



**CELSIUS**  
**RESOURCES LTD**

**Chamber of Mines Namibia Mining  
Conference**

**Opuwo Cobalt Project**

**26 April 2018**

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*All amounts in AUD unless stated otherwise.*

# Corporate

## Capital Structure

- 601.9M shares (CLA)
- 70.5M listed options (CLAO – AUD 0.01 strike)
- Mkt Cap AUD 134M at \$0.20 (CLA+CLAO)
- Cash - approx. \$4.3 million (end Dec, 2017)

## Major Shareholders

- Gecko Namibia (Pty) Ltd 8.48%
- J P Morgan Nominees 4.27%
- CitiCorp Nominees P/L 3.26%
- Borg Family Super Fund 2.67%
- Featherbed Australia P/L 2.54%
- HSBC Custody Nominees 2.46%
- Pheakes P/L 2.42%
- Brijohn Nominees P/L 2.31%

## Directors/Management

- Brendan Borg (Managing Director)
- Bill Oliver (Non Exec Chairman)
- Pine van Wyk (Non Exec Director)
- Ranko Matic (Non Exec Director)
- Melanie Ross (Company Secretary)
- Edward Legg (Project Development Manager)
- Rainer Ellmies (Gecko GM Exploration)
- Kaarina Ndalulilwa (Senior Geologist)
- Gideon Kalumbu (Senior Geologist)

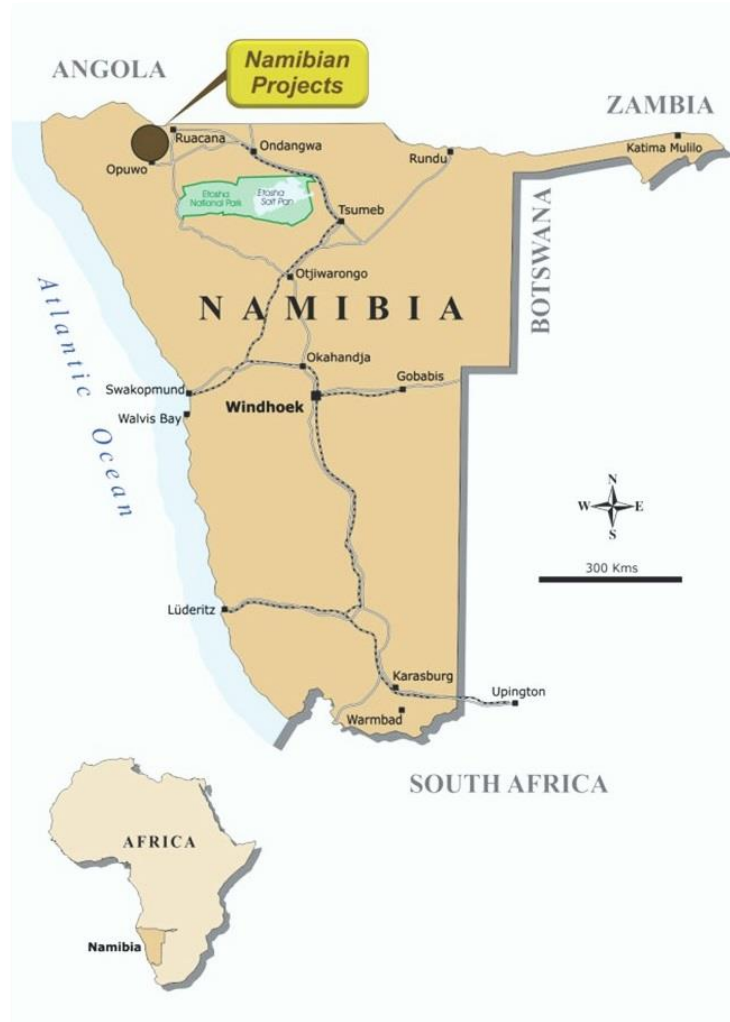
# Cobalt: a commodity in demand



- Substantial price appreciation over past two years to over USD 90,000/tonne.
- Battery Grade cobalt chemicals have seen greater price increases than equivalent LME metal prices.
- Shift of Chinese EV manufacturers towards cobalt based lithium ion batteries.
- DRC dominant source - security and diversity of supply concerns.

