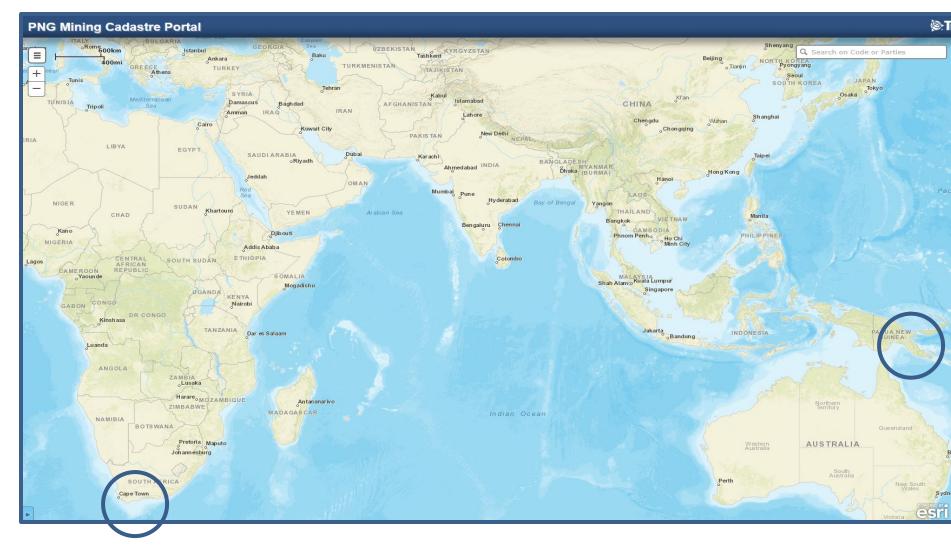


Papua New Guinea Mining Tenement System





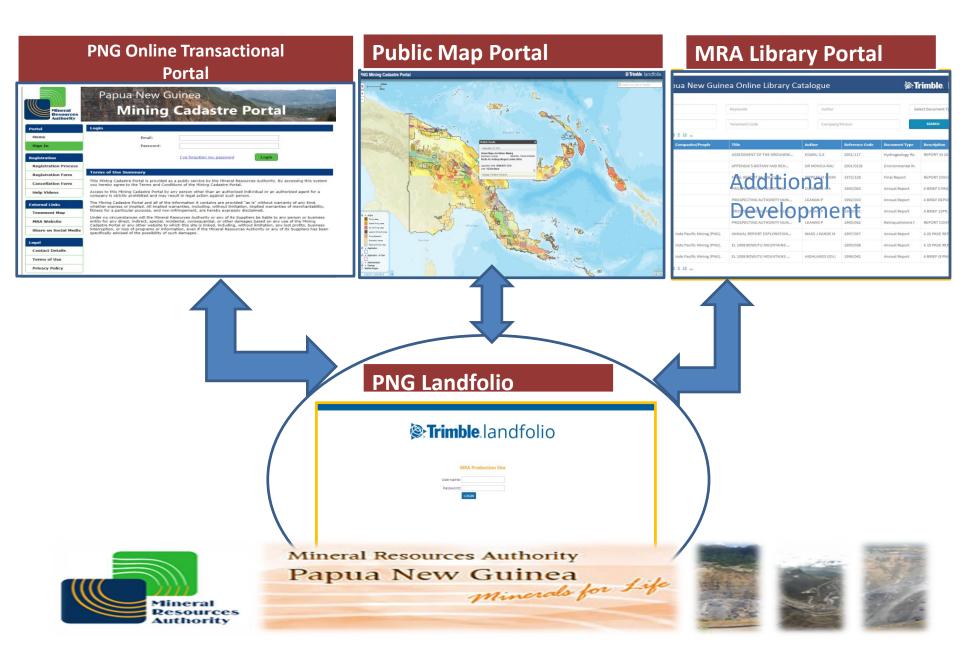


Mineral Resources Authority (MRA)

- State Own Entity that Regulates the Mining Industry in Papua New Guinea (PNG) pursuant to the Mining Act 1992
- MRA is located in the capital, Port Moresby, with a Small Scale Mining Branch and training centre in Wau Morobe Province.



