

**Präsentation am 20.04.2024 beim**

# **Arbeitskreis**

**Papua-Neuguinea, Pazifik, Ostasien (PPO)**

**19./20. April 2024, Freitag und Samstag**

**Mission EineWelt in Neuendettelsau**

# **Wege zur Ressourcen- gerechtigkeit**

Diese vorläufige Version ist für die Teilnehmenden der Veranstaltung.

Es wird demnächst noch eine ausführliche Fassung dazu geben.

Danke für das Interesse, Eckart Garbe

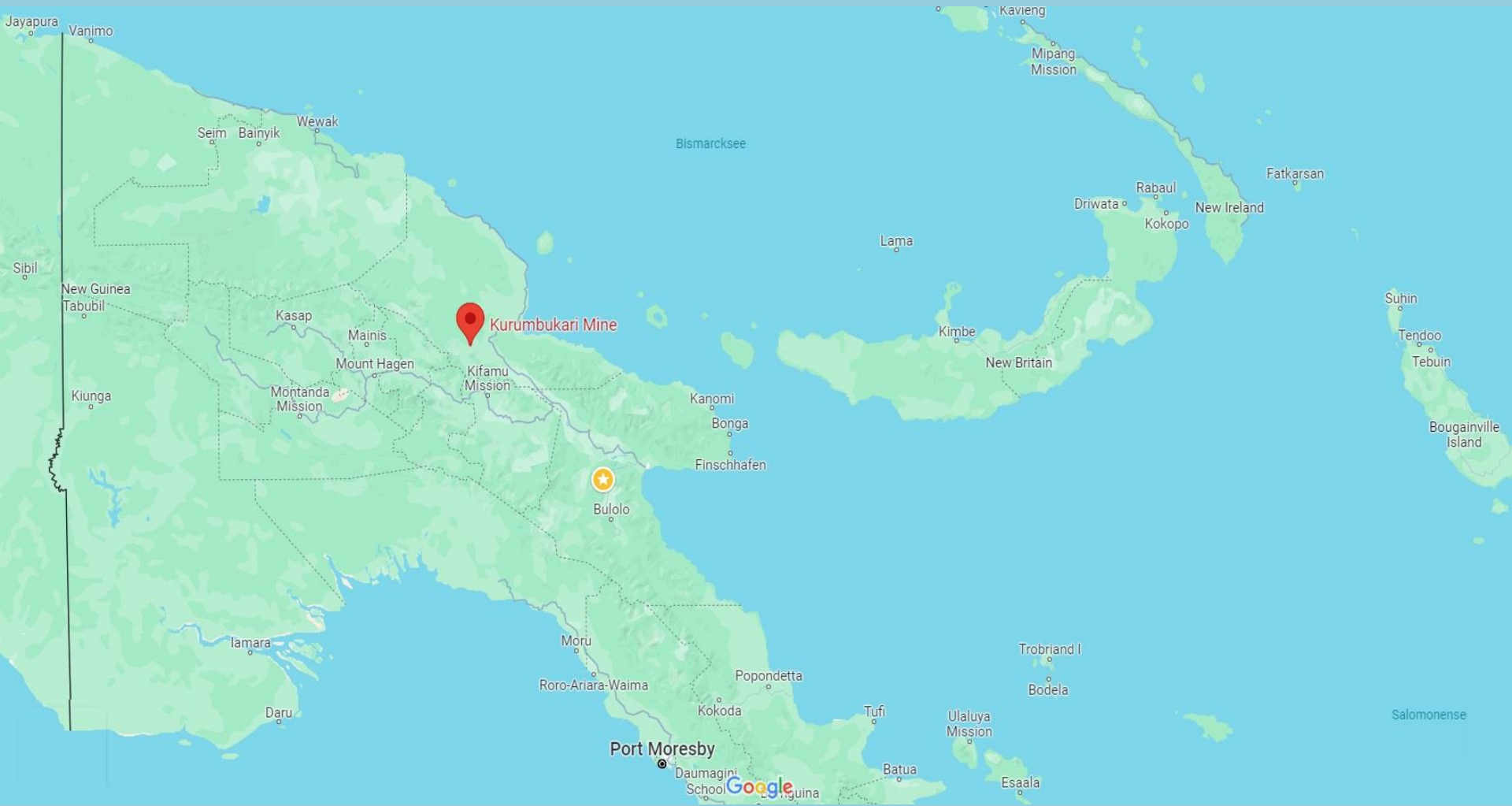


瑞木镍钴管理（中冶）有限公司  
RAMU NICO MANAGEMENT(MCC) LIMITED

## PNGs Ramu Mine:

**Wem nützt sie? Was kostet sie?**

**Wer braucht diese Rohstoffe?**



**Kurumbukari Mine**

**Port Moresby**

Daumagini School **Google** Papua New Guinea