Source: [InfoMine.com](http://InfoMine.com)

# Namibia: A Premier Mining Destination

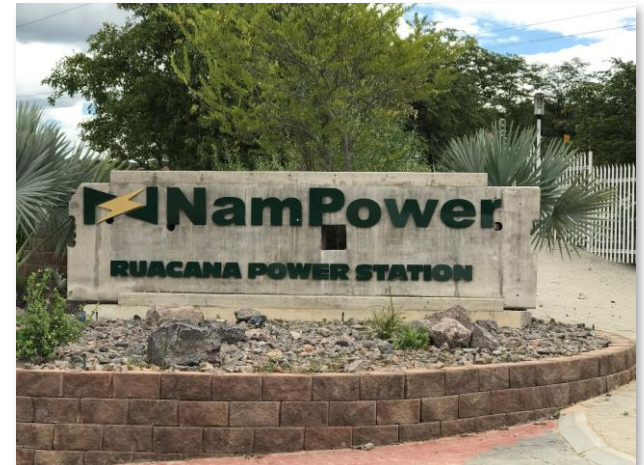


- Politically & socially stable:
  - Strong rule of law.
  - National development agenda.
  - Walvis Bay Export Processing Zone - favourable tax considerations.
- Excellent project infrastructure:
  - Regional capital Opuwo (supplies, airport, hospital).
  - Sealed roads from Opuwo to Windhoek and Walvis Bay Port.
  - 320MW hydro electric power station at Ruacana linked to 330kV power grid.
  - 66kV and 33kV lines at Project.



# Infrastructure

- Power and water at Project site.
- Excellent road Infrastructure.
- Services in nearby regional capital, Opuwo.
- Walvis Bay Port.