PNG Landfolio Design



MRA Library Portal:

- Geological Reports
- Exploration Reports
- Map Files
- Historic tenement data including annual reports, drill-hole & core analysis, hydrology, social & landowner agreements, etc

	Mineral Resource	-	
	Mineral Resource		
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113, 610	Indo Pacific Mining (PNG).	EL 1008 BOWUTU MOUNTAINS .
Mineral Resources	Authority	
Papua New	Guinea	1.10
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	Keywords	Author		S	elect Document 1	
	Tenement Code	Company,		SEARCH		
2 10						
Companies/People	Title	Author	Reference Code	Document Type	Description REPORT IN 20	
	ASSESSMENT OF THE GROUNDW	EGARA, S.S	2001/117	Hydrogeology Re		
	APPENDIX 5-BOTANY AND REH	DR MONICA RAU	2001/013E	Environmental Re		
	FINAL REPORT PA 100 KUTU	TIPPETT M C SIMI	1972/128	Final Report	REPORT DISC	
	PROSPECTING AUTHORITY NO	DUGMORE M A	1993/003	Annual Report	A BRIEF 5 PAG	
	PROSPECTING AUTHORITY NUM	LEAMAN P	1992/033	Annual Report	A BRIEF REPO	
	PROSPECTING AUTHORITY NUM	LEAMAN P	1993/001	Annual Report	A BRIEF 13PF	
	PROSPECTING AUTHORITY NUM	LEAMAN P	1993/002	Relinquishment F	REPORT CON	
Indo Pacific Mining (PNG).	ANNUAL REPORT EXPLORATION	WASS J KANDE M	1997/057	Annual Report	A 20 PAGE RE	
Indo Pacific Mining (PNG).	EL 1008 BOWUTU MOUNTAINS		1995/038	Annual Report	A 19 PAGE RE	
Indo Pacific Mining (PNG).	EL 1008 BOWUTU MOUNTAINS	HIGHLANDS GOLI	1996/042	Annual Report	A BRIEF (6 PA	





Landfolio Experiences: Benefits and Challenges





Landfolio Users





Landfolio Experiences – Benefits & Challenges

Papua New Guinea Extractive Industries Transparency Initiative (PNG EITI) Executive Summary Report for 2018	Where inificeit hates 0		BRIFINENT HATE BRITANS GIVEN	 Replace Paper based Tenement Application Hard Copy Registry 80 registered users
EITI	Mine and Exploration Reporting	Online Portal	Passing of New Mining Bill (Q2,2020)	 Human error – Users attending to & closing actions IT connectivity (constant power & server issues) No Current Legislative Support No audit capacity of production and revenue



