# Sprott Equity Research Ticker: PDM CN 1021 cash: \$19m

07 September 2021

Ticker: PDM CN	<b>1Q21 cash:</b> \$19m	<b>Project</b> : LK Project / Tyko				
Market cap: C\$55m	<b>Price:</b> C\$0.23/sh	<b>Country:</b> Finland / Canada, ON				
RECOMMEND (unc): BUY	TARGET (unc): C\$0 70/sh	RISK RATING HIGH				

We see today's Haukiaho MRE as a 'taster' of what is to come at Kaukua South. Haukiaho's MRE came quickly given the historic wide-spaced drilling, still seeing an impressive like-for-like 24% increase in ounces from <2km drilling, itself talking to the simplicity of these layered intrusions. For the sake of simplicity, the 1.1Moz @ 1.08g/t AuEq at spot is a nice beat on the prior 920koz @ 1.23g/t AuEq (850koz @ 1.14g/t PdEq lifts to 1.1Moz @ 1.00g/t PdEq). Haukiaho is far from done yet, with a sparsely drilled +2km strike likely to convert with modest drilling, and perhaps more interestingly, a further 15km trend with limited exploration. However, we think the center of gravity will remain further north at Kaukua for two simple reasons of size and grade. Kaukua Main's 1Moz @ 1.5q/t PdEq is materially higher grade, although at a higher cut-off, Haukiaho does host ~750koz @ 1.45q/t AuEq for example. However, layering in size, adding our own published estimate of Kaukua South of 1.6Moz @ 1.1q/t PdEq (2.2Moz @ 1.24q/t AuEq at spot) could take that area to ~2.5Moz PdEq already. Nearby, smaller Murtolampi shouldn't be forgotten with its 79m @ 2.9g/t PdEq likely to add several hundred thousand ounces in our view. If Kaukua South is booked at or over our estimate, this would take group resource to 3.6Moz @ 1.1g/t PdEq (3.9Moz @ 1.22g/t AuEq), in line with our original investment thesis: **3-5Moz potential**. Even then, this system is growing given newly surveyed, very significant, bulls-eye geophysical anomalies both east and west of Kaukua South, and of course the Tyco nickel asset in Canada adds material value too. As such, we maintain our BUY rating and C\$0.70/sh PT based on SCPe 3.6Moz PdEq (3.9Moz AuEq) including our SCPe resource for Kaukua South of 1.6Moz @ 1.1q/t PdEq (1.7Moz @ 1.2q/t AuEq) ahead of the 1H22 (or sooner) maiden MRE there. Combined with a scarcity premium on size and jurisdiction, and our estimate of the stock trading at <0.1xNAV now with 1xNAV FF FD of ~C\$1.50-2.00/sh approaching production makes this a conviction name for us.

				-				
LK Project (100%)	Tonnes (Mt)	∆ (%)	Grade (g/t PdEq*)	∆ (%)	Ounces (koz PdEq*)	∆ (%)	Grade (g/t AuEq^)	Ounces (koz AuEq)^
Kaukua Main: M&I	11.0	-	1.49	-	528	-	1.62	571
Kaukua Main: inferred	10.9	-	1.22	-	427	-	1.32	462
Haukiaho: inferred	32.7	41%	1.00	-12%	1052	24%	1.08	1137
Total	54.6	21%	1.14	<b>-8</b> %	2,007	11%	1.24	2170
SCPe Kaukua South	44.4	-	1.11	-	1582	-	1.20	1711
GRAND TOTAL	99.0	11%	1.13	-4%	3,590	6%	1.22	3881
Conversion (%)	68%	-10%		-	68%	-		
SCP ROM @ 75% conv.	67.1	-	1.13	-4%	2,433.72	-4%	1.22	2631

#### Table 1. (A) New Haukiaho resource against and (B) constraining inputs

Source: SCP, 3Q19 Kaukua MRE, 3Q21 Haukiaho, delta to 2013 Haukiaho non-compliant; \*PdEq @ LT: \$2,000/oz Pd, \$1,100/oz Pt,

1,850/oz Au, \$8.00/lb Ni, and \$4.00/lb Cu, ^AuEq @ spot today

#### Haukiaho resource lifts 24% to 1.2Moz @ 1.1g/t PdEq ahead of YE21 Kaukua Area MRE

Palladium One has released a maiden compliant 43-101 resource of 1.21Moz @ 1.15g/t PdEq (1.26g/t AuEq at spot for reference) based on 1,942m of infill / confirmation drilling last year. The resource, extending over 3km strike of the 17km trend, is ~2/3 base-metal and 1/3 Pd+P. A further +2km strike contains some historic drilling over IP anomalies that, with a modest amount of new drilling could be upgraded. The 0.25g/t PdEq (\$15/t) cut-off resource is pit-constrained at \$1,650/oz Au, \$3.50/lb Cu, \$7.50/lb Ni, \$20.00/lb co, \$1,600/oz Pd and \$1,100/oz Pt. An elevated cut-off of 0.6g/t PdEq (\$25/t) was used to report the base-case despite the pit-shell models using 0.25g/t (\$15/t).