Bulolo

Bismarcksee

Salomonense

Jayapura Vanimo

Seim Bainyik Wewak

Sibil New Guinea Tabubil

Kasap Mainis Mount Hagen Kifamu Mission

Montanda Mission

Kiunga

Iamara

Daru

Moru Roro-Ariara-Waima

Popondetta Kokoda

Tufi

Batua

Ulaluya Mission

Trobriand I Bodela

Kanomi Bonga Finschhafen

Kimbe

New Britain

Lama

Driwata Rabaul Kokopo

New Ireland

Fatkarasan

Suhin Tendoo Tebuin

Bougainville Island

Kavieng Mipang Mission



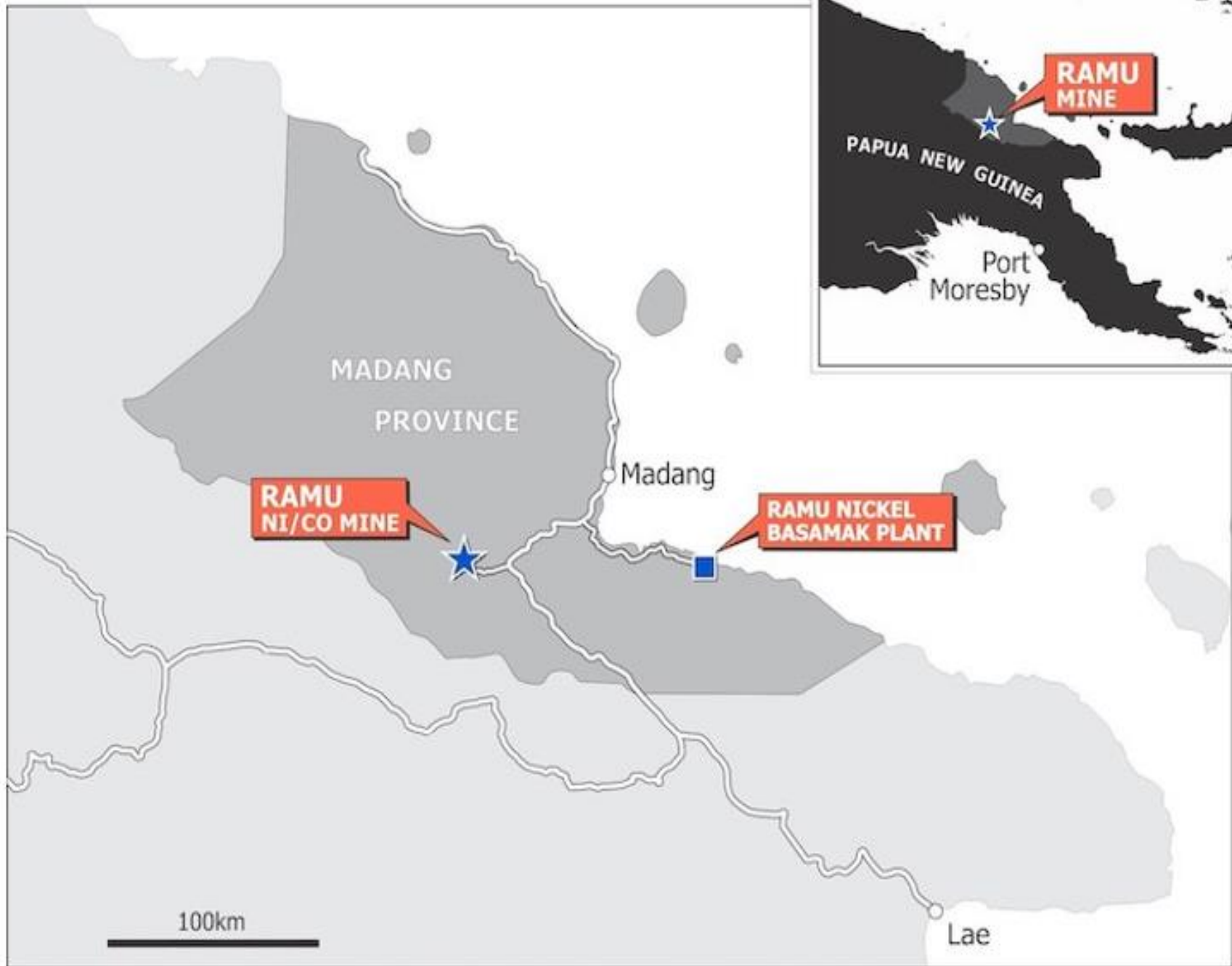
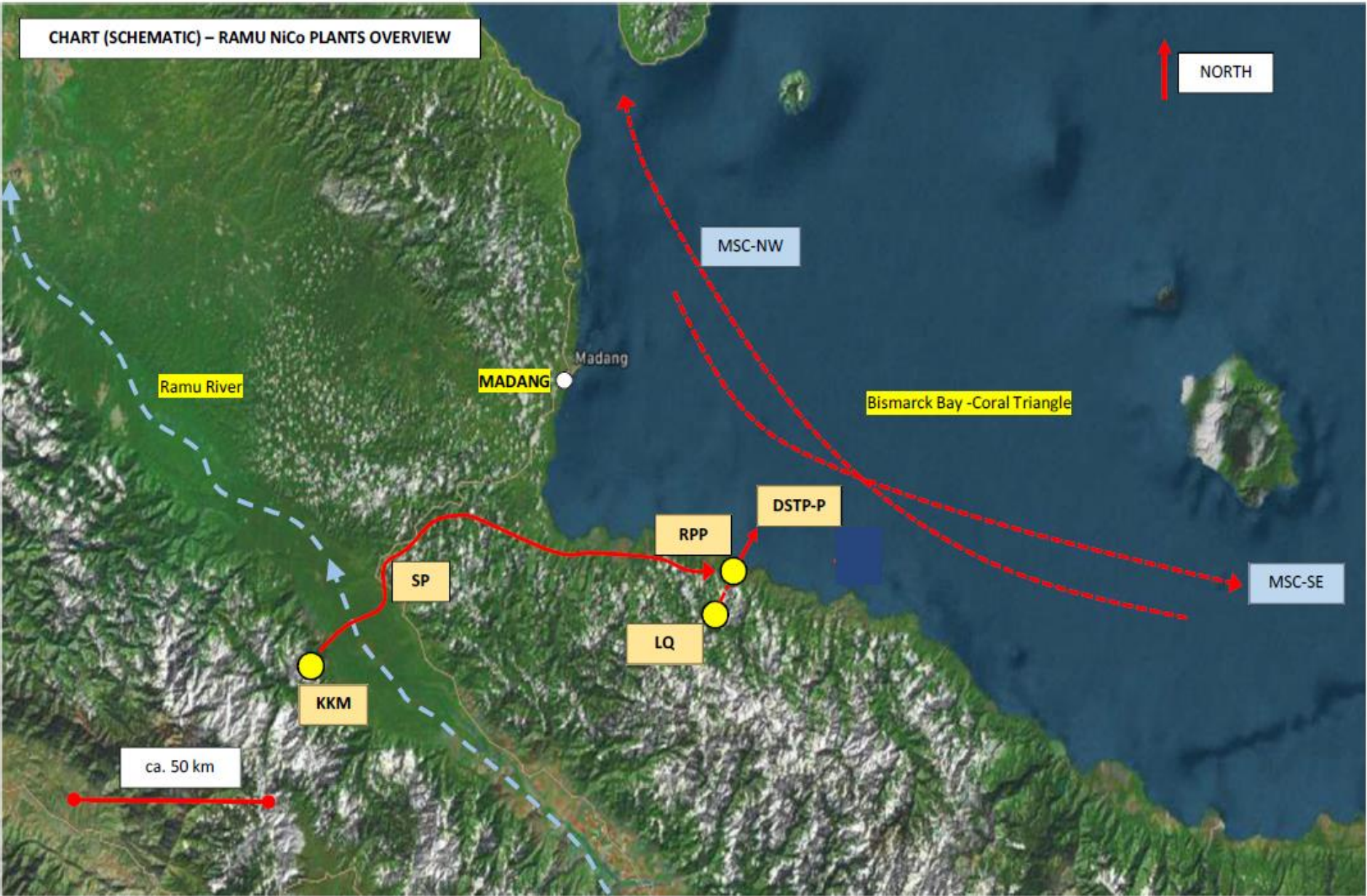




