); containing 322,000t zinc, 90,000t lead and 8.5Moz silver.
  - Total Indicated and Inferred Mineral Resources (including South Block) now 9.3Mt at 10.8% Zn+Pb (6.1% Zn, 4.7% Pb, 66g/t Ag); containing 568,000t zinc, 433,000t lead and 19.9Moz silver.
- Expansion Feasibility Study planned to assess potential for near term development of insitu Mineral Resources
- Successful launch of the Century Solar Power Project

Melbourne Office Suite 4, Level 9, 350 Collins Street, Melbourne VIC 3000 Perth Office Suite 23, 513 Hay Street, Subiaco WA 6008 / O Box 1311, Subiaco WA 6904

**Phone** +61 (8) 6142 0989



# Corporate Highlights

- Significant equity and debt raisings to assist with funding Century development:
  - A\$53M fully underwritten placement completed
  - US\$45M (A\$58M) conditional debt facility secured subject to due diligence
- Conditional agreement for New Century Resources to move to 100% interest in the
   Century Zinc Mine though purchase of Century Bull Pty Ltd
  - Equity only transaction & escrow of all new equity securities for 12 months
- Key Board & Management appointments ahead of a Q3 2018 operational restart

# **Operations**

# Outstanding Feasibility Results for the Restart of Century Operations

During the quarter the Company announced the results of the Feasibility Study for restarting the Century Zinc Mine (RFS) in Queensland.

The RFS, completed by Sedgman Pty Ltd (A member of the CIMIC Group) (Sedgman) in collaboration with New Century, included detailed economic analysis on a large scale tailings reprocessing operation utilising the significant existing infrastructure located on site at the Century Zinc Mine.

Based on the proposed production profile, New Century estimates Century will be one of the top 10 zinc operations in the world, with steady state production forecasted at 507,000tpa of zinc concentrate at 52% zinc (264,000tpa zinc metal) over an initial 6.3 year mine life from the Century Tailings Deposit only.

The Company considers the restart of Century to have outstanding commercial fundamentals, generating over A\$1,760 million in free cashflow over the initial tailings operations of 6.3 years. The projected NPV<sub>8</sub> of the project (post tax) is A\$1,308 million with an IRR of 270%.

All base case financial analyses were performed at a long term zinc price assumption of US\$1.25/lb (US\$2,755/t), which is based on the Bloomberg consensus median forecasts from independent analysts for 2018. This assumption is ~28% lower than current zinc price of US\$1.60/lb (US\$3,525/t).

Sensitivity and scenario analysis have also been performed on the most influential variables for the proposed operations. The results of these analyses demonstrate the operations will be most sensitive to fluctuations in the zinc price, foreign exchange rate and metallurgical recovery.

**Phone** +61 (8) 6142 0989



Table 1: Restart Feasibility Study summary

Тес	hnical Parameters	Fina	ancial Parameters²			
Design Production	507,000tpa zinc concentrate	NPV <sub>8</sub> Base Case US\$1.25		Optimistic Zinc US\$1.50/lb		
(dry metric tonnes) <sup>1</sup>	(264,000tpa zinc metal)	(Post-tax)	A\$1,308M	A\$1,729M		
Proven Ore Reserve	77.3Mt at 3.1% ZnEq <sup>5</sup>	IRR (Post-tax)	270%	350%		
Conc. Grade <sup>1</sup> (LOM average)	52% zinc & 187g/t silver	EBITDA (LOM avg p.a.)	A\$449M	A\$579M		
Design Throughput <sup>1</sup>	15Mtpa	Total Free Cashflow	A\$1,764M	A\$2,325M		
Mine Life (Tailings Only)	6.3 years	Capital Costs	Start Up Cap Ramp Up Ca			
First Production	Q3 2018	Operating Costs (LOM average)	C1: US\$0.38 C3: US\$0.50			

#### Table 1 Notes:

- 1. Throughput, Design Production and Concentrate Grade represent the average steady state values following initial operational ramp up period (approximately 15 months).
- 2. Long term Base Case exchange rate and commodity pricing assumptions are based on Bloomberg consensus median forecasts from independent analysts for the year 2018. Long term AUD/USD FX 0.75, and long term commodity prices of US\$2,755/t zinc, US\$17.8/oz silver.
- 3. C1 is defined as direct cash operating costs produced, net of by-product credits, divided by the amount of payable zinc produced. Direct cash operating costs include all mining, processing, transport, treatment & refining costs and smelter recovery deductions through to refined metal.
- 4. C3 cost includes C1 costs, plus depreciation, indirect costs and royalties.
- 5. The ZnEq calculation is located below Table 5 of this announcement.

The forecast start-up capital estimate is A\$50 million (including A\$2.8 million contingency) to first production at an initial throughput rate of 8Mpta. Once in production, further ramp up capital of A\$63 million will be invested over a 15 month period (for a total capital requirement of A\$113 million) to bring the operation into full production at 15Mtpa. Ramp up capital is proposed to be funded from operational cash flow.

Based on the operating cost estimates, New Century has also forecast operations from the Century Tailings Deposit to be the one of the lowest cost primary zinc operations in the world, with Life-of-Mine C1 costs at US\$0.38/lb and C3 costs at US\$0.50/lb. A comparison of Total Cash Costs against other operations is provided in Figure 2.

As a key outcome of the RFS, the Company has declared a Proven Ore Reserve of 77.3Mt at 3.1% ZnEq (3.0% zinc and 12g/t silver) for the Century Tailings Deposit. This represents a 98% conversion from the previous Measured Resource (see ASX announcement 12 September 2017).

Based on these results, the New Century Board has approved the immediate progression to the construction, refurbishment and re-commissioning phase.