2010 Min and Duadoutta

Mineral Resources Authority Papua New Guinea Minerals for Life

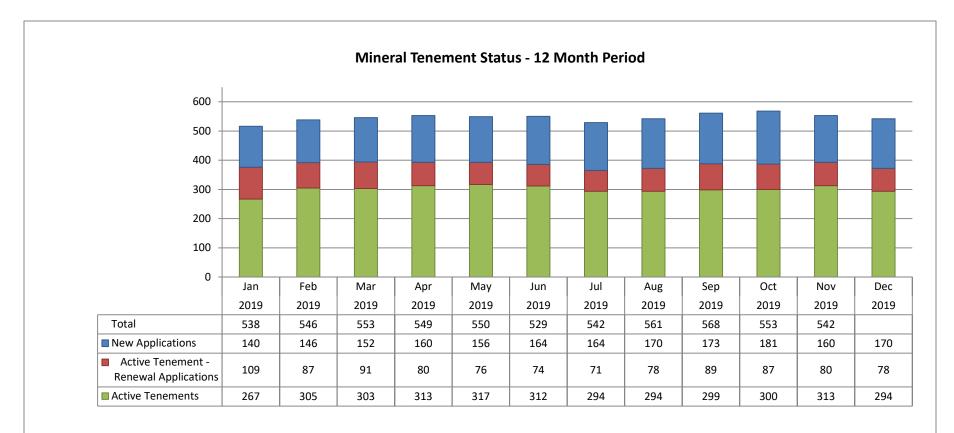
REPORTING EXAMPLE: MINE PRODUCTION

& REVENUE DATA

2019 Mineral Production															
Mines		Commodity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total YTD
		gold (oz)	18,004	22,786	23,535	20,086	27,278	19,192	23,720	29,953	27,323	42,696	28,506	23,249	306,328
	PRODUCED	silver (oz)	93,205	87,457	119,518	125,734	113,689	83,392	84,956	183,186	151,219	152,973	157,971	113,914	1,467,214
		copper (t)	6,083	7,585	8,154	7,769	9,027	6,158	7,013	9,987	8,670	11,418	9,523	7,581	98,968
		gold (oz)	23,340	25,930	19,901	12,046	31,899	29,707	32,646	33,126	27,551	13,967	52,639	36,340	339,092
k Tedi (SML 1 0)	SHIPPED	silver (oz)	99,988	116,689	77,360	68,276	150,730	136,538	134,308	172,098	132,657	83,780	265,362	192,632	1,630,418
		copper (t)	7,464	8,616	6,413	4,508	10,676	9,428	9,521	10,642	8,325	3,975	15,581	12,272	107,421
		gold (pgk)	112,194,178	110,623,956	75,115,690	51,699,706	138,828,088	166,309,618	149,663,352	175,281,640	131,551,506	68,817,756	249,197,782	193,813,793	PGK 1,623,097,065
	FOB	silver (pgk)	5,776,298	5,265,594	3.327.418	3,170,269	6,666,105	7,496,548	7,038,059	9,389,996	7,002,554	4,703,414	13,861,921	12,669,238	PGK 86,367,414
		copper (pgk)	161.604.831	203.142.576	129.517.959	85,233,272	155.483.567	189.452.653	182,655,451	167.385.408	162,224,376	78.945.701	302,454,089	276.028.082	PGK 2,094,127,96
															PGK 3,803,592,44
		gold (oz)	49.531	34.093	55.317	26.077	47,976	53.371	44.961	50.734	63.602	45.736	64.698	61.340	597.436
	PRODUCED	silver (oz)	39.638	26,608	39,506	23,899	40,736	42.501	52.243	13,179	17.878	13,564	19.054	27.341	356,147
		gold (oz)	52.837	34.809	51,026	37,088	39.814	56.091	38.010	58,364	60,989	44.000	72,424	56,977	602,429
Porgera (SML 1 P) Lihir(SML 6) Kurumbukari (SML 8) Tolukuma (ML 104) Eddie Creek (ML 144,ML 384,ML 384, ML 402, ML 462) Simberi (ML 136)	SHIPPED	silver (oz)	64.010	30,795	40.600	29,565	27,019	49,596	36,787	41,450	26,735	43,654	16,257	25,882	432,350
			225,906,946	152,179,205	226,459,612	158,929,637	173,705,017	255,387,603	180.842.021	291,731,338	314,893,464	218,565,388	365,476,064	287,673,140	PGK 2,851,749,43
	FOB	gold (pgk)													
		silver (pgk)	2,255,202	1,313,280	2,069,730	1,135,334	1,087,844	2,048,622	1,572,718	2,282,480	1,462,684	2,020,588	979,091	1,358,306	PGK 19,585,879
															PGK 2,871,335,31
		gold (oz)	97,028	80,237	61,014	90,329	105,060	65,891	66,359	68,004	83,143	56,776	38,640	68,578	881,059
hir(SML 6)		gold (oz)	78,684	100,394	87,993	81,769	108,822	87,926	54,331	55,502	73,838	66,303	44,239	50,375	890,176
	FOB	gold (pgk)	342,158,404	446,181,426	386,739,467	354,474,240	471,924,854	406,488,099	261,088,403	285,146,685	472,957,984	335,458,518	219,907,921	257,148,378	PGK 4,239,674,37
															PGK 4,239,674,37
		nickel (t)	2,449	2,652	2,562	2,845	2,920	3,001	2,905	2,576	2,908	2,244	2,704	2,954	32,720
	PRODUCED	cobalt (t)	217	236	250	263	259	271	261	236	243	181	237	262	2,916
		Chromite (t)	7,111	7,165	8,399	10,667	11,000	11,271	13,305	10,690	7,866	6,876	9,912	11,311	115,573
		nickel (t)	1.338	1,166	4.084	2,233	2,046	5,178	5,528	4,885	4.118	4,371	3,333	2.477	40,757
urumbukari (SML 8)	SHIPPED	cobalt (t)	128	106	374	205	185	472	507	448	374	362	292	217	3.670
		Chromite (t)	12,742	5,598	11,936	8.817	6.372	15,088	17.775	10.577	12.571	10,118	17.024	8,118	136,736
		nickel (pgk)	38,530,052	32,832,016	134,351,542	75.611.009	62,921,999	156,182,292	182,388,179	185,848,025	212,842,077	228,361,287	144,746,489	78,198,081	PGK 1,532,813,04
	FOB	cobalt(pgk)	18.644.266	8,722,461	20.019.440	13,882,367	13,346,009	32,855,928	34,233,576	29,223,183	31,796,367	32,535,353	24,870,189	13,539,256	PGK 273,668,395
	100		361.404												PGK 49,909,276
		Chromite (pgk)	301,404	164,027	621,852	367,301	268,853	593,284	27,959,370	2,489,959	4,465,149	2,417,835	8,496,074	1,704,168	
			_											_	PGK 1,856,390,71
	PRODUCED	gold (oz)		-									_		0
		silver (oz)													0
olukuma (MI_104)	SHIPPED	gold (oz)													0
		silver (oz)													0
	FOB	gold (pgk)													PGK 0
	100	silver (pgk)													PGK 0
															PGK 0
	PRODUCED	gold (oz)	17.80	0.00	2.60	0.70	0.00	0.00	0.00	0.00	4.90				26
	FRODUCED	silver (oz)	16.20	0.00	2.40	0.60	0.00	0.00	0.00	0.00	4.10				23
	0100000	gold (oz)	17.80	0.00	2.60	0.70	0.00	0.00	0.00	0.00	4.90				26
аане стеек (ML 144,ML 384,ML 384, ML 402, ML 462)	SHIPPED	silver (oz)	16.20	0.00	2.40	0.60	0.00	0.00	0.00	0.00	4.10				23
	FOR	gold (pgk)	74,057.00	0.00	10,999.00	2,919.00	0.00	0.00	0.00	0.00	19,106.00				PGK 107,081
	FOB	silver (pgk)	793.00	0.00	134.00	35.00	0.00	0.00	0.00	0.00	212.00				PGK 1,174
		VF 211/													PGK 108,255
	PRODUCED	gold (ozt)	8,880	15.513	9,709	12,151	10,417	13,676	9.844	8,763	8.454	8,005	6,913	8,153	120,478
		silver (ozt)	2,368	850	4,846	3.873	3,051	2,626	3,989	3,415	3,339	3.045	4,921	3.016	39,339
				5.354	4,846	12,743				9,014	8,417	7,737		6,441	120,268
imberi (ML 136)	SHIPPED	gold (oz)	7,703				10,216	10,993	11,180			-	10,881		
		silver (oz)	2,368	850	4,846	3,873	3,051	2,626	3,989	3,415	3,339	3,045	4,921	3,016	39,339
	FOB	gold (pgk)	32,687,384	23,108,060	84,609,540	54,041,731	43,301,085	49,924,029	52,255,028	38,133,282	42,943,067	38,319,928	53,218,707	31,373,058	PGK 543,914,899
		silver (pgk)	121,503	44,168	248,752	272,736	147,544	156,894	206,668	188,238	199,092	177,124	282,164	167,893	PGK 2,212,776
		1	1	1	1	1		1		1	1	1	1		PGK 546,127,675