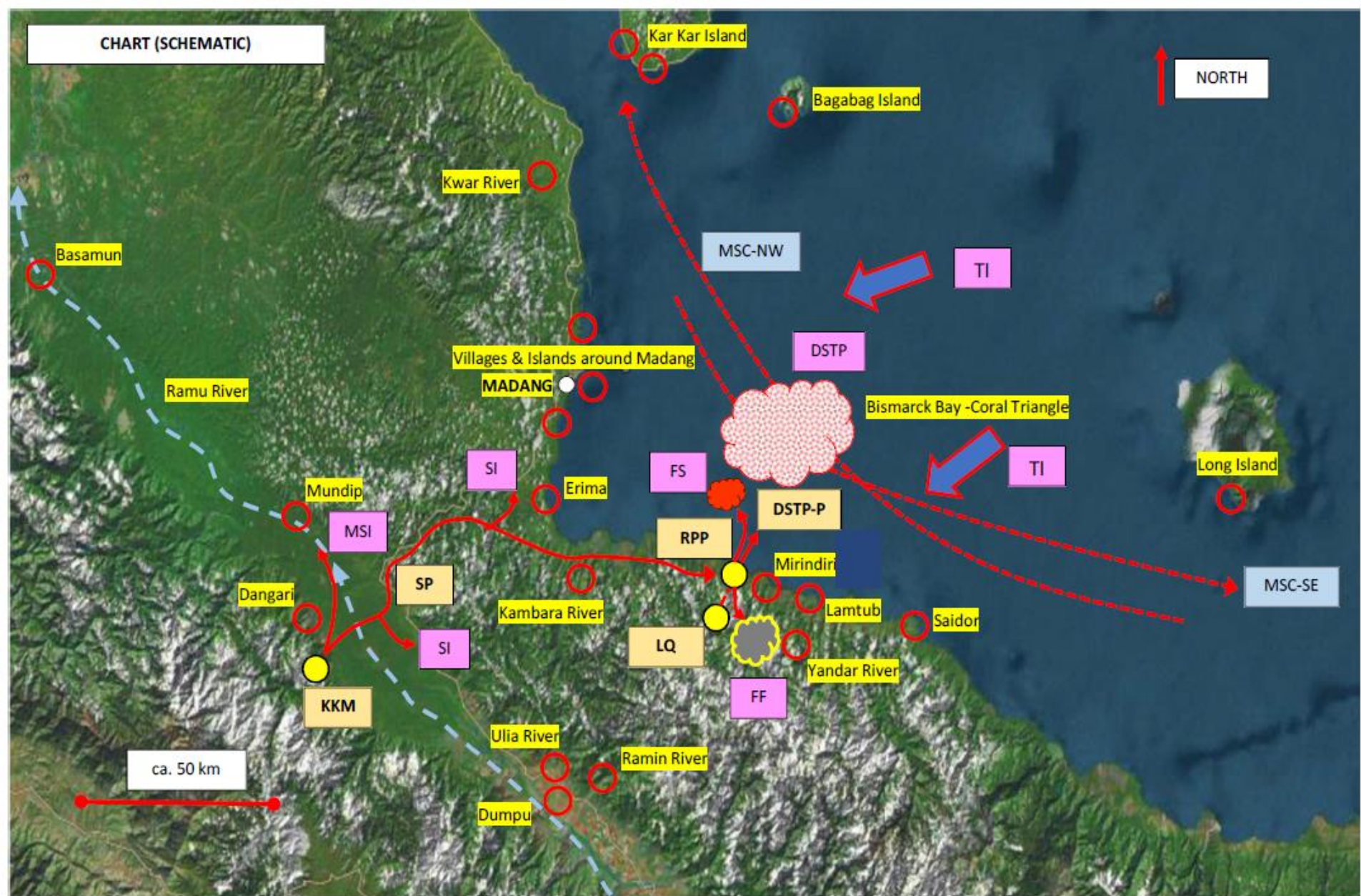
CHART (SCHEMATIC) – RAMU NiCo PLANTS OVERVIEW



KKM	SP	RPP	LQ	DSTP-P	MSC
Kurukumbari Mine	Slurry Pipeline	Ramu Processing Plant	Limestone Quarry	Deep Sea Tailings Placement Pipeline	Monsoonal Sea Currents



CHART (SCHEMATIC)



○	KM	MSI	SP	SI	RPP	LQ	DSTP-P	FF	FS	DSTP	TI	MSC
Sampling points	Kurukumbari Mine	Mining Sediment Impacts	Slurry Pipeline	Slurry Impacts	Ramu Processing Plant	Limestone Quarry	Deep Sea Tailings Placement Pipeline	Factory Fume	Factory Spills	Deep Sea Tailing Placement	Tsunami Impacts	Monsoonal Sea Currents

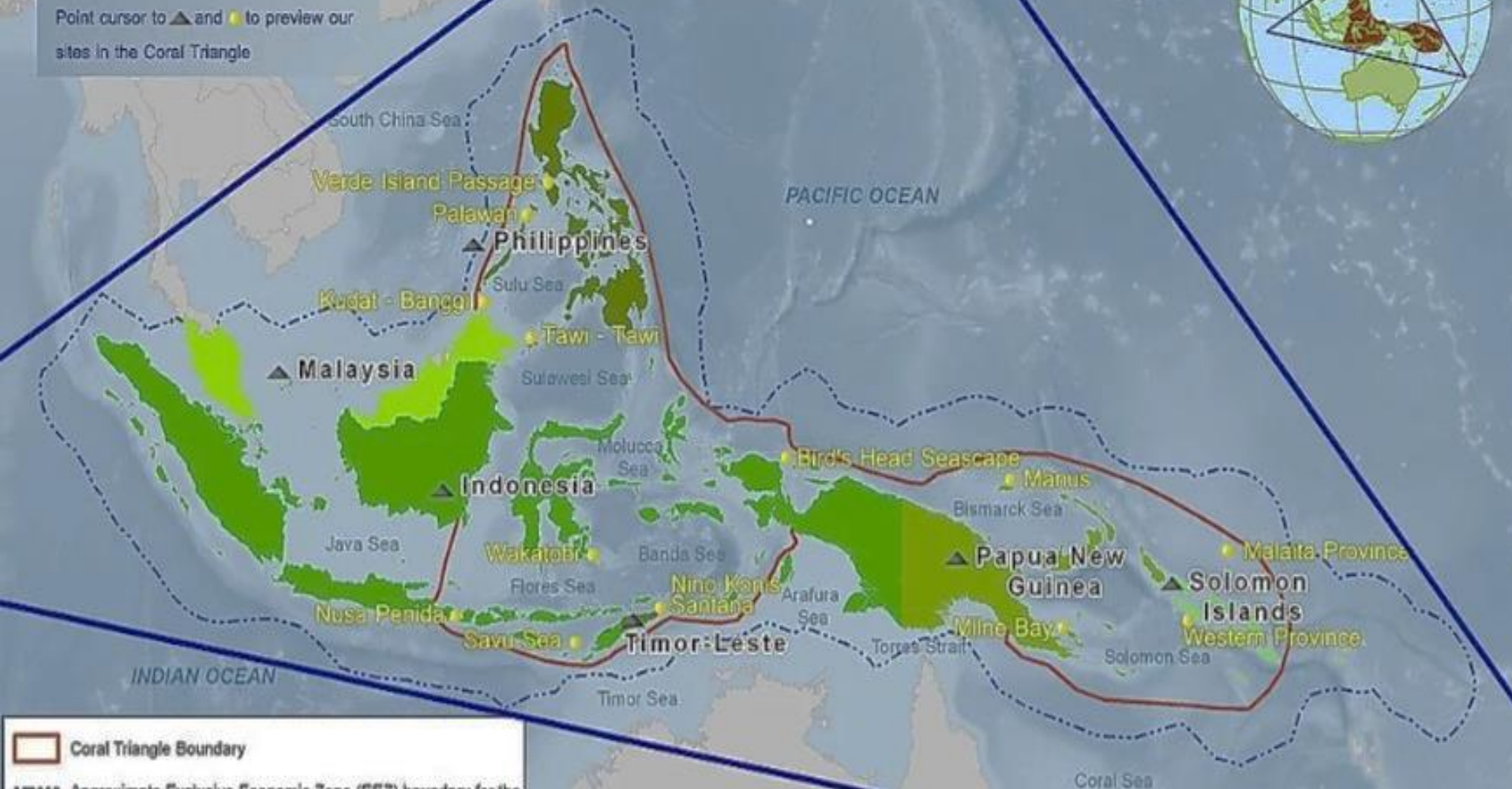


# The Coral Triangle Region



US CTI Support Program Integration Sites

Point cursor to ▲ and ● to preview our sites in the Coral Triangle



▲ Coral Triangle Boundary

--- Approximate Exclusive Economic Zone (EEZ) boundary for the six Coral Triangle Countries

Note: The Coral Triangle Initiative Regional Plan of Action may be implemented within the waters under national jurisdiction of each of the Coral Triangle governments, recognizing that this is different than the scientific boundaries of the Coral Triangle.