**Phone** +61 (8) 6142 0989



Table 2: Scenario analysis for the proposed restating of operations at the Century Zinc Mine

Scenario	Long Term Zinc Price	Long Term AUD:USD	NPV8 (post-tax)	IRR (post-tax)	Total Free Cashflow
Optimistic Case	US\$1.50/lb (US\$3,306/t)	\$0.75	A\$1,729M	350%	A\$2,325M
Base Case	US\$1.25/lb (US\$2,755/t)	\$0.75	A\$1,308M	270%	A\$1,764M
Bearish Case	US\$1.00/lb (US\$2,204/t)	\$0.75	A\$881M	189%	A\$1,194M

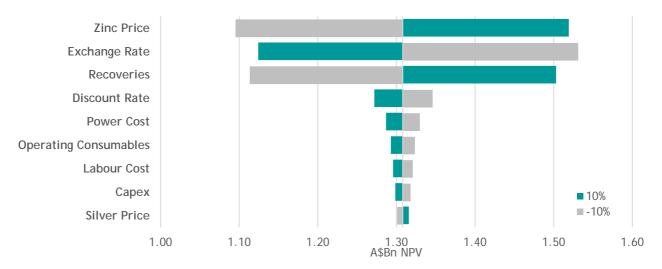


Figure 1: Sensitivity Analysis (NPV)

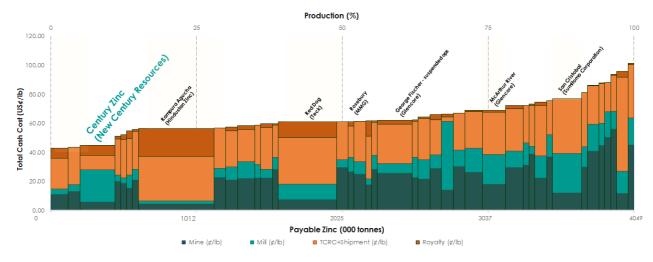


Figure 2: Top primary zinc operations: Total Cash Costs against payable zinc production (source: SNL Metals & Mining 2016 data excluding NCZ figures)

Melbourne Office Suite 4, Level 9, 350 Collins Street, Melbourne VIC 3000

Perth Office Suite 23, 513 Hay Street, Subiaco WA 6008 / O Box 1311, Subiaco WA 6904

**Phone** +61 (8) 6142 0989



# Environmental Authority Issued for Century Operations

During the quarter the Company announced an amendment to the existing Environmental Authority EPML00888813 (EA), to allow progressive economic rehabilitation activities at Century, was issued by the Queensland Government's Department of Environment and Heritage Protection (DEHP).

The EA amendment allows for tailings to be relocated back into the original Century open pit and rehabilitated via sub-aqueous deposition as opposed to capping of the tailings dam.

The amendment to the EA follows exhaustive reviews and analysis of the proposed economic rehabilitation operations by New Century, which culminated in the determination by DEHP that a 'minor' amendment to the existing EA was required.



Figure 3: Waste rock dump cover monitoring systems, collecting performance data on waste rock rehabilitation at the Century Zinc Mine

**Phone** +61 (8) 6142 0989



## Tailings Recovery Testwork & Optimisation

### Background

New Century's metallurgical test work has been carried out by independent metallurgical laboratory group Auralia Metallurgy under supervision of the Company's Metallurgy Manager, Rod Smith. Rod is considered one of Australia's preeminent flotation experts with over 30 years' experience in metallurgical and flotation process development and operation. Prior to New Century, Rod worked at AMMTEC Ltd, including 13 years as Managing Director. AMMTEC was one of Australia's largest mining metallurgical laboratories, purchased by ALS Ltd (ASX:ALS) in 2011.

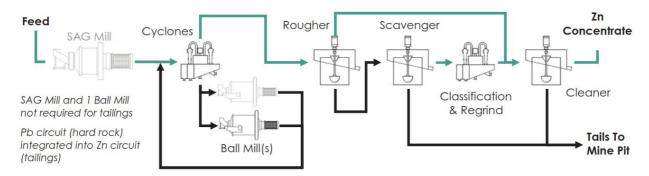


Figure 4: Tailings reprocessing vs hard rock processing in the existing Century Processing Plant

The following is a summary of the metallurgical test work completed to date on the recovery of zinc from the Century Tailings Deposit:

# 1999-2016: Production from the original Century 'Big Zinc' Deposit

- Operation involved progressive grinding to <10µm and sequential flotation</li>
- Over 1Mtpa of zinc concentrate produced via the 7Mtpa processing plant for 16 years
- Focused on high throughput at the expense of maximizing recovery (2015: 74%)
- >77Mt of tailings generated at a zinc grade of ~3.0%%

## 2014-2015: MMG Tailings Reprocessing Trials - Low Grade Concentrate Production

- 10,000t Bulk Pilot Trial: achieved over 70% recovery of Zn into a Rougher concentrate
- MMG focus was on direct metal production on site (as opposed to the historic concentrate only operations) via significant additional site processing infrastructure
- Independent testwork (ALS Laboratories) validated performance of the pilot trial

### 2016: MMG Tailings Reprocessing Trials - High Grade Concentrate Production

- Focussed only on utilisation of existing equipment within the Century Processing Plant
- Commissioned testwork by Changsha Research Institute of Mining & Metallurgy (CRIMM)
- Built on Bulk Pilot Trial with additional Scavenger and Cleaner unit operations

Melbourne Office Suite 4, Level 9, 350 Collins Street, Melbourne VIC 3000
Perth Office Suite 23, 513 Hay Street, Subiaco WA 6008 / O Box 1311, Subiaco WA 6904

**Phone** +61 (8) 6142 0989



- Successful zinc recovery of 52% into a concentrate grade of >48% Zn
- Independent testwork by ALS Laboratories validated performance of CRIMM testwork