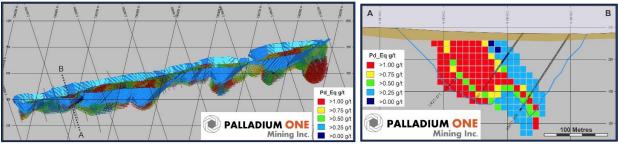


Figure 1. (A) Isometric and (B) cross-section views of Haukiaho MRE block model

Source: Palladium One

#### Why we like Palladium One

- 1. Existing 2Moz @ 1.14g/t PdEq pittable resource in Finland with cheap power and low 20% tax
- 2. SCPe +1.6Moz @ 1.1g/t PdEq on new Kaukua south asset
- 3. Brand new undrilled conductors east and west of Kaukua South
- 4. SCPe 23kt Ni contained at Ontario high-grade sulphide discovery 'in for free' and growing
- 5. Fully funded 27,000m program underway

#### Catalysts

- 1. CY21: Ongoing drill results from planned 27,000m (Finland 23,000m, Canada 4,000m)
- 2. 1H22: Kaukua South maiden MRE
- 3. CY22: Regional drilling over new Kaukua anomalies and untested 15km strike at Haukiaho

#### Research

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## **Equity Research**

Ticker: PDM CN	Price / ml		C\$0.23/s			Project PNAV today:	0.08x		Asset:	LK Project	
Author: B.Salier / B.Gaspar	Rec / 0.2	5xNAV PT:	BUY, C	\$0.7/sh		1xNAV <sub>3Q24</sub> FF FD:	C\$1.85/sh		Country:	Finland	
Commodity price	CY21E	CY22E	CY23E	CY24E	SPOT	Resource / Reserve	Tonnes	PdEq	Grade	PdEq oz	AuEq oz
Palladium price	2,000	2,000	2,000	2,000	2,368	Kaukua Main 3Q19 resource	22Mt	1.36	ig/t	955koz	1032koz
Platinum Price	1,100	1,100	1,100	1,100	1,002	SCPe Kaukau South	44Mt	1.11	g/t	1582koz	1711koz
Gold price	1,850	1,850	1,850	1,850	1,796	SCP mining invty @ 75% conv.	67Mt	1.13	8g/t	2434koz	2631koz
Nickel Price	17,632	17,632	17,632	17,632	19,570	Haukiaho 3Q21 MRE	33Mt	1.00	)g/t	1052koz	1137koz
Copper Price	8,926	8,926	8,926	8,926	9,363	Project: USES			Funding:	SOURCES	
SOTP project valuation*		C\$m	0/ship	NAVx	C\$/sh	Pre-DFS exploration / G&A:	C\$20m	C	ash + pre	first Au op.:	C\$30m
Ungeared @ build start (3Q23	)	693.6	100%	1.00x	2.48	Build capex:	C\$380m		Pre-t	ouild equity:	C\$30m
Cash @ 2Q21		16.7	100%	1.00x	0.06	Fin. cost + WC over DFS	C\$18m	Bui	ld equity (	۵.6xNAV:	C\$133m
Cash from options + warrants		13.4	100%	1.00x	0.05	TOTAL USES:	C\$418m	65	5% geared	debt @ 8%:	C\$247m
SCPe resources ex invty @ US	\$25/oz	36.6	100%	1.00x	0.13	Buffer / drill budget:	C\$22m	-	TOTAL	SOURCES:	C\$440m
Murtolampi sat. 200koz @ US	\$50/oz	12.7	100%	1.00x	0.05	Share data	Basic	FD with op	tions	FD for	· build
Tyko nominal upside (C\$m)		10.0	100%	1.00x	0.04	Basic shares (m)	241.2	279.7		490	
Asset NAV7% US\$2000/oz Po	I	783	1		2.80	Ratio analysis	CY20E	CY21E	CY22E	CY23E	CY24E
*Shares diluted for options min			_ Market P/N	IAV/7~ /020		Average shares out (m)	237.2	458.8	490.5	490.5	490.5
Asset value: 1xNPV project @				, (t) <sub>%4</sub> q20		EPS (C\$/sh)	_	_	_	_	_
Project NPV (C\$m)			\$2000oz	\$250007	\$300007		_	_	_	_	_
Discount rate: 9%	¥130002	556	681	931	1,180	EV (C\$m)	47.3	74.2	82.2	36.4	347.7
Discount rate: 7%	503	556 644	783	1,060	1,180		47.3	-	- 82.2	- 30.4	- 347.7
Discount rate: 7%		749	904			FCF yield (%) PER (x)	-	-	-	-	-
	591		33%	1,213 41%	1,522		-	-	-	-	-
Ungeared project IRF		28%			49%	P/CF (x)	-	-	-	-	-
Project NPV (C\$/sh)			\$2000oz				-	-	-	-	-
Discount rate: 9%	1.53	1.99	2.43	3.33	4.22	Income statement	CY20E	CY21E	CY22E	CY23E	CY24E