Adapted from base map by Nate Peterson/ITNC

500 Kilometers





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## PNGs Ramu Mine:

**Wo? Was? Und Wie?**

**Wie entstanden? Wie arbeitet sie?**







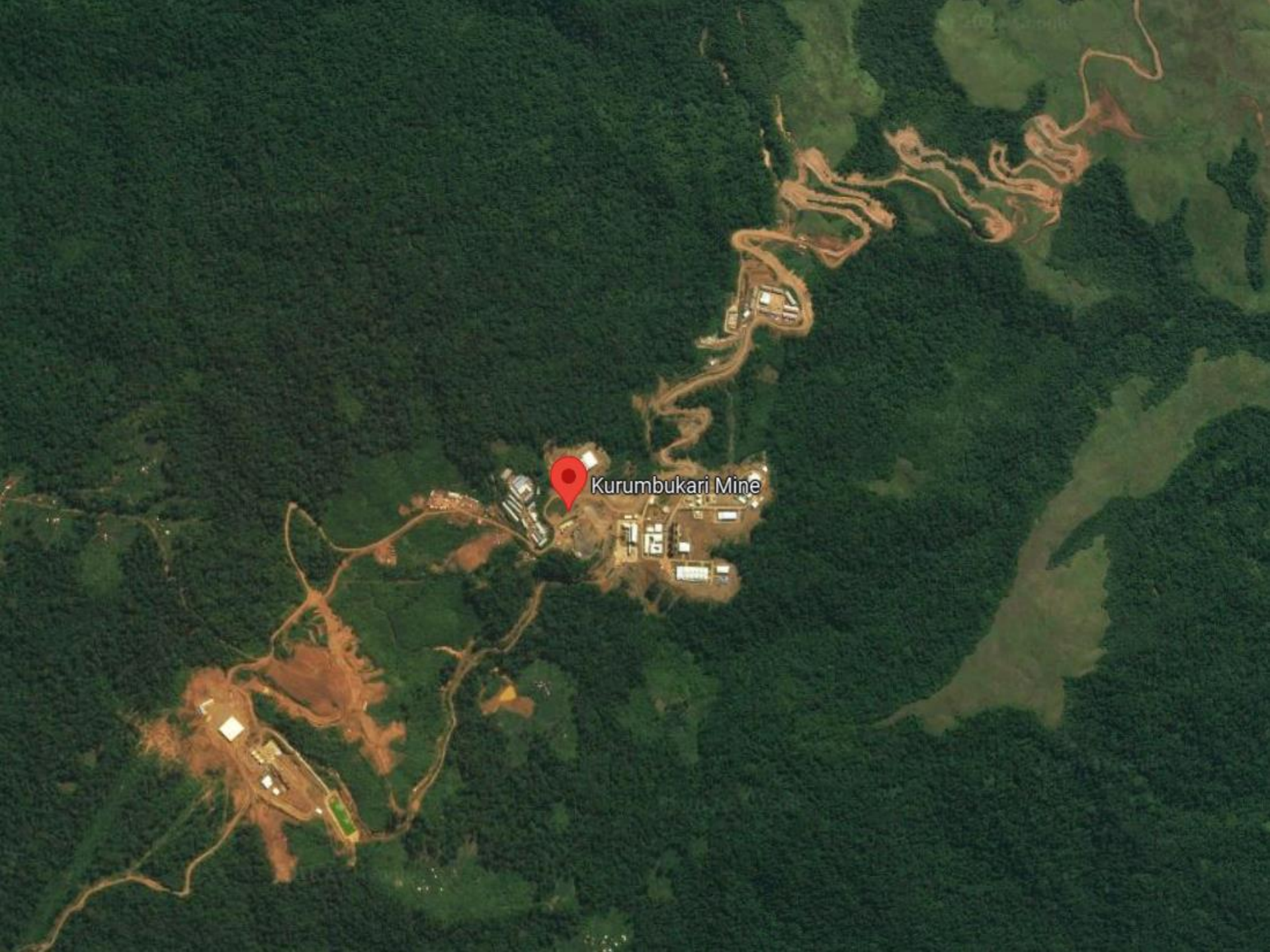






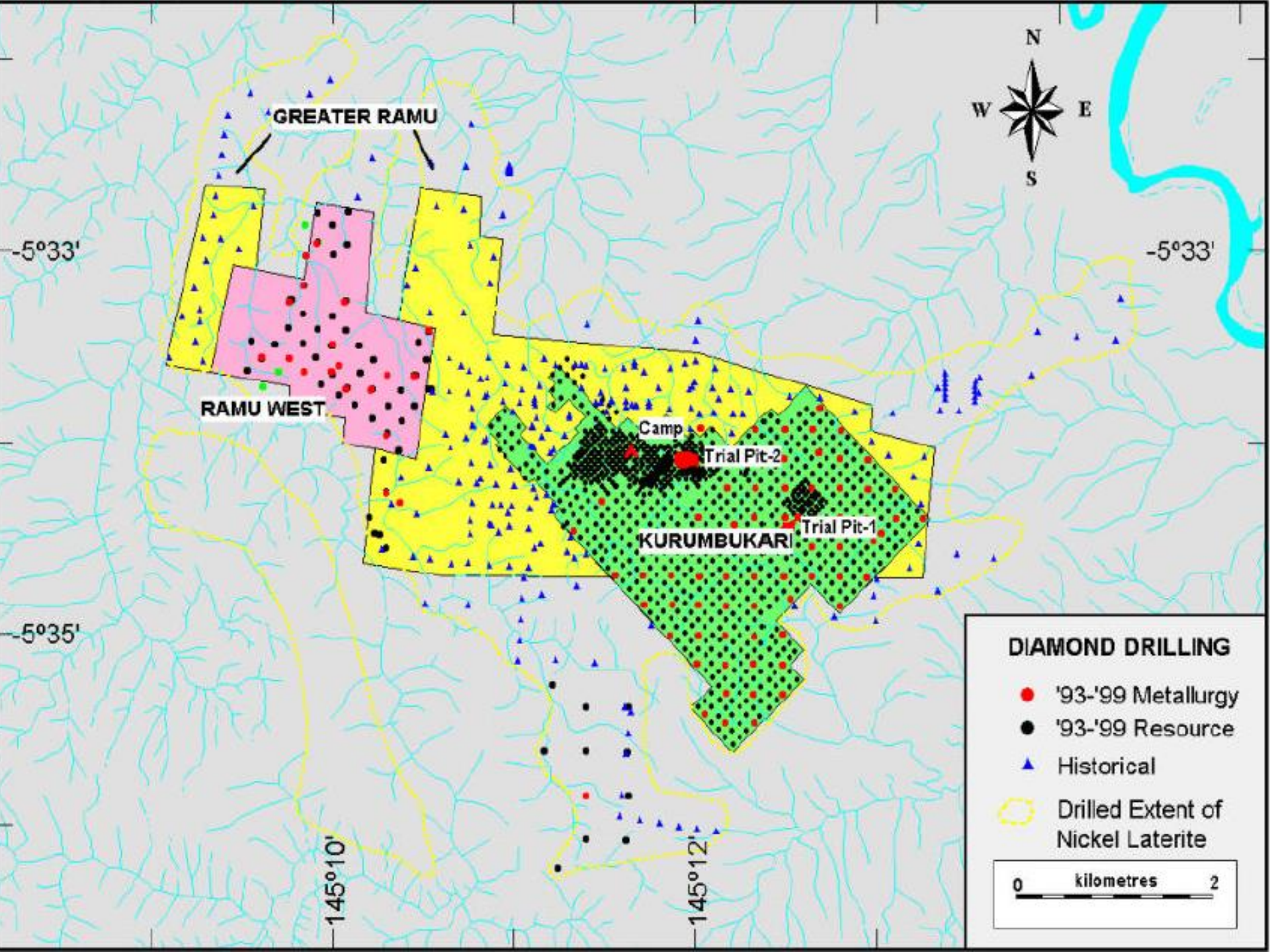






Kurumbukari Mine































中国五矿



中冶瑞木  
MCC RAMU NICO















MCCDPY API Spec 5L PSL2

631% 10.5% 1 19 9 3 ERM X60

E250800 6 1 6 0 P=12.4MPa

07 AD44 3 4 Made in China









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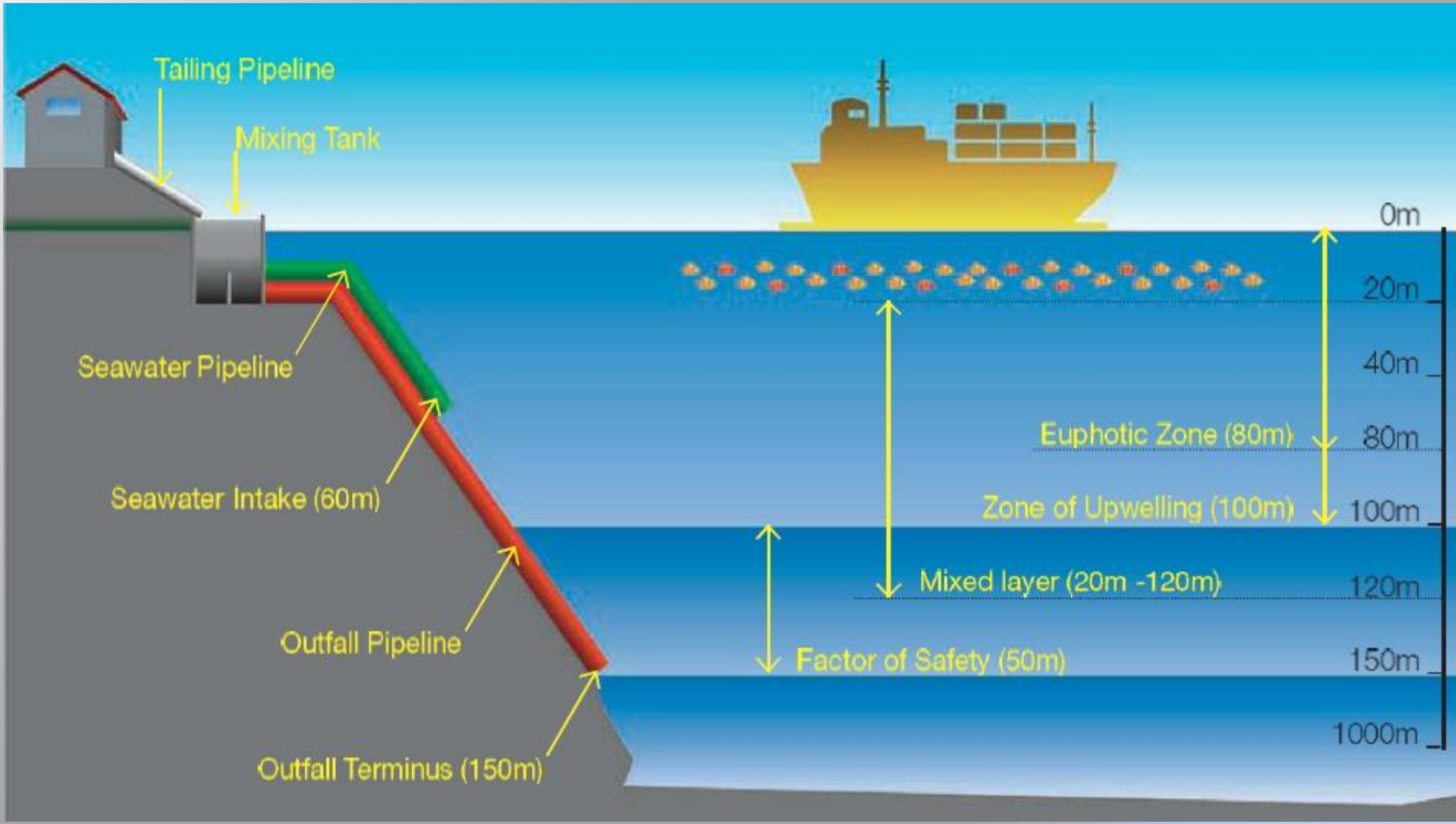


Tailing mix tank

Basamuk Bay

Countercurrent decantation thickeners

- Basamuk refinery facilities
- Bathymetric contour
- Tailing pipeline
- Slurry feed line
- Sulfur pipeline
- Raw water
- Drainage
- Coordinate reference






















# **BASAMUK BAY SPILL – 24<sup>th</sup> August 2019**

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**PRESENTATION BY CEPA PNG - INITIAL WATER  
QUALITY ASSESSMENT OF THE RAW SLURRY SPILL  
IMPACT AREA**





 CONSERVATION ENVIRONMENT PROTECTION AUTHORITY

## BATHYMETRIC CONTOUR



Indicates  
flow of  
spill  
residual  
impacts,  
wave  
effects,  
flow  
velocity,  
blossome  
et., Etc.

[www.emtv.com.pg](http://www.emtv.com.pg)









MCE  
R  
Ramu NiCo  
Management | MCE | Limited  
"One Ramu NiCo"  
"One Community"

MCE  
R  
Ramu NiCo  
Management | MCE | Limited  
"One Ramu NiCo"  
"One Community"