### 2017: New Century - High Grade Concentrate Production: Flowsheet Optimisation Testwork

- Built on success of MMG High Grade Concentrate Production testwork program
- All proposed modifications continue to use only the existing Century Processing Plant
- Initial New Century acquisition due diligence testwork program focused on replicating previous MMG work, successfully achieving a recovery of 50% zinc into a concentrate grade of 52% Zn.
- Following these results, optimisation testwork was completed on tailings deposit Indicated Resource samples
- New Century achieved further successful recovery improvements via testwork completed at ALS Laboratories and Auralia Laboratories, including:
  - 1. Utilisation of one existing ball mill to reduce float feed grind size from a p80 of 75µm to ~40µm, liberating ~30% additional zinc for flotation from the coarser size fraction;
  - 2. Reduced copper sulphate addition by 65%, improving zinc flotation performance and reducing gangue material flotation; and
  - 3. Included rougher concentrate in regrind allowing further liberation of zinc for flotation.
- The total impact of improvements has achieved increased zinc recovery from 50% to up to 64% at zinc concentrate grade of 53%.

## Further New Century Optimisation Test Work

During the quarter the Company announced the results of domain composite testwork across the Century Tailings Deposit, showing highly consistent zinc recoveries of 61 to 64% into a concentrate grading 50 to 53% zinc.

Representative samples for each 'domain' were obtained from drilling associated with the announced Measured Resource estimate of the Century Tailings Deposit (see ASX announcement 12 September 2017).

The domain composite testwork was undertaken to provide further confirmation that the existing Century Processing Plant can be configured to achieve consistent zinc recoveries over the entire Century Tailings Deposit and therefore the life of proposed future operations.

As part of this testwork, the Company also combined representative samples from <u>all domains</u> to further validate the likely average overall performance of the Century Tailings Deposit. The results of this testing is also shown in Table 3 as the 'Combined Domains Test'.

**Phone** +61 (8) 6142 0989



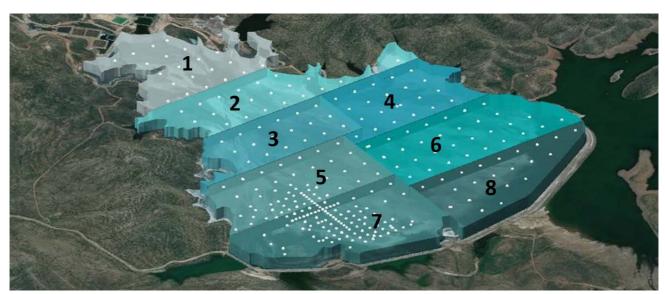


Figure 5: Century Tailings Deposit domain composite locations

Table 3: Overview of the Century Tailings Deposit domain testwork program

Measured Resource		Measured	Resource		Zinc Concentrate		
Drilling Samples	Tonnes	Zn %	Pb %	Ag g/t	Total Zinc Recovery	Zinc Grade	Silver Grade
Met Domain 1 Test	7.75Mt	2.86%	0.48%	12.8 g/t	63%	51%	208 g/t
Met Domain 2 Test	8.05Mt	2.96%	0.45%	12.1 g/t	63%	51%	195 g/t
Met Domain 3 Test	6.80Mt	2.90%	0.43%	11.7 g/t	62%	50%	188 g/t
Met Domain 4 Test	8.80Mt	3.05%	0.42%	10.5 g/t	64%	50%	167 g/t
Met Domain 5 Test	10.8Mt	2.93%	0.43%	11.7 g/t	61%	52%	198 g/t
Met Domain 6 Test	16.3Mt	3.14%	0.49%	13.1 g/t	63%	50%	202 g/t
Met Domain 7 Test	8.95Mt	2.97%	0.41%	10.6 g/t	62%	52%	166 g/t
Met Domain 8 Test	11.4Mt	3.18%	0.60%	15.4 g/t	64%	53%	259 g/t
Combined Domains Test	78.9Mt	3.02%	0.47%	12.4 g/t	63%	51%	213 g/t

The results in Table 3 show total recovery of zinc from both the flotation (sulphide) zinc source and the minor amount of water soluble zinc present in each domain.

The results of the individual domains received to date compare well with the Combined Domains Test result, which gave 63% zinc recovery into a concentrate grading 51% zinc & 213g/t silver.

**Phone** +61 (8) 6142 0989



### Strong Consistency in Particle Size Distribution & Metal Grade Profiles Across All Domains

As part of the domain composite testwork a comparative analysis was performed on the Measured Resource drilling samples from each domain to determine the consistency in both particle size distribution and metal distribution across the domains.

The analysis allows the Company to assess the likely feed consistency to the Century Plant over the life of operations, which is important for ensuring reliable and optimised Plant performance.

As Figures 6 to 8 show, the individual size fractions of each domain contain a similar particle size distribution, as well as consistent zinc and silver distribution. This further demonstrates the homogenous nature of the Century Tailings Deposit and provides confidence in the expected consistency in plant feed over the life of proposed future operations.

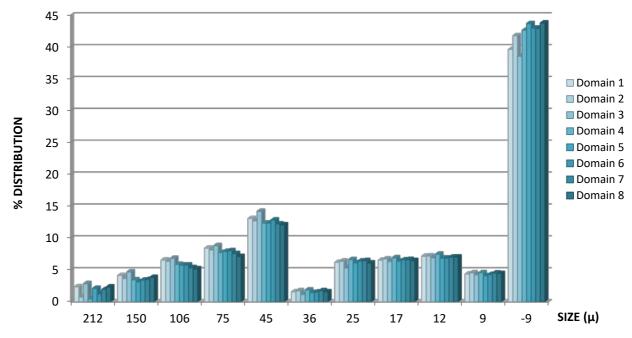


Figure 6: Weight % distribution across the size fractions within each domain of the Century Tailings Deposit (refer to Figure 5 for domain locations on the Century Tailings Deposit)