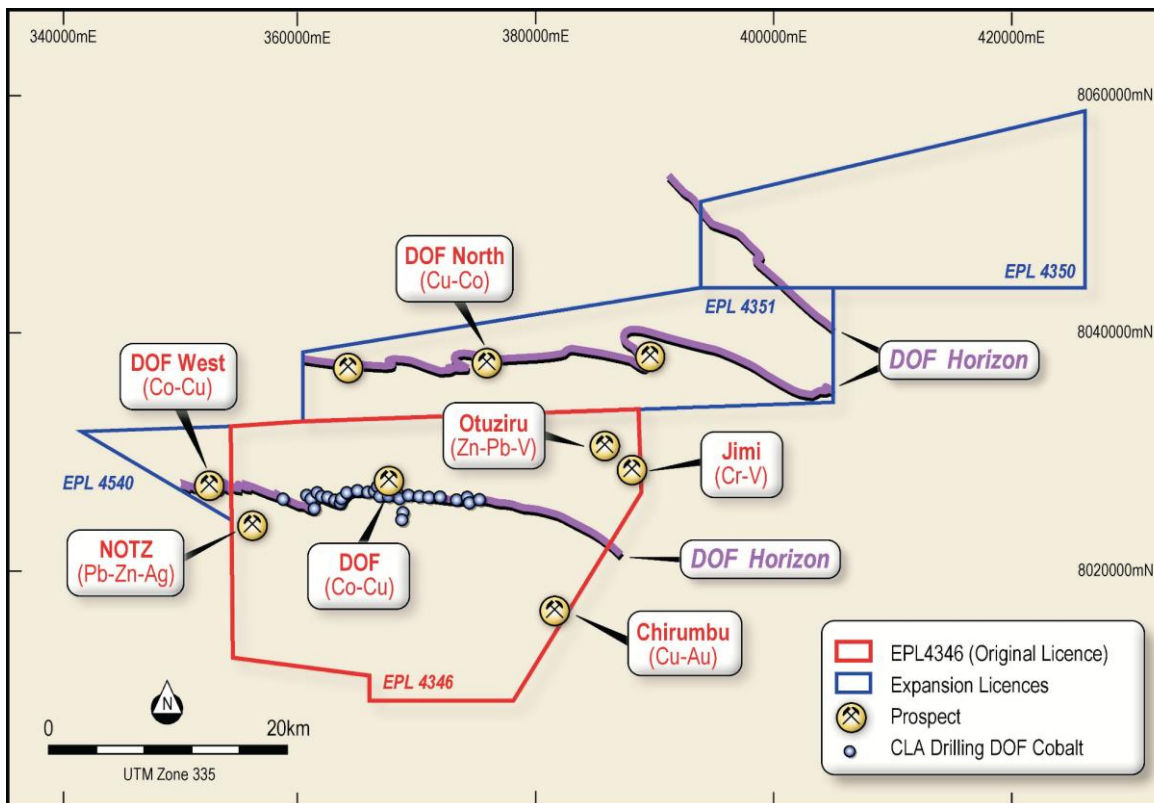
# Project Ownership Structure

- Celsius moved to immediate 95% interest in Opuwo Cobalt Project in September, 2017 (5% loan carried share remains with Namibian Former Robben Island Political Prisoners' Trust).
- Gecko Namibia is the largest shareholder of Celsius as a result of the transaction, and subsequent participation in latest capital raising (8.48%).
- New licences surrounding Opuwo totaling approximately 782 km<sup>2</sup> acquired from Gecko Namibia (total project area now approximately 1,470 km<sup>2</sup>).
- Over 100 km of cobalt-copper prospective horizon now under control of Celsius.
- Gecko is a diversified mining services, mining, and exploration company - currently operating mines in Namibia.
- Provides Celsius exploration management and drilling services in country.



# Large-scale Cobalt-Copper Targets

- Mineralisation hosted in Neoproterozoic sediments of the Kaoko Belt (the western extension of the Copper Belt in DRC and Zambia).
- Dolomite Ore Formation (DOF) is a carbon rich, marly dolomitic horizon in a sequence of clastic and carbonate lithologies in the upper Ombombo Subgroup.



- Maiden JORC Mineral Resource defined over **10 km** strike.
- Mineralisation intersected over a **15 km** zone in initial Celsius drilling, confirmed by assays.
- Over **100 km** of potentially mineralised strike - large scale Project.
- Potential for additional mineralised zones, adjacent and parallel to known mineralisation.
- **Outcrops at surface.**
- **Low in deleterious elements (As, Cd, U).**
- **Cobalt present as linnaeite (Co sulphide).**
- Other targets: Zn-Pb-V, Cu-Au, Cr-V, Pb-Zn-Ag.



# Maiden JORC Mineral Resource

- The Mineral Resource estimate comprises **112.4 million tonnes** at a grade of **0.11% cobalt, 0.41% copper, and 0.43% zinc**, at a cutoff grade of 0.06% (or 600 ppm) cobalt. The Mineral Resource estimate represents contained cobalt of **126,100 tonnes** and consists of:
  - **72.0 million tonnes** at a grade of **0.11% cobalt, 0.42% copper and 0.41% zinc** in the **Indicated** category, and a further
  - **40.5 million tonnes** at a grade of **0.12% cobalt, 0.41% copper and 0.46% zinc** in the **Inferred** category.
- The resource has been further split by ore type, with over 95% of the Mineral Resource is comprised of the fresh sulphide ore type, a key feature of the Opuwo Project.
- **126,100 tonnes of contained cobalt** significantly exceeds the Company's expectation and its previously announced exploration target.
- Mineralised zones comprising the resource are open in all directions, with excellent scope for expansion with further drilling.
- The Mineral Resource will form the basis of the Project Scoping Study for Opuwo, for which key work programs are advancing well, with delivery expected late in Q2, 2018.