2014 Design Action Plan  
SHE  
EHS









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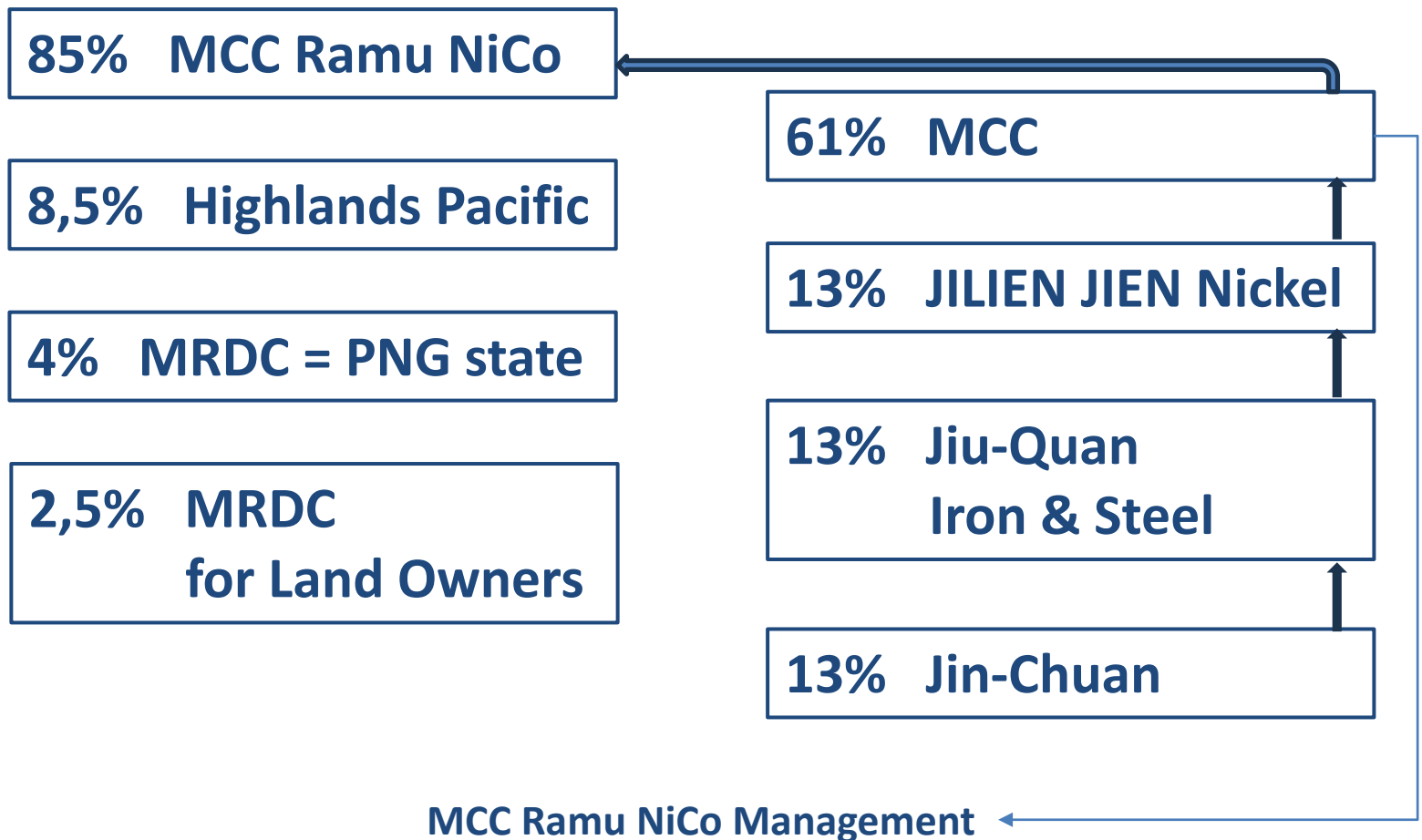
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MCC RAMU NICO





# Ramu Nickel Joint Venture

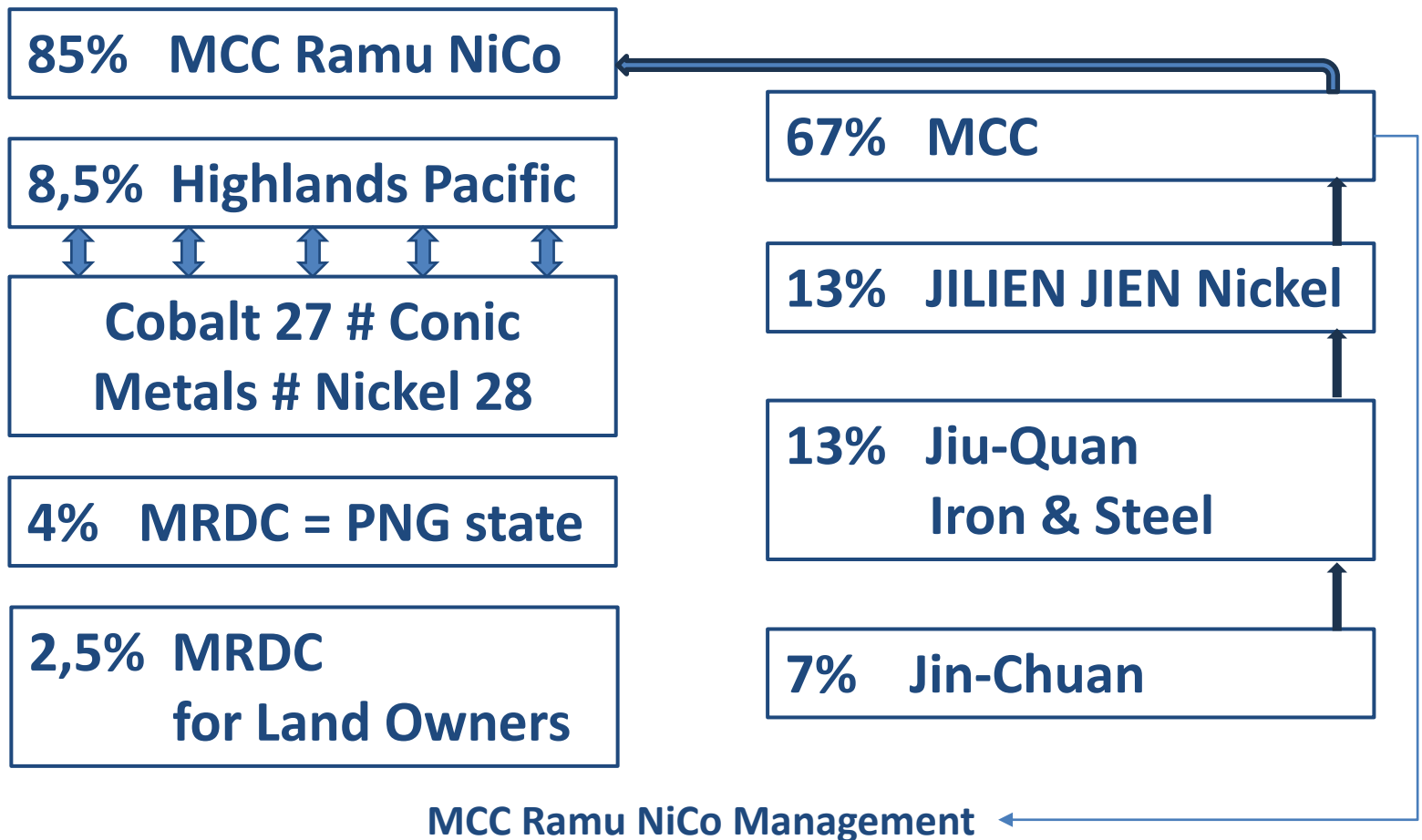
## Besitzverhältnisse





# Ramu Nickel Joint Venture

## Besitzverhältnisse ab Mai 2019 ff.







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## PNGs Ramu Mine:

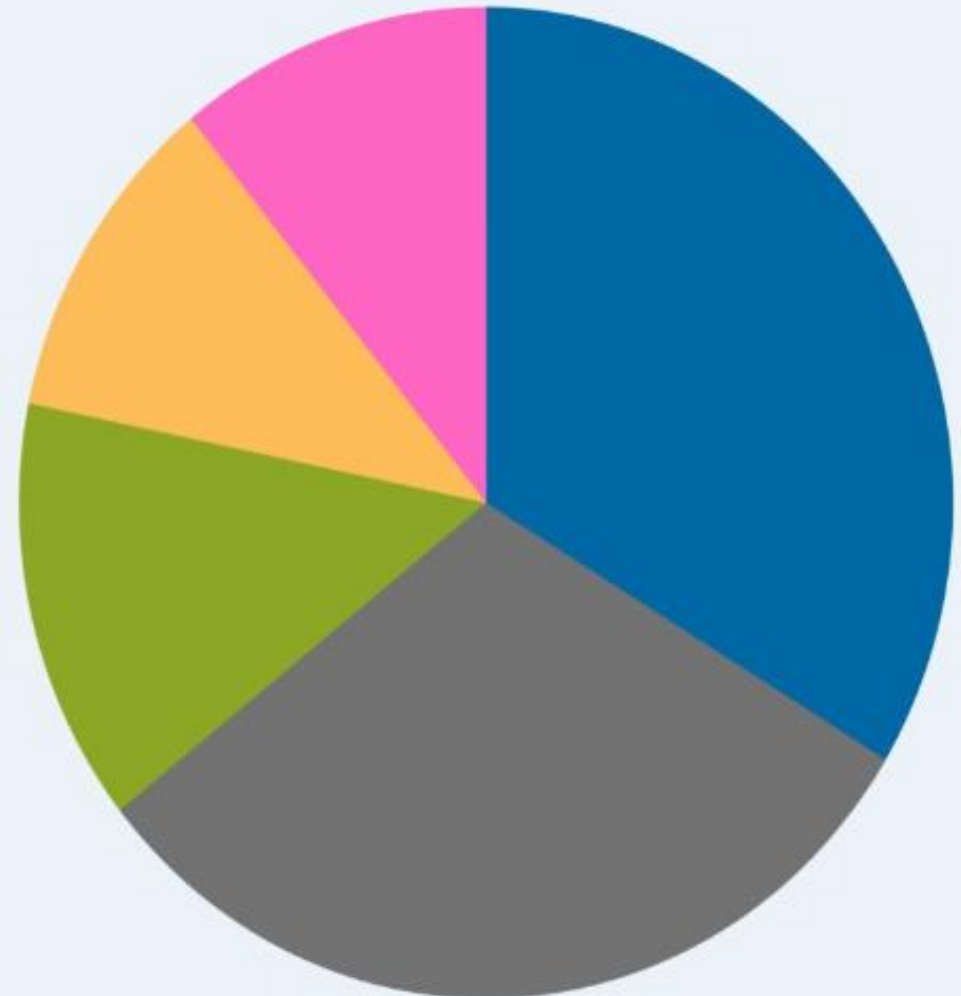
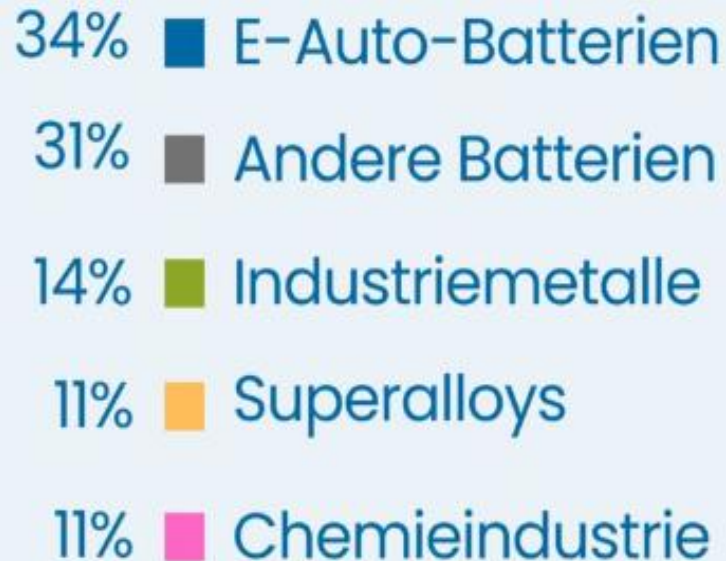
**Was hat das denn mit uns zu tun?**