**Phone** +61 (8) 6142 0989



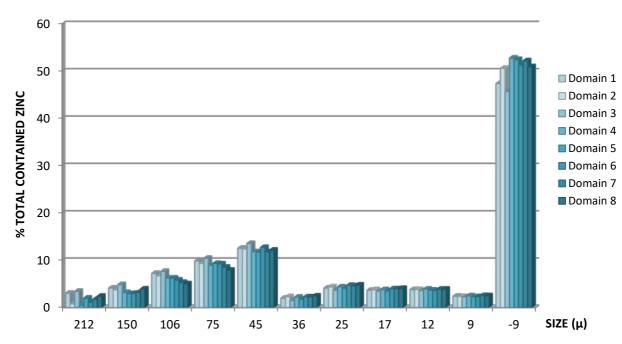


Figure 7: Zinc distribution across the size fractions within each domain of the Century Tailings Deposit (refer to Figure 5 for domain locations on the Century Tailings Deposit)

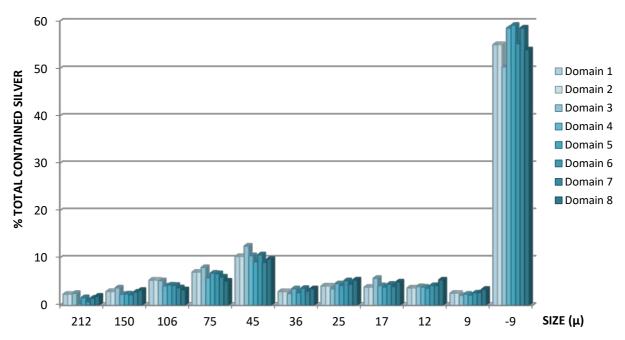


Figure 8: Silver distribution across the size fractions within each domain of the Century Tailings

Deposit (refer to Figure 5 for domain locations on the Century Tailings Deposit)

**Phone** +61 (8) 6142 0989



### Confirmation of Negligible Zinc Oxidation Across All Domains

As part of the Measured Resource drilling program, samples collected for the domain composite testwork were also analysed for zinc speciation in order to determine the level of oxidation within the Century Tailings Deposit.

Figure 9 shows the results of the testwork show relatively negligible oxidisation of the Century Tailings Deposit, with oxidised (i.e. water soluble) zinc averaging just 2.4% across all of the domains of the Century Tailings Deposit.

New Century still plans to recover soluble zinc as part of proposed future operations. Recovery of soluble zinc is a simple process that is common in the water treatment industry, involving the mixing of process water (containing dissolved zinc) with the commonly used reagent NaSH in an open stirred tank (infrastructure already on site). This process precipitates a relatively small amount of high purity zinc concentrate.

New Century has demonstrated recoveries of 90% of soluble zinc from the circuit into a clean precipitate that can then be combined with the main flotation concentrate.

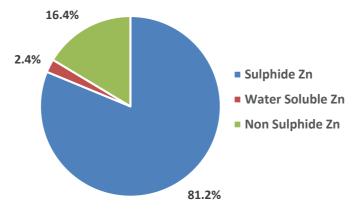


Figure 9: Weighted average composition of zinc within across all domain composites of the Century Tailings Deposit

### Carbon Flotation Commentary - Big Zinc/South Block vs Tailings

The historical processing of the original Century ore body utilised free flotation of carbon. The carbon within the ore body was at that time hydrophobic and floated without reagent assistance. Historical operations managed carbon efficiently within the existing Century Processing Plant via a carbon pre-float circuit. This consisted of simple flotation vessels for carbon removal prior to lead and zinc flotation circuits.

Unlike the original Century ore body and South Block, the current Century Tailings Deposit does not require discrete carbon management due to the fact that the carbon in the tailings dam has been

Melbourne Office Suite 4, Level 9, 350 Collins Street, Melbourne VIC 3000 Perth Office Suite 23, 513 Hay Street, Subiaco WA 6008 / O Box 1311, Subiaco WA 6904

**Phone** +61 (8) 6142 0989



completely wetted. That is, the historical flotation reagents used in processing have been soaked up by the carbon, resulting in the carbon becoming hydrophilic.

The benefit of carbon wetting within the Century Tailings Deposit is that, while carbon is still present in the ore body, it can now be simply and efficiently controlled by the same depressants (dextrin/F100) as other gangue material in the ore body (e.g. silica).

Therefore, the carbon pre-float circuit is not required for tailings reprocessing and carbon itself is not a discrete material that needs to be managed separately to other gangue material. Future operations that include the processing of South Block material will however require the restarting of the existing carbon pre-float circuit.

The management of carbon with other gangue material as opposed to separately within the tailings operations has been demonstrated in testwork performed by New Century, previous mine owners and in several different independent laboratories. It has also been demonstrated from samples obtained from multiple drilling programs across the entire Century Tailings Deposit (including a 10,000t bulk trial of tailings through the existing plant).

In addition, both New Century and previous mine owners have achieved concentrate grades of 50% or greater through tailings testwork utilising the existing Century Processing Plant flowsheet.

# South Block Resource Development

Subsequent to the quarter's end, the Company announced the completion of resource definition over the South Block mineralisation at the Century Zinc Mine.

Table 4: JORC Compliant Mineral Resources at the Century Zinc Mine (excluding Ore Reserves, rounding errors apply)

Deposit	Tonnes (Mt)	Zn (%)	Pb (%)	Ag (g/t)	Zn (t)	Pb (t)	Ag (Oz)
South Block (Indicated)	6.1	5.3	1.5	43	322,000	90,000	8,550,000

The South Block Indicated Mineral Resource complements already defined insitu Inferred Mineral Resources at Silver King and East Fault Block, demonstrating the significant upside for operations beyond the recently announced Restart Feasibility Study over the Proved Ore Reserve of the Century Tailings Deposit (77.3Mt at 3.1% ZnEq).

#### South Block Mineral Resource Overview

South Block is located on the southernmost portion of the original Century ore body and directly adjacent to the existing Century Processing Plant.