# Maiden JORC Mineral Resource Tables

## JORC Compliant Indicated and Inferred Mineral Resource

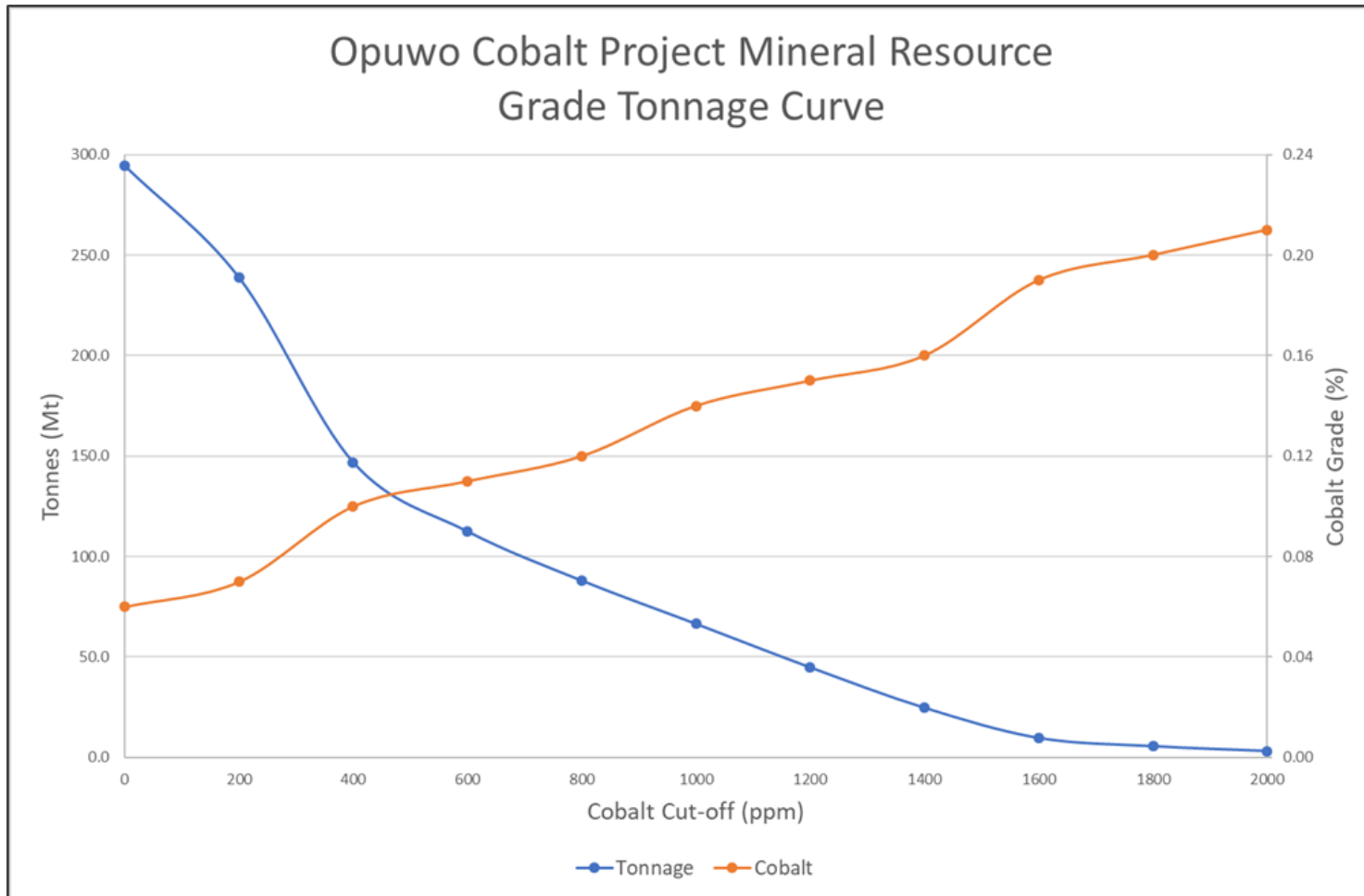
Category	Ore Type	Cobalt Cut-off (ppm)	Tonnage (Mt)	Cobalt (%)	Copper (%)	Zinc (%)	Contained Cobalt (t)
Indicated	Oxide	600	3.8	0.10	0.39	0.36	3,900
	Transition - Sulphide	600	1.6	0.10	0.42	0.38	1,700
	Fresh - Sulphide	600	66.5	0.11	0.42	0.41	73,700
TOTAL INDICATED		600	72.0	0.11	0.42	0.41	79,300
Inferred	Fresh - Sulphide	600	40.5	0.12	0.41	0.46	46,900
TOTAL		600	112.4	0.11	0.41	0.43	126,100