Tenement Status 2019







SUPPORT & MAINTENANCE

- PROVIDES CRITICAL 'BACKROOM' CONNECTION & TECHNICAL BACK-UP
- 2 X SITE VISITS PER YEAR FOR USER TRAINING, TROUBLESHOOTING & DEVELOPMENT
- ENABLES CLOUD HOSTING AMAZON
- PROVIDES FOR KEY ADMINISTRATOR TRAINING IN CAPETOWN
- ENABLES ANTICIPATION OF FUTURE DEVELOPMENTS i.e. REGULATORY REVISION
- ENABLES IDENTIFICATION OF SYSTEM WEAKNESSES, BOTH TECHNICAL AND HUMAN





REVISED MINING LEGISLATION New legislation will trigger a complete Landfolio review and upgrade

- Both old and new systems may require to operate in parallel for a transitional period up to 5 years
- New aspects include social mapping & land identification date, new tenement types i.e. Retention Licence & mine area extensions, new tenement terms, extensive enforcement & penalty powers
- Accordingly, work plans and processes will have to be re-scoped and re-built
- Extensive user training and user numbers





NEW DEVELOPMENTS

- MAP & DATA SALES
- CAPTURE OF REAL TIME PRODUCTION & GEOLOGICAL DATA – PROVIDED DIRECT FROM MINES
- SAFETY DATA
- ALLUVIAL SPECIFIC DATA
- DRILL-HOLE CADASTRAL LOCATION



Thank You