**Phone** +61 (8) 6142 0989





Figure 10: Location of the South Block Mineral Resource

The remaining Century-style Zn-Pb-Ag mineralisation in South Block is tabular in geometry and measures approximately 1,000m in length, 115m in width and is up to 30m thick. Mineralisation is encountered 21m below surface at the western extent, and is exposed in the southern pit wall.

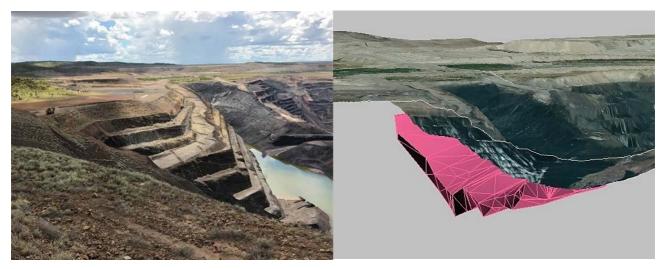


Figure 11: View facing West of the South Block Mineral Resource

**Phone** +61 (8) 6142 0989



### South Block Drilling

As part of the South Block Mineral Resource definition, diamond drilling was completed to obtain representative samples to support quality assurance and quality control checks of historic drilling.

The program consisted of two diamond drill holes through the central region of the deposit. The samples were used to locally validate the Indicated Mineral Resource estimate, and provide representative sample for metallurgical test work and metal recovery assumptions.

The results of the program confirmed the presence of a continuation of the original Century style 'Big Zinc' mineralisation in the South Block area. The results also compared well with historical drilling assays, and model estimates, in those areas of the mineralisation.

The Ordinary Kriging method was used for the grade estimate of the South Block Mineral Resource. Ordinary Kriging is widely considered the best linear unbiased estimation method and was considered appropriate given the close data spacing, and relative consistency within estimation domains at Century.

Estimation domains were stratigraphically defined using the established Century geological units, and have hard estimation boundaries applied.

The Indicated classification for the 2017 South Block Mineral Resource estimate considers the quality of the estimate based on the qualitative and semi-quantitative metrics of slope of regression and kriging efficiency; along with confidence in the geological understanding, and the data density across the deposit.

Drill hole spacing across the deposit is approximately 45m which is considered sufficient to give high confidence in the geological model in defining both the mode, and extents, of mineralisation.

The South Block Indicated Mineral Resource was reported at a 3.0% zinc equivalence (ZnEq) Cut-off grade. This value is considered to represent contiguous mineralisation above which grade there is reasonable potential for economic recovery.

#### Preliminary South Block Metallurgical Testwork

While South Block represents a continuation of the historical Big Zinc ore body, which was successfully mined and processed for over 16 years, New Century elected to complete metallurgical testwork on the drilling samples for confirmation of historical performance and potential areas of recovery optimistation.

Preliminary testwork completed to date has been positive, with the New Century metallurgical team confirming South Block will be suitable for processing via the existing plant configuration at the Mine. This includes the requirement for utilistion of the existing carbon pre-float circuit of the plant, which allows for the initial removal of carbon prior to lead then zinc flotation, ensuring target concentrate grades are maintained.



Recoveries of up to 82% zinc, 85% lead and 83% silver have been achieved to date. Further metallurgical testwork and optimisation is planned in the coming months in order to finalise sufficient inputs for New Century's planned Feasibility Study, which is detailed further in this announcement below (Expansion Feasibility Study).







Figure 12: Progressive flotation of the South Block ore samples, with upfront carbon pre-float (left) followed by lead concentrate flotation (middle) and final zinc concentrate flotation (right)

## South Block Preliminary Mining Assessment & Access Approvals

As previously announced on 6<sup>th</sup> September 2017, New Century has entered into a Collaboration Agreement with the Waanyi ReGen Joint Venture (WRJV) to assess the feasibility of open cut mining operations at the Century Zinc Mine, centered around the South Block Indicated Mineral Resource.

The WRJV is a joint venture between Waanyi Enterprises Pty Ltd and Downer EDI Mining Pty Itd, representing the interests of both the Waanyi People (traditional owners of the Century Mining Lease area) and Downer Group's (\$3.7B market capitalisation) mining services division.

As part of the Collaboration Agreement, New Century engaged the WRJV to carry out an initial assessment of mine design, engineering and costings for the development of South Block.

This initial assessment has demonstrated the potential for inclusion of South Block into the planned operations of the Mine. The results of this mining assessment will be utilised as the basis for New Century's planned Expansion Feasibility Study.

The Collaboration Agreement also provides for the potential future mining operations to be conducted by the WRJV, pending the outcome of the feasibility work commercial discussions.

Also, as part of the progression of development for the potential mining of South Block, New Century has initiated a process of obtaining all required Traditional Owner consents for earthworks and mining in the South Block area. This process is being conducted with the assistance of the Native Title representative body, the Waanyi PBC. Waanyi PBC must comply with its statutory

Melbourne Office Suite 4, Level 9, 350 Collins Street, Melbourne VIC 3000
Perth Office Suite 23, 513 Hay Street, Subiaco WA 6008 / O Box 1311, Subiaco WA 6904

**Phone** +61 (8) 6142 0989



Native Title obligations in relation to matters affecting the Waanyi people and these are separate to WRJV activities.

Traditional Owner consents include the development and approval of a Cultural Heritage Management Plan (CHMP) for the South Block area. New Century has been actively engaged with the Waanyi Community, through the Waanyi PBC, to work collaboratively on the development the CHMP. Activities are well progressed and are anticipated to be finalised in 1H 2018.

# **Expansion Feasibility Study**

The definition of the South Block has significantly increased the total Century Indicated and Inferred Mineral Resource base, which is in addition to the Proved Ore Reserve of the Century Tailings Deposit (77.3Mt at 3.1% ZnEq).