## JORC Compliant Indicated and Inferred Mineral Resources at Various Cobalt Cut-off Grades

Cobalt Cut-off (ppm)	Tonnage (Mt)	Cobalt (%)	Copper (%)	Zinc (%)	Contained Cobalt (t)
0	294.4	0.06	0.24	0.33	177,100
200	238.7	0.07	0.28	0.37	169,100
400	146.7	0.10	0.37	0.41	142,800
<b>600</b>	<b>112.4</b>	<b>0.11</b>	<b>0.41</b>	<b>0.43</b>	<b>126,100</b>
800	87.9	0.12	0.44	0.44	109,100
1000	66.4	0.14	0.46	0.45	89,700
1200	44.7	0.15	0.49	0.46	66,000
1400	24.6	0.16	0.50	0.47	40,000
1600	9.6	0.19	0.46	0.45	17,900
1800	5.5	0.20	0.45	0.42	10,900
2000	3.1	0.21	0.45	0.34	6,300

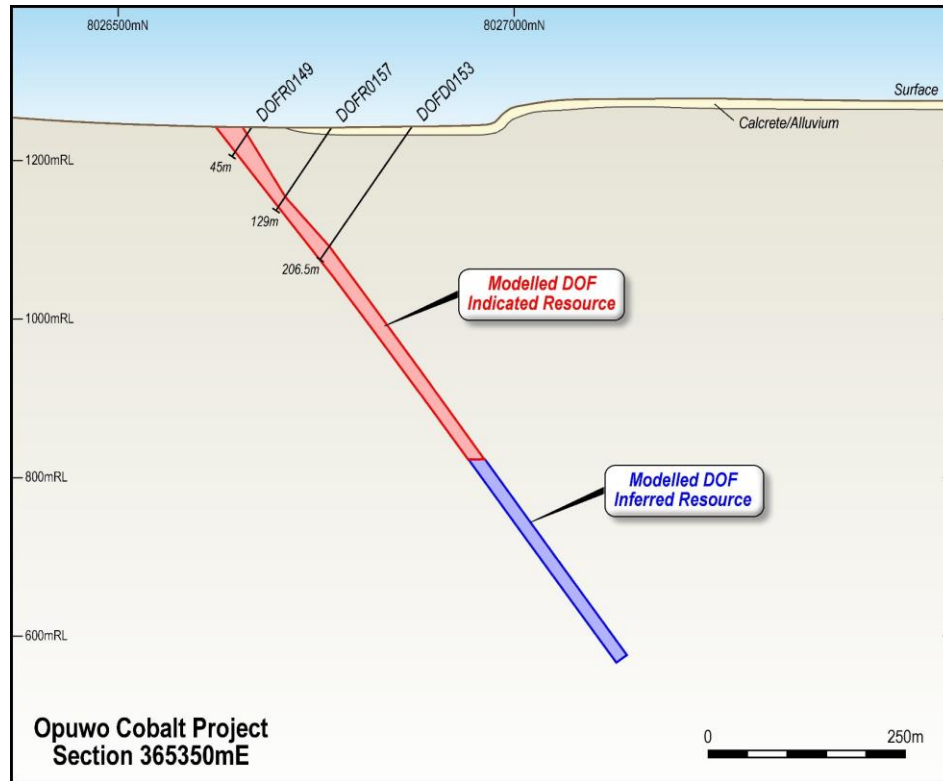
\* Note that minor rounding errors occur in these tables.