Discount rate: 7%	1.80	2.30	2.80	3.79	4.78	Net revenue (C\$m)	-	-	-	-	-
Discount rate: 5%	2.11	2.68	3.23	4.34	5.44	COGS (C\$m)	-	-	-	-	-
*Project NPV, ex fin. costs and						Gross profit (C\$m)	-	-	-	-	-
Group NAV over time^	3Q21	3Q22	3Q23	3Q24	3Q25	D&A, attrib (C\$m)	-	-	-	-	-
LK Project NPV (C\$m)	598	640	694	997	1,181	G&A + sh based costs (C\$m)	1.3	2.2	2.1	3.2	4.2
G&A and finance costs (C\$m)	(88.3)	(82.6)	(76.7)	(76.3)	(58.5)	Finance cost (C\$m)	3.7	9.0	8.7	4.3	7.6
Net cash prior qtr (C\$m)	16.7	36.0	25.3	(76.2)	(211.5)	Taxes (C\$m)	-	(0.3)	-	-	-
Cash from options (C\$m)	13.4	13.4	13.4	13.4	13.4	Net income (C\$m)	(5.0)	(11.2)	(10.9)	(7.4)	(11.8)
Resource / exlo nom. (C\$m)	49.2	49.2	49.2	49.2	49.2	Cash flow, attrib.	CY20E	CY21E	CY22E	CY23E	CY24E
NAV FF FD (C\$m)	589	656	705	907	974	EBIT (C\$m)	(1.3)	(2.5)	(2.1)	(3.2)	(4.2)
Shares in issue (m)	280	411	411	490	490	Add back D&A (C\$m)	-	-	-	-	-
1xNAV7%/sh FF FD (C\$/sh)*	2.11	1.60	1.71	1.85	1.99	Less tax + net interest (C\$m)	3.7	8.7	8.7	4.3	7.6
Geared NAV at first con, dilute	ed for build,	, net G&A a	nd fin. cos	ts^		Net change in wkg cap (C\$m)	0.5	0.1	-	(0.2)	-
NAV at first con (C\$m)	\$1500oz	\$1750oz	\$2000oz	\$2500oz	\$3000oz	Other non-cash (C\$m)	(8.4)	(17.4)	(17.3)	(8.0)	(15.1)
Discount rate: 9%	596	748	897	1,195	1,492	Cash flow ops (C\$m)	(5.5)	(11.1)	(10.7)	(7.1)	(11.6)
Discount rate: 7%	651	815	974	1,294	1,613	PP&E - build + sust. (C\$m)	0.5	-	-	80.0	299.7
Discount rate: 5%	716	891	1,064	1,409	1,753	PP&E - expl'n (C\$m)	-	-	-	-	-
Geared project IRF		26%	30%	39%	46%	Cash flow inv. (C\$m)	(0.5)	-	-	(80.0)	(299.7)
NAV at first con (C\$/sh)*			\$2000oz		\$3000oz		7.9	35.3	10.0	132.9	-
Discount rate: 9%	1.07	1.43	1.79	2.50	3.22	Debt draw (repay) (C\$m)	-	-	-	-	246.8
Discount rate: 7%	1.22	1.61	1.99	2.75	3.52	Cash flow fin. (C\$m)	7.9	35.3	10.0	132.9	246.8
Discount rate: 5%	1.39	1.80	2.22	3.05	3.88	Net change in cash (C\$m)	1.9	24.2	(0.7)	45.8	(64.5)
^Project NPV incl grp SG&A & j					5.00	EBITDA (C\$m)	(4.9)	(11.5)			
					VE				(10.9)	(7.4)	(4.1)
Production	Y1	Y2	Y3	Y4	Y5	Balance sheet	CY20E	CY21E	CY22E	CY23E	CY24E
PdEq production (000oz)	143	166	166	153	148	Cash (C\$m)	7.2	31.3	30.6	76.4	11.9
AISC cost (US\$/oz PdEq)	769	738	738	799	822	Acc rec., inv, prepaid (C\$m)	0.3	0.2	0.2	-	
AISC = C1 + sustaining capex, Y	1 = LY25					PP&E + other (C\$m)	0.1	(0.2)	(0.2)	79.8	379.5
180koz Oz prod'n (LH	IS, 000oz)		C cost (US	\$/oz PdEq)	850/oz	Total assets (C\$m)	7.6	31.2	30.6	156.2	391.4
				<b>→</b>	830/02	Debt (C\$m)	-	-	-	-	246.8
160koz			A designed and a desi	-	800/oz	Accounts payable (C\$m)	1.0	0.6	0.6	0.6	0.6
					750/oz	Others (C\$m)	0.0	0.3	0.3	0.3	0.3
140koz		<b>~</b>				Total liabilities (C\$m)	1.0	0.9	0.9	0.9	247.8
					700/oz	Issued capital (C\$m)	20.0	54.9	65.0	198.1	198.3
120koz		1	1		650/oz	Retained earnings (C\$m)	(13.3)	(24.6)	(35.4)	(42.8)	(54.6)

Source: SCP estimates

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Summary of Recommendations as of September 2021	
BUY:	46
HOLD:	0
SELL:	0
UNDER REVIEW:	0
TENDER:	0
NOT RATED:	0
TOTAL	46

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