The total Mineral Resources at Century (excluding Ore Reserves) are:

9.3Mt at 10.8% Zn+Pb (6.1% Zn, 4.7% Pb & 66g/t Ag)

consisting of an Indicated Mineral Resource of 6.1Mt at 6.8% Zn+Pb (5.3% Zn, 1.5% Pb & 43g/t Ag) and total Inferred Mineral Resources of 3.2Mt at 18.4% Zn+Pb (7.6% Zn, 10.7% Pb & 109g/t Ag)<sup>1</sup>.

Further geological assessment is underway to assess the potential to upgrade the existing Inferred Mineral Resources, in addition to continued assessment of other identified deposits within the tenement package that are yet to be classified as JORC compliant Mineral Resources.

New Century is now planning the initiation of an Expansion Feasibility Study to assess the incorporation of these insitu resources into upcoming operations of the Century Zinc Mine. New Century considers that the Expansion Feasibility Study has the potential to increase the previously announced (tailings only) 6.3 year mine life at 264,000tpa full scale zinc metal production (see ASX announcement dated 28 November 2017)<sup>2</sup>.

The Expansion Feasibility Study is planned to begin in Q2 2018 and is expected to be completed prior to the end of year. The successful outcomes of the Study will be progressively incorporated into planned tailings operations, which remain on track to begin in Q3 2018.

<sup>&</sup>lt;sup>1</sup> See details of the individual Mineral Resource estimates in Table 5 of this announcement.

<sup>&</sup>lt;sup>2</sup> New Century Confirms that all material assumptions underpinning the zinc metal production target as announced on 28 November 2017 continue to apply and have not materially changed.



Table 5: JORC Compliant Mineral Resources & Ore Reserves at the Century Mine

Mineral Resources	Tonnes (Mt)	Zn (%)	Pb (%)	Ag (g/t)	Zn (t)	Pb (t)	Ag (Oz)
South Block (Indicated)	6.1	5.3	1.5	43	322,000	90,000	8,550,000
Silver King (Inferred)	2.7	6.9	12.5	120	186,000	337,500	10,500,000
East Fault Block (Inferred)	0.5	11.6	1.1	48	60,000	5,500	800,000
TOTAL	9.3	6.1	4.7	66	568,000	433,000	19,850,000
Ore Reserves	Tonnes (Mt)	ZnEq <sup>3</sup> (%)	Zn (%)	Ag (g/t)	Zn (t)	Pb (t)	Ag (Oz)
Century Tails (Proved)	77.3	3.1	3.0	12	2,287,662		29,734,819

Note: ZnEq was calculated for each block of the Century Tailings Deposit from the estimated block grades. The ZnEq calculation takes into account, recoveries, payability (including transport and refining charges) and metal prices in generating a zinc equivalent value for each block grade for Ag and Zn. ZnEq = Zn%+ + Ag troy oz/t\*0.002573. Metal prices used in the calculation are: Zn US\$3,000/t, and Ag US\$17.50/troy oz.

# Century Solar Project

During the quarter the Company announced that the first stage of a planned roll out of renewable energy generation within the mix of energy supply for the Century Zinc Mine has begun, with the engagement of SunSHIFT to provide a modular Solar PV array.

The successful integration of this initial system will be used to form the basis for development and roll out of a substantial solar power facility on site.

The initial solar facility will offset approximately 70,000 litres of diesel per annum, reducing both operating costs and the site's environmental impact.

Launching the Century Solar Power Generation Project at the Mine was Senator the Hon James McGrath, Assistant Minister to the Prime Minister. Senator McGrath said the Project illustrated New Century Resources' commitment to improving its environmental footprint as well as sourcing reliable, sustainable and affordable sources of power to support the Mine's restart of operations now with expansion into the future.

**Phone** +61 (8) 6142 0989

<sup>&</sup>lt;sup>3</sup> The ZnEq calculation is located below Table 5 of this announcement.





Figure 13: Modular solar system to be installed at the Century Mine

# **Corporate**

# Completion of a A\$53M Fully Underwritten Placement

During the quarter the Company announced the completion of a fully underwritten equity raising to raise gross proceeds of approximately \$52.9M by way of an institutional placement of approximately 44.1m ordinary shares to professional and sophisticated investors (Offer) at an issue price of \$1.20/share.

The Offer was significantly oversubscribed with strong support from a range of major domestic and international institutional investors.

The proceeds of the Offer are expected to contribute to funding the restart of operations at the Century Zinc Mine via initial tailings reprocessing, as well as funding the Company's corporate, general and administrative costs through to mid-2018.

Credit Suisse (Australia) Limited acted as sole lead manager, bookrunner and underwriter to the Offer. Tamesis Partners LLP acted as a co-lead manager.

**Phone** +61 (8) 6142 0989



# US\$45M Debt Facility with Sprott Resource Lending

During the quarter the Company announced the signing of a legally binding, conditional term sheet, for a US\$45.0M (~A\$58.0M) debt facility with global resources fund Sprott Resource Lending (Sprott).

Summary details of the facility are set out below:

Table 6: Summary of terms of Sprott debt facility

Debt Facility Terms Summary				
Total Debt Facility	US\$45,000,000 ~A\$58,000,000			
Term	3 years from closing date			
Amortisation	Equal instalments after 1st anniversary of closing			
Interest Rate	10% per annum			
Equity Fee	1,687,500 NCZ Ordinary Shares			
Security & Ranking	Senior secured, first ranking			
Hedging	None			
Cashflow Sweep	None			
Cost Overrun Facility	None			

Completion of the debt facility remains conditional on, amongst other conditions, completion of legal and technical due diligence and formal documentation. Subject to the satisfaction of these conditions, New Century expects final agreements to be concluded in Q1 2018 and full details will be announced.

Sprott Resource Lending is a division of Sprott Inc., a leading natural resource-focused investment firm with more than US\$7 Billion in resource sector investments.

The Sprott approach is focused on collaboration and partnership. Working with management, Sprott optimises the financial structure of each facility to best suit the particular needs of the company.

New Century's advisors for the proposed debt facility are Tamesis Partners LLP, a specialist ECM and advisory house with a focus on the mining sector.

# New Century Resources to Move to 100% Interest in Century Zinc Mine

During the quarter Company announced the conditional acquisition of the final remaining 30% minority interest in the Century Zinc Mine. The proposed acquisition will move the Company to 100% interest in the Project.

**Phone** +61 (8) 6142 0989



The acquisition of the final interest is to be achieved through the purchase of Century Bull Pty Ltd (Century Bull), which holds a 30% interest in Century Mine Rehabilitation Project Pty Ltd (CMRP) which is the owner of all assets associated with the Century Zinc Mine and supporting logistics infrastructure. New Century Resources owns the remaining 70% of CMRP.

In accordance with Listing Rules 7.1, 10.1 and 10.11 and section 611 item 7 of the Corporations Act, the proposed transaction requires New Century shareholder approval, with the Notice of Meeting to contain an independent expert report. Notice materials have been sent to shareholders subsequent to the quarter's end, with the meeting and shareholder vote scheduled to occur on the 23 February 2018.

The proposed transaction structure is a simple equity transfer deal given both New Century Resources and Century Bull own a percentage of the same asset (being CMRP). It is proposed that New Century Resources move from 70% to 100% ownership in CMRP through the issuance of 30% of its capital structure to existing shareholders of Century Bull.

The total allocation of equity securities to Century Bull shareholders for the acquisition will be:

126,000,000 NCZ ordinary shares; and

79.9M

 35,000,000 NCZ options with a three year expiry and an average exercise price of \$0.42/share (see Table 8 for detailed breakdown of NCZ option pricing).

**Proposed Century Bull Current NCZ Revised NCZ Capital Capital Structure Equity Allocation Structure** Century Project Interest 70% Project Interest 30% **Project Interest 100%** Bull % **NCZ Shares** 341.2M 126.0M 467.2M 27.0%

35.0M

114.9M

30.5%

Table 7: Overview of proposed acquisition terms and revised NCZ capital structure

All equity securities issued under the proposed transaction will be subject to 12 months escrow.

The proposed NCZ options allocation within Table 7 is split evenly amongst the existing NCZ option exercise prices of the current capital structure of the Company, as shown in Table 8:

Phone +61 (8) 6142 0989

**NCZ Options** 



Table 8: Detailed breakdown of proposed options allocation and revised NCZ capital structure

	Current NCZ Capital Structure	Proposed Century Bull Equity Allocation	Revised NCZ Capital Structure	
Option Pricing	Project Interest 70%	Project Interest 30%	Project Interest 100%	Century Bull %
\$0.25	51.4M	22.0M	73.4M	30.0%
\$0.50	13.5M	6. <i>0</i> M	19.5M	30.8%
\$0.75	7.5M	3.5M	11.0M	31.8%
\$1.00	7.5M	3.5M	11.0M	31.8%
NCZ Options	79.9M	35.0M	114.9M	30.5%

The average exercise price of the proposed 114,900,000 options on issue (post transaction completion) is \$0.41/share, representing an additional \$47.4M in additional cash for the Company should all options be exercised.

Pending shareholder approval, all other requirements associated with the current earn-in agreement between New Century and Century Bull (see ASX announcement dated 19 July 2017) will be extinguished as part of the proposed transaction.

This includes the current contractual requirement for New Century to commit A\$10,000,000 in project development expenditure to earn the initial 70% interest in CMRP.

### Key Development Team Appointments

During the quarter and subsequent to the quarter's end, the Company announced a significant bolstering of the Company's project delivery and operational capabilities through several key additions to the Board and Management team. Details of each new hire as listed below.

# Mr Peter Watson - New Century Director

Peter Watson is a chemical engineer with over 30 years' experience in the resources sector, both in Australia and overseas. He has held technical and executive roles with a number of companies throughout his career, culminating in his appointment as the MD & CEO of Sedgman Limited, a market leading engineering and mining services firm.

Initially joining Sedgman as COO Metals Division in 2010, Peter successfully led and supported the development and execution of EPC and Operations Contracts in excess of A\$2 Billion as he progressed through roles as Executive General Manager (2011 - 2012) and Global Executive Director (2012 - 2014), before being made MD & CEO (2014 - 2016).

**Phone** +61 (8) 6142 0989



During this time at Sedgman, Peter provided leadership and guidance across a suite of over 10 large scale Mine Operations contracts and over 30 EPC contracts across a broad spectrum of commodities.

He was also instrumental in delivering significant growth of the Company, with Sedgman's market capitalisation doubling during the period he was MD & CEO, prior to a takeover by the CIMIC Group in 2016.

Peter was widely credited with the transformation of Sedgman through a strong focus on people and culture on a global scale.

Peter brings to New Century a successful background in project development and delivery, as well as asset optimisation & maintenance capabilities and organisational leadership experience. He also brings significant board level experience at both the public and wholly owned company level, particularity on matters covering safety, governance, financial reporting, risk management, strategy and leadership.

### Mr Bill Wise - New Century Marketing Consultant

Bill is a highly experienced and globally recognised base metal and concentrate marketing consultant, with an unmatched understanding of Century zinc concentrate and downstream smelting of Century product.

He was previously the General Manager for global metal and concentrate marketing and sales for Zinifex Ltd (historical owner of the Century Zinc Mine) and was responsible for the first zinc and lead offtake contracts established for the Century mine.

During his time at Zinifex, Bill managed marketing budgets in excess of A\$2 Billion per annum turnover and negotiated annual contracts now recognised as industry standard concentrate terms.

Bill was also responsible for managing the purchasing of large volumes of base metal concentrate for the various Zinifex smelters for more than a decade. From these smelters he also managed the sales of finished metal products, including special high grade zinc, diecasting alloys and continuous galvanising grade zinc.

Bill has been appointed to lead the activities of the Company in negotiation and securing of zinc concentrate offtake agreements and establishing the New Century marketing division.

# Mr Simon Beach - New Century General Manager HR

Simon is a highly experienced Human Resources executive with over 25 years in the mining industry.

Having worked for MIM Holdings Limited (Xstrata now Glencore), Henry Walker Eltin and most recently as HR General Manager for Newcrest Mining Limited (ASX: NCM), Simon has a deep understanding of Human Resources with experience in large complex remote mining operations both within Australia and offshore.

**Phone** +61 (8) 6142 0989



Simon's role at Newcrest included both global onshore and offshore HR functions with a key focus on people strategy, culture, organisational development, remuneration and benefits, attraction of talent, succession, workers compensation and industrial relations.

He also led a team which played a key role in Newcrest being awarded both the 2012 and 2013 Randstad Australia Award for Most Attractive Employer in the Mining and Natural Resources Sector.

Two key additions have been made to the New Century team to assist with expediting the restarting of operations at the Century Zinc Mine. Mr Bill Wise has joined as Marketing Consultant and Mr Simon Beach has joined as General Manager HR.

### Mr Adam Clark - Head of Processing & Pipeline

Adam is an experienced metallurgist and plant operator with 24 years' experience in the resources industry. He has held a number of senior technical and management roles including most recently as Zinc Operations Manager at Glencore's Mt Isa Mines operations and as Processing Manager at Newcrest Mining's Lihir operations.

Adam joins New Century as the Head of Processing and Pipeline at the Century Mine. His experience in operating large processing plants, particularly on Lihir Island and at Mount Isa, will be invaluable as the Company moves toward restarting the Century Processing Plant as part of scheduled operations in 2018.

### Mr Stuart Brown - Group Financial Controller

Stuart has joined New Century as Group Financial Controller based in the corporate office in Melbourne. Previously Stuart was Finance Manager/CFO at Glencore's CSA Mine in Cobar, and has also held a number of senior finance roles over his career with mining and metals processing companies including Nystar, Xstrata and Placer Dome, both within Australia and offshore.

Stuart has extensive experience in base metal operations from mine through to smelter. At Nystar for example, he was responsible for the financial management and corporate compliance of eight mines and smelters in six different countries.

He is recognised as having a track record in systems development and management of rapidly growing companies, including experience with change management and successful team building.

#### Mr Tim Edwards - Mining Technical Services Manager

Tim has strong experience in all technical aspects of open pit mining operations, including drill and blast, load and haul, contractor management and supervision, site rehabilitation, feasibility studies, operational planning and budgeting. His experience spans across a range of commodities including base metals, gold, iron ore and coal.

Tim has also previously spent a brief period working at Century for previous mine owners.

**Phone** +61 (8) 6142 0989



Tim joins New Century from contracting roles within BHP's Technology Strategy and Innovation Department. He has spent over 10 years in the Technical Departments of mines in Queensland, Western Australia, the Northern Territory and New Zealand.

# Mr Greg O'Shea - Port Operations Manager

Greg is an experienced operations and project management professional with extensive experience in capital intensive port, logistics and heavy industry management. Recently he has held management roles with Glencore and Xstrata at their shipping and port facilities in Townsville.

Prior to that, Greg was the Engineering Manager with MIM Holdings (Shipping & Transport) and also the Operations Manager at Abbott Point Bulk Coal Terminal.

Greg joins the Company with a focus on streamlined management of all facets of the port at Karumba, in particular focusing on ensuring that the facility is ready to handle the first delivery of zinc concentrate in the second half of 2018.

# Other Projects: Kodiak Coal Project (NCZ 70%)

The Kodiak Coal Project is currently on care and maintenance.

The Company continues to consider options with regards to the future of the Kodiak Coking Coal Project in Alabama, USA, including assessing options in relation to financing, joint venture opportunities or a disposal of the asset.

#### For further information please contact:

Patrick Walta - Managing Director +61 (08) 6142 0989



### Competent Persons Statement

#### Mineral Resources

The information in this announcement that relates to Inferred Mineral Resources on the Silver King Deposit and the East Fault Block Deposit was first reported by the Company in its prospectus released to ASX on 20 June 2017, and the South Block Deposit was first reported by the Company to the ASX on 15 January 2018. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements, and in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement 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 form the original market announcement.

#### Ore Reserves

The information in this announcement that relates to the Ore Reserve at the Century Tailings Deposit was first reported by the Company in its ASX announcement titled "New Century Reports Outstanding Feasibility Results that Confirm a Highly Profitable, Large Scale Production and Low Cost Operation for the Century Mine Restart" dated 28 November 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, and in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement 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 form the original market announcement.

Phone +61 (8) 6142 0989 info@newcenturyresources.com www.newcenturyresources.com



# Appendix 1:

The following information is provided pursuant to Listing Rule 5.3.3 for the quarter ended 31 December 2017:

Project	Location	Status	Interest
Century Zinc Mine	Queensland, Australia		
ML 90058	Lawn Hill	Granted	70%
ML 90045	Lawn Hill	Granted	70%
EPM 10544	Lawn Hill	Granted	70%
Kodiak Coking Coal Project	Alabama, USA		
Coke Seam, Gurnee Property	Shelby & Bibb Counties	Lease	70%
Atkins Seam, Gurnee Property	Shelby & Bibb Counties	Lease	70%
Gholson Seam, Gurnee Property	Shelby & Bibb Counties	Lease	70%
Clark Seam, Gurnee Property	Shelby & Bibb Counties	Lease	70%

No tenements were disposed of during the quarter.

Phone +61 (8) 6142 0989

Email info@newcenturyresources.com www.newcenturyresources.com