# Mineral Resource Grade Tonnage Curve

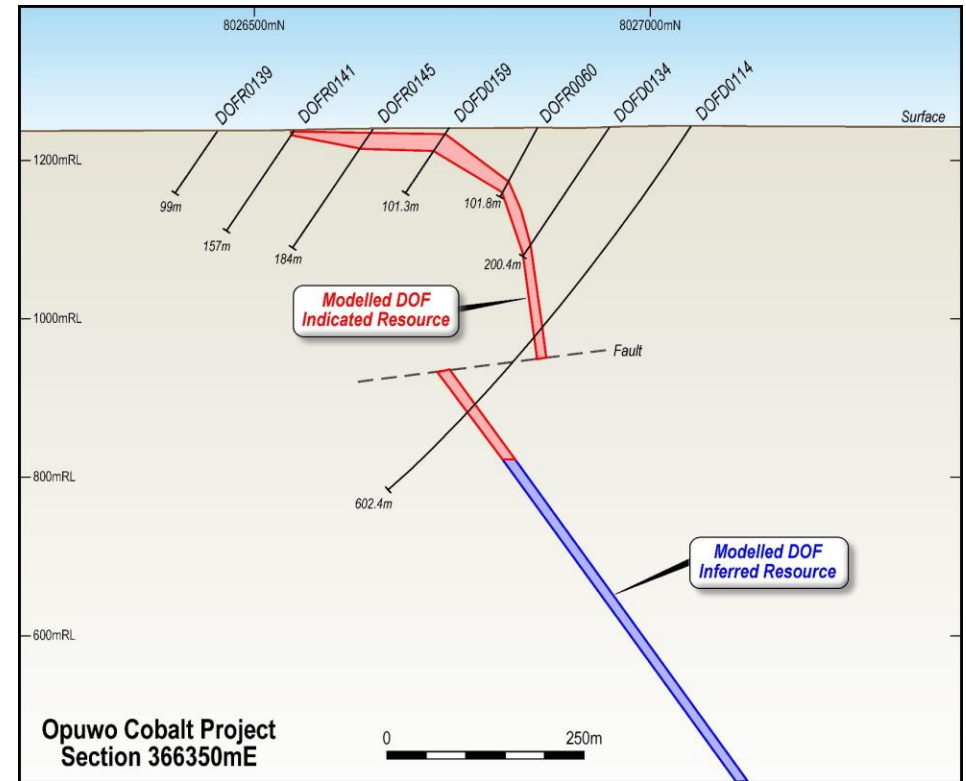


# Maiden JORC Mineral Resource Cross Sections

Cross Sectional View - Section 365350mE



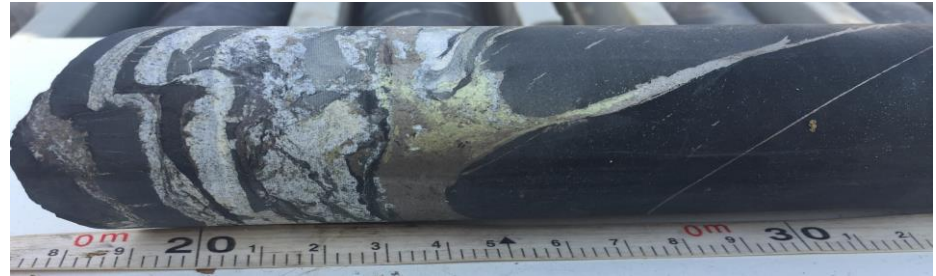
Cross Sectional View - Section 366350mE





# Simple, sulphide-hosted mineralogy

- Disseminated and vein-hosted sulphides.
- Mineralisation is chalcopyrite (copper), linnaeite (cobalt), sphalerite (zinc) plus iron sulphides (pyrite/pyrrhotite).
- Flotation testing showed up to 88% of cobalt recoverable into sulphide concentrate.
- Closed circuit flotation recoveries of 80% at a concentrate grade of up to 1.5% cobalt.
- Further work planned to establish optimised flotation parameters, which will consider saleable concentrate specifications and downstream leach processing requirements.



# High leach extraction of cobalt and copper

- Employing an approximately 1% cobalt grade flotation concentrate, 8 different leach regimes were explored.