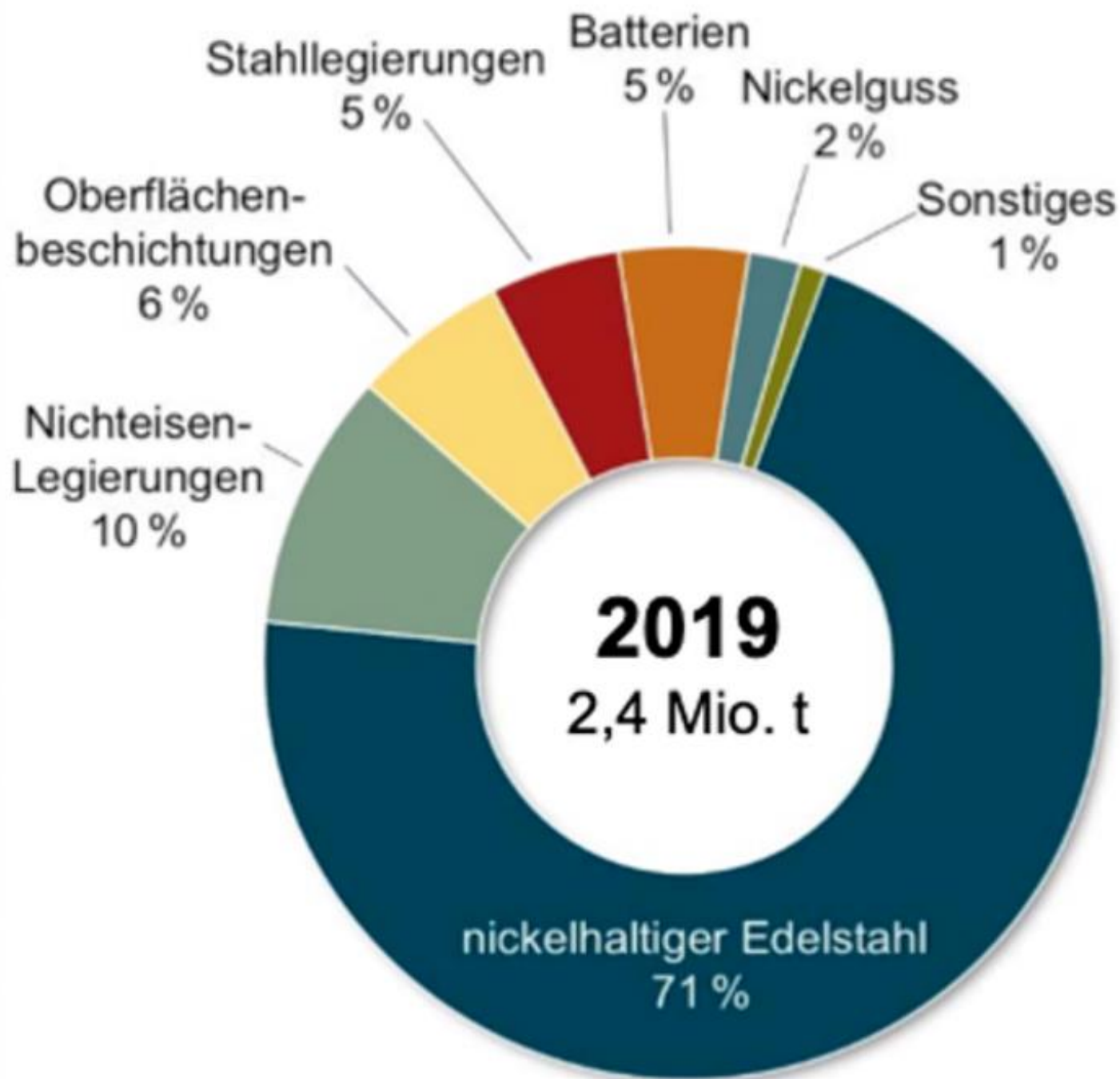


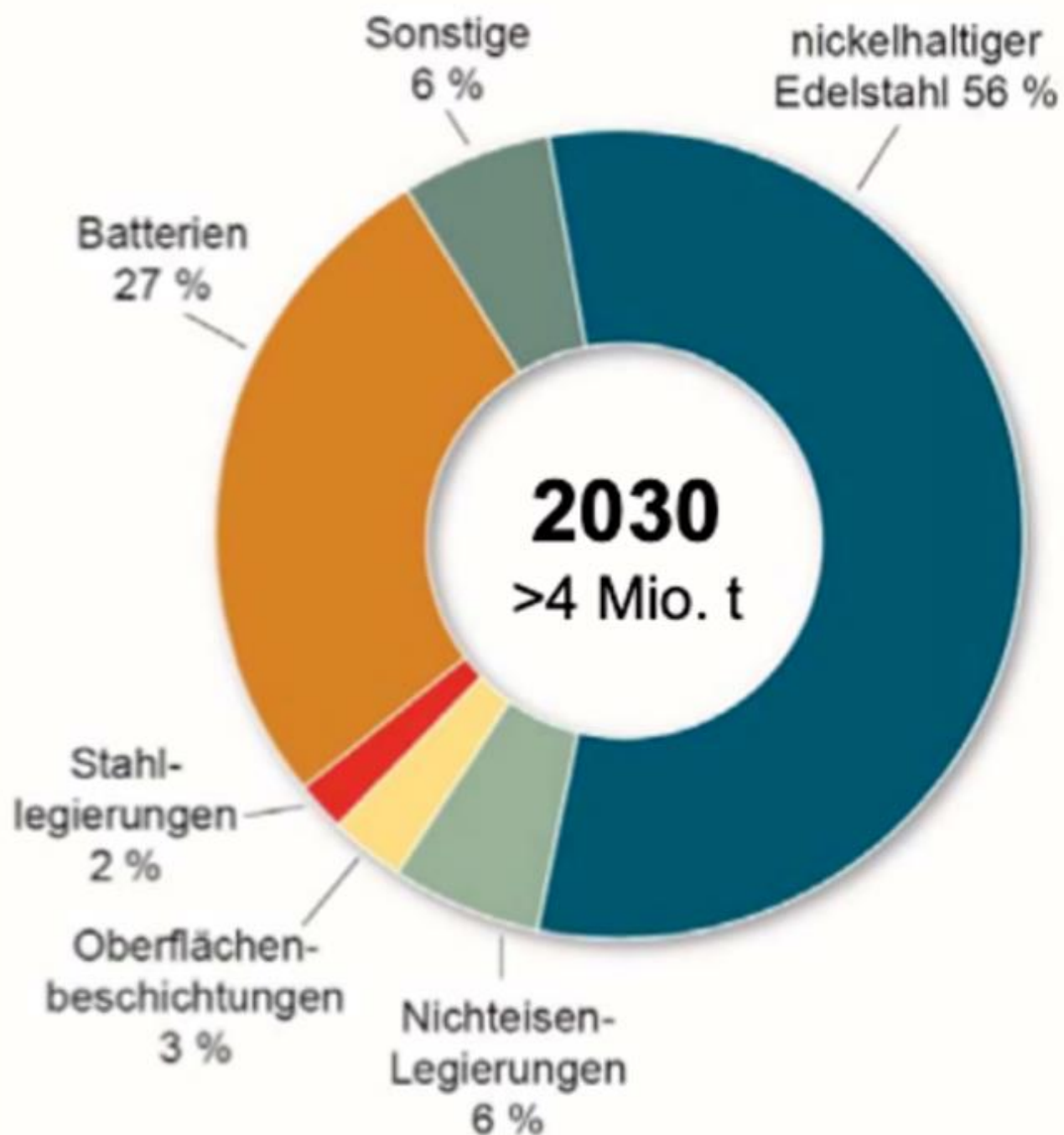
# Wofür Kobalt verwendet wird

Gesamtnachfrage in Prozent (2021)











## Rohstoffe für Tesla Model S 85 (ohne Akku)\*

791 kg	Stahl
385 kg	Aluminium
295 kg	Kupfer
210 kg	Kunststoffe
10 kg	seltene Erden

## Rohstoffe in Akku- zellen von E-Autos

50 kg	Grafit
30 kg	Nickel
10 kg	Mangan
8 kg	Kobalt
6 kg	Lithium

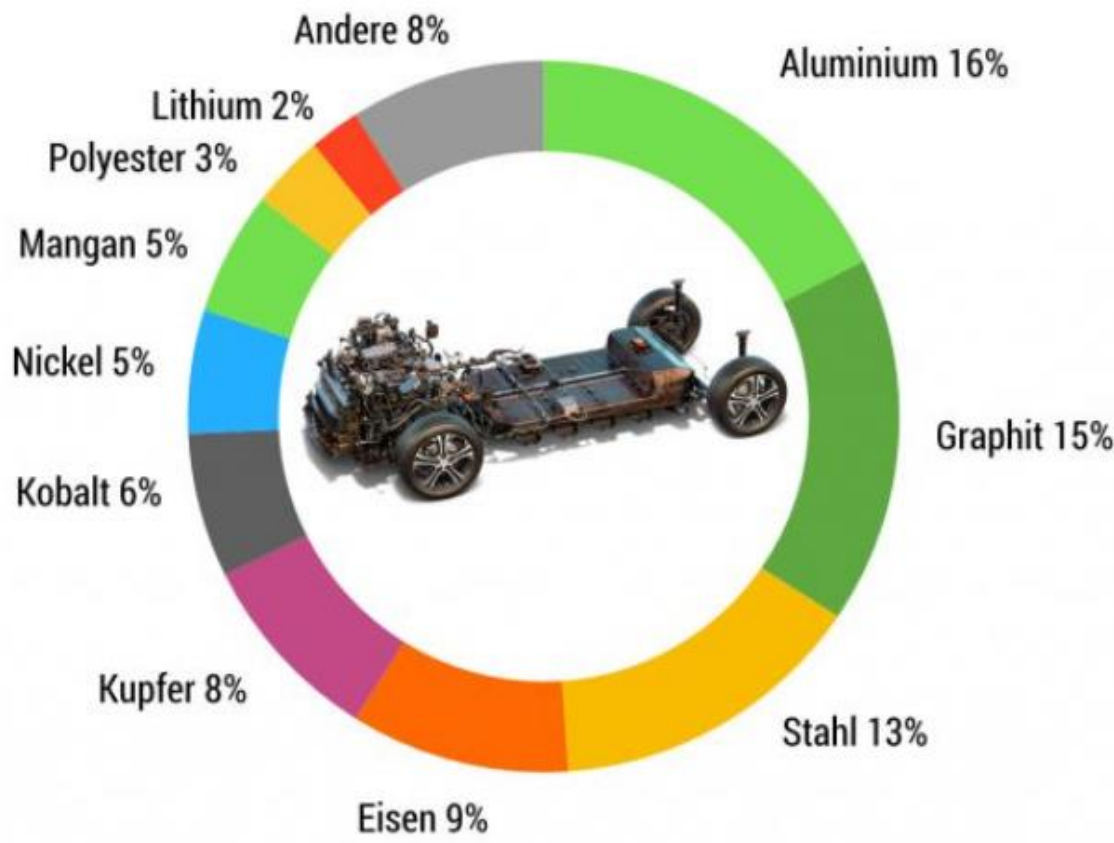
\* Analyse Kimmo Klemola 2016



Beispiel für NMC-Batterien  
mit 60 kWh

# Rohstoffbestandteile einer Elektroauto-Batterie

Am Beispiel eines Chevrolet Bolt



Der Batterie-Pack eines Chevrolet Bolt wiegt um die 435 kg.





**Danke für die Geduld.**