- Cobalt extraction in autoclave oxidative leaches were typically greater than 95% at temperatures of 115, 135 and 155 deg C and 800 kPa oxygen pressure.
- Copper extractions in these leaches were typically greater than 94%.
- Data suggests that the classical processes of copper SX-EW (Solvent extraction, electrowinning) and cobalt sulphate crystallisation can be employed to produce saleable products.
- Process is acid generating - low additional acid requirements.



# Scoping Study Activities

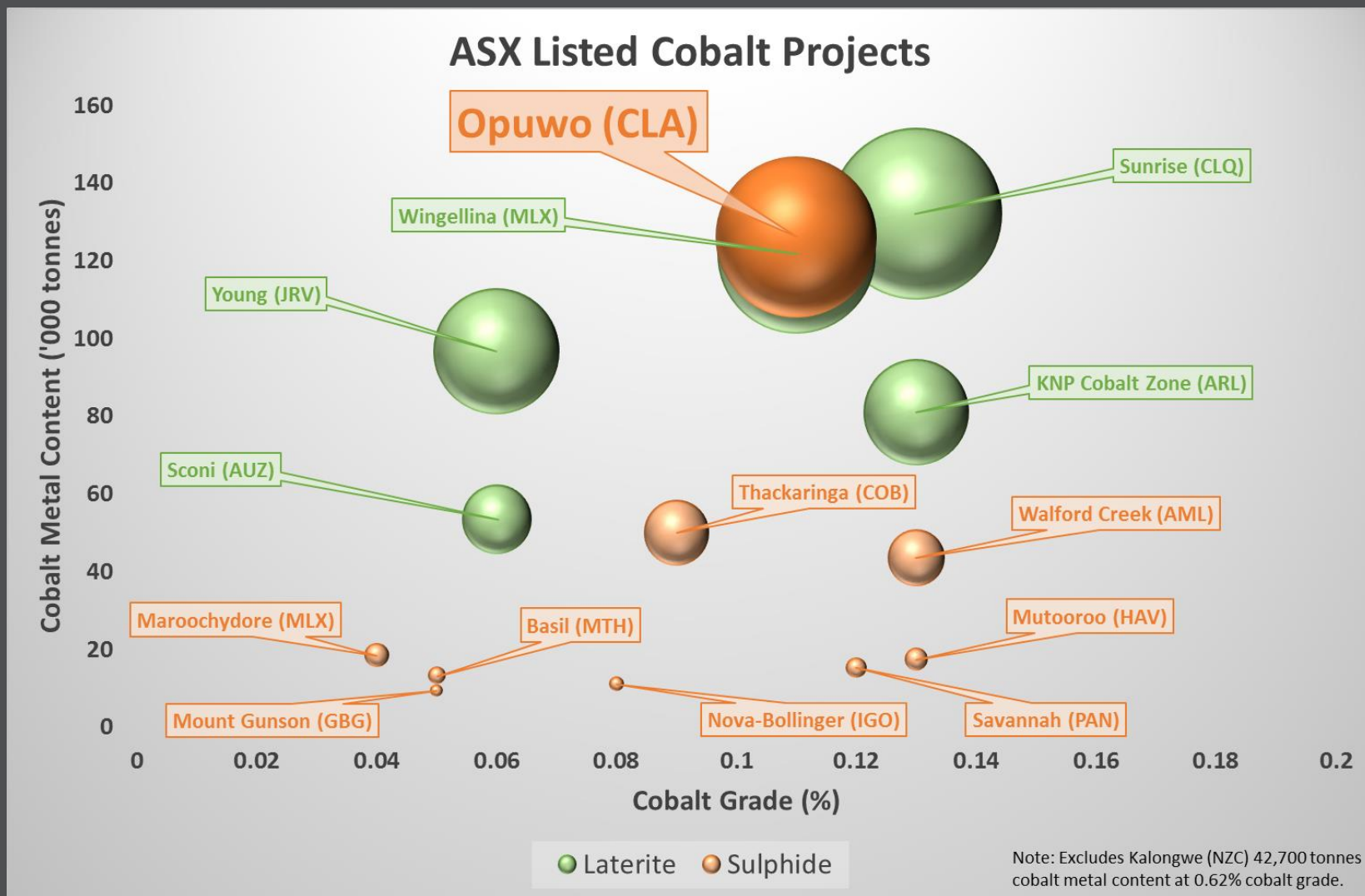
- Project Development Manager (Edward Legg) appointed to manage studies.
- Key consultants appointed:
  - Metallurgy - Orway Mineral Consultants (OMC), Hydromet Pty Ltd and SGS Australia.
  - CAPEX/OPEX Estimates - Orway Mineral Consultants (OMC).
  - Mining Studies – Pivot Mining Consultants (supported by Gecko Namibia).
  - Resource Modeling and Estimation - DMT Kai Batla.
  - Environmental, water and social studies - SLR Environmental
- Scoping Study targeted for late Q2, 2018 completion.



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# Peer Comparison





# Social Responsibility and Community Work

- Very good relationship with the local communities from the beginning due to proactive approach
- **Celsius built a Kindergarden at Okondaurie village**
- Emphasis on employment creation for the local communities: Between 40 and 80 workers from surrounding villages employed in year 1
- **All exploration work is performed by Namibians**
- Integration of local labour force into project team: Training on the job provided
- **Support of communities through water supply**
- Formation of a CSR Steering Committee with all relevant stakeholders



# Planned Next Steps

- **Continue exploration for expansion of mineralisation with further drilling.**
- Exploration of other targets across the project area (April, 2018).
- **Complete and report Project Scoping Study (targeted for late Q2, 2018).**
- Commence Pre-Feasibility Study (late Q2, 2018).\*
- **Extensive infill and extension resource drilling program (late Q2, 2018).\***

\* Assuming positive Scoping Study outcome

# Competent Persons Statement

*Information in this report relating to Exploration Results is based on information reviewed by Mr. Brendan Borg, who is a Member of the Australasian Institute of Mining and Metallurgy and Managing Director of Celsius Resources. Mr. Borg 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 by the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Borg consents to the inclusion of the data in the form and context in which it appears. The Exploration Results are based on standard industry practices for drilling, logging, sampling, assay methods including quality assurance and quality control measure as detailed in the ASX announcements referred to in this presentation.*

*Information in this report relating to Mineral Resource Estimates is based on information prepared by Mr. Dexter Ferreira, who is a Member of the South African Council for Natural Scientific Professions, which is a Recognised Professional Organisation (RPO). Mr. Ferreira is a Contract Resource Specialist for DMT Kai Batla Pty. Ltd., who act as Resource Consultants to Celsius. Mr. Ferreira 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 by the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Ferreira consents to the inclusion of the data in the form and context in which it appears.